Agriculture & Biosciences

A Bee on the Brink: What a Sub-Social Bee Can Tell Us About Evolutionary Biology
Working with assistant professor of biology Sandra Rehan, Sean Lombard ’17, a pre-med student, spent the summer of 2014 researching the social patterns of small carpenter bees. “The small carpenter bees can tell us something about why some insects have evolved to become highly social and others have not.” Rehan explained. Because genes in bees are similar to those in humans, understanding how the environment, including the social environment, affects expression of the genes in bees can provide insights into factors that may influence human social behavior. Lombard participated in the work with financial assistance from the UNH Hamel Center Research Experience and Apprenticeship Program.

http://www.unh.edu/unhtoday/veterans/2014/08/bee-brink

A Boon for Lowbush Blueberries
UNH Cooperative Extension researchers have partnered with local farmers to improve the farmers’ wild blueberry crops and meet increasing consumer demand. Olivia Saunders, UNH Cooperative Extension field specialist in food and agriculture, led the successful effort to obtain a USDA Sustainable Agriculture, Research, and Education grant to study organic approaches for weed management in local wild blueberry crops, specifically the use of sulfur as a natural option to control weeds that threaten yields.

http://extension.unh.edu/articles/Boon-Lowbush-Blueberries

A Great Day to Be a Bobcat: UNH Study Finds the Fierce Feline’s Population Is Strong
A research team led by John Litvaitis, professor of natural resources and the environment, has found that bobcat populations in New Hampshire are expanding. In a study funded by the U.S. Fish and Wildlife Service, the U.S. Department of Agriculture, and the New Hampshire Agricultural Experiment Station, nineteen bobcats were temporarily captured for DNA sampling and then tracked using radio collars with built-in GPS. Citizen scientists from across the state also contributed to the research by submitting stories and pictures of recent bobcat sightings in their communities. Litvaitis’ team has found that bobcat populations have risen from 100-150 in the mid-1980s to a current estimate of 800-1,200. Bobcats can now be found in southeastern New Hampshire, a region formerly depleted of the iconic species.

http://www.unh.edu/unhtoday/2014/11/great-day-be-bobcat
http://www.unh.edu/news/releases/2014/11/bp06bobcat.cfm
http://nhpr.org/post/bobcats-granite-state

Beneath It All
Matt Morris ’14, a sustainable agriculture and food systems major, is conducting research on the relationship between corn seed treatments and weed populations. His advisor, assistant professor of agroecology Rich Smith, explained: “We know that pesticide seed treatments are reducing the fungal and insect pests of crops…but what we don’t know is if, by using these products, we are also inadvertently harming the populations of beneficial organisms that naturally help control weeds.” Morris’s project is an offshoot of the work of natural resources and the environment Ph.D. student Lesley Atwood, who is studying the impact of treated corn seeds on soil organisms and nutrient cycling.

http://colsa.unh.edu/article/spring-2014/beneath-it-all
Beyond the Books and Into the Field for Summer Animal Tracking

Three UNH Manchester students spent the summer of 2014 conducting fieldwork in the 800-acre Hackett Hill urban forest area outside of Manchester, New Hampshire. Under the supervision of associate professor of biology Steve Pugh, biology majors Joshua Linnane ’15, Derek Burkhartd ’15, and Jessica Landry ’15 tracked the presence and behavior of various mammal and non-mammal species in the wilderness area. Burkhart and Landry focused their studies on mice, while Linnane used motion detection cameras to observe wildlife such as coyotes, deer, and blue herons. As they collected data for the long-term study of this habitat, the students had many opportunities to learn new skills and expand on what they had learned in the classroom, such as honing their tracking and wildlife identification skills.

http://manchester.unh.edu/blog/campus-news/beyond-books-and-field-summer-animal-tracking

Biology Students Win Viewers Choice Film Award

Goosebumps, a film by UNH Manchester biological science students Derek Burkhardt, Joshua Linnane, and Marc Stanieich, received the most hits of all the videos submitted, winning them the Viewers’ Choice Award from the American Physiological Society’s (APS) Phantastic Physiology Voyage: “Function Follows Form” video contest. The contest encourages undergraduate and graduate students to connect creatively with physiology and engages them with the broader public. Burkhardt, Linnane, and Stanieich were among nine UNH Manchester students to enter their short films in this contest in Fall 2013.

http://manchester.unh.edu/blog/campus-news/biology-students-win-viewers-choice-film-award

Bringing the U. to You: UNH Cooperative Extension Celebrates a Century of Service to the Granite State

UNH Cooperative Extension is celebrating 100 years of service to the state of New Hampshire this year. UNH Cooperative Extension was established in 1914 in response to the Smith-Lever Act, federal legislation requiring land grant universities to take innovative agricultural education to local farms. Ken La Valley, Cooperative Extension dean and director, explained: “The great idea that has kept Cooperative Extension relevant for 100 years is taking our know-how out to the people who can’t afford the time to come to Durham. Bringing information to the people is still how it works today.” Recent UNH Cooperative Extension projects include successfully addressing the invasive spotted wing Drosophila fruit fly, exploring the use of high and low tunnels to expand the New England produce growing season, and recycling solar energy to heat greenhouses sustainably.

http://www.unh.edu/unhtoday/2014/11/bringing-u-you

Combat Under Glass

UNH Cooperative Extension scientists Cheryl Smith, Brian Krug, and Alan Eaton continued an 18-year tradition by offering workshops on Integrated Pest Management (IPM) to over 150 greenhouse producers in New Hampshire, Vermont, and Maine in January. Over the years, the Tri-State Greenhouse IPM Workshops have become progressively more “hands on” and demonstration-oriented. They offered growers proven and developing techniques for preventing root disease and controlling pests, proposed innovative strategies, such as using a species of wasp to control harmful aphids, and discussed the preventative steps growers can take before resorting to chemical control. The IPM workshops have become highly anticipated annual events for the growers.

http://extension.unh.edu/articles/Combat-Under-Glass
Cultivating Productive Partnerships – Carl Majewski and Cheshire County Farmers Share Lifetimes of Learning

Carl Majewski has spent 12 years as UNH Cooperative Extension’s ambassador of agriculture in Cheshire County, building friendships and partnerships with dozens of farmers in New Hampshire’s southwest corner, sharing ideas, conducting research, trying out new approaches for maximizing the yield and quality of crops, and applying the wisdom of hard-earned farming experience. It is this respect and trust that allows Majewski to conduct projects with the assistance of neighboring farmers, such as a current test of triticale, a hybrid of wheat and rye, as a new kind of winter cover crop that might increase both the yield and quality of the feed and protect fields from winter erosion.

http://extension.unh.edu/articles/Cultivating-Productive-Partnerships

Dial 11 Digits, Get 1,000 Answers

UNH Cooperative Extension’s Master Gardener program provides answers for New Hampshire residents experiencing challenges with plants, pests, and livestock. The program, which began in 1993 to accommodate the steady calls from citizens in need of one-on-one assistance, now boasts a team of 190 highly trained active volunteers. In addition to answering questions from the public, the Master Gardeners hold programs at nursing homes, assist communities with specific horticultural endeavors such as butterfly habitats, and organize symposia with guest speakers. Those in need of assistance may call 1-877-EXT-GROW Monday through Friday from 9 a.m. to 2 p.m. or e-mail answers@unh.edu.

http://extension.unh.edu/articles/Dial-11-Digits-Get-1000-Answers

Dr. Ladybug

Lindsay Havens, a Ph.D. Student in genetics in UNH’s College of Life Sciences and Agriculture, works with assistant professor of genomics Matt MacManes in UNH’s Hubbard Center for Genome Studies to examine the cause of the wide variation in spot number on Harmonia axyridis (commonly known as the Harlequin Ladybug). Hypothesizing that there is genetic control of this characteristic, Havens has sequenced the DNA of the ladybug to develop a first draft of its genome. Interested individuals from around the world can upload their own photos of Harlequin ladybugs to Havens’ website, www.spotaladybug.com.

http://colsa.unh.edu/article/dr-ladybug-0

Drew Conroy, Professor, UNH Thompson School of Applied Science – Sub-Saharan Africa

With financial support from the UNH Center for International Education, Drew Conroy, professor of applied animal science in the Thompson School of Applied Science, spent three weeks traveling through sub-Saharan Africa in the summer of 2014. Conroy’s activities included participating in an agricultural development summit in Kenya designed to share ideas informally and develop supportive relationships among leaders of non-government organizations supported by the Mulago Foundation, and visiting an agricultural development project in the Democratic Republic of the Congo supported by Working Villages International (WVI) to explore possibilities for expanding WVI’s work in the region. Conroy also visited Alicia Walsh ’15, a biomedical science major and pre-vet student who spent the summer conducting research at the Cheetah Conservation Fund’s International Research and Education Centre in Namibia through UNH’s International Research Opportunities Program.

http://unh.edu/cie/drew-conroy

Drew Conroy (left) and Fiston Marc Malago examine rice at Working Villages International’s Maliba Farm in the Democratic Republic of the Congo. Credit: Drew Conroy
Eels, Interrupted: American Glass Eels, Extension Scientists, and Volunteers in a River Rendezvous

Alyson Eberhardt, UNH Cooperative Extension specialist in coastal ecosystems, leads a team of scientists and citizen volunteers in the annual counting of the number of American glass eels making their way to New Hampshire’s freshwater rivers and lakes from deep in the Sargasso Sea in the heart of the Atlantic Ocean, 2,000 miles away. The eel count is one activity of many that goes into balancing the health of the eel population and the interests of fishermen who, worldwide, consider eels an important and lucrative catch. The efforts of Eberhardt and her team help New Hampshire Fish and Game meet a standard set by Atlantic States Marine Fisheries Commission regulations that the American eel population be monitored in at least two sites in each state every year.

http://extension.unh.edu/articles/Eels-Interrupted

Emerald Ash Borer Workshops Help Landscapers, Foresters, and Property Managers

UNH Cooperative Extension field specialists Amy Papineau and Tim Fleury organized a series of workshops in Portsmouth and Concord for landscapers, foresters, and property managers who may be affected by the emerald ash borer (EAB). This invasive species was discovered to have infected ash trees in New Hampshire during March of 2013. Papineau explained, “We wanted to bring the landscapers together and give them the information they need to answer their clients’ questions and make the appropriate management decisions regarding the ash trees on the properties they manage.”


EXPERT: Entomologist Alan Eaton on Ticks and Preventing Lyme Disease

Alan Eaton, UNH Cooperative Extension professor and entomologist, is available to talk about ticks and preventing the spread of Lyme and other tick-borne diseases. According to Eaton, ticks are expected to be abundant this summer in New Hampshire, but an infection of the disease can be prevented by performing daily checks for ticks, a time-consuming but effective practice for all residents and visitors.

http://www.unh.edu/news/releases/2014/05/bp28eaton.cfm

Fairchild Dairy Center Receives 2013 Quality Milk Award from Dairy One

The Fairchild Dairy Teaching and Research Center, a facility of the NH Agricultural Experiment Station at UNH’s College of Life Sciences and Agriculture, has been awarded a 2013 Quality Milk Award from the nationally-recognized nonprofit dairy farmers cooperative, Dairy One. The Fairchild Dairy Center’s research herd was recognized for consistently producing milk with a low somatic cell count throughout the year. Milk with low somatic cell count is produced by healthier cows, resulting in more profitable herds, higher milk production per cow, higher milk quality premiums, and milk with a longer shelf life and higher yield of cultured dairy products.

Fairchild Dairy Marks 25 Years of Research
The Fairchild Dairy Teaching and Research Center, a facility of the NH Agricultural Experiment Station at the UNH College of Life Sciences and Agriculture, marked its 25th anniversary on October 29 with a celebration that included presentations of the university’s current dairy research. The anniversary event highlighted research on a wide variety of topics, including those related to alternative feeds for dairy cows, nitrogen retention and nutrient partitioning calves, bioavailability of certain amino acids, and dairy cow fertility. With more than $50 million in annual milk sales, the New Hampshire dairy industry is a critical component of the State’s agricultural economy.

http://www.unh.edu/unhtoday/2014/10/fairchild-dairy-marks-25-years-research
http://colsa.unh.edu/aes/article/nhaes/fairchild25

Finally, a Mug Shot for a Crop-Killing NH Pest
Researchers at the NH Agricultural Experiment Station at UNH have identified and catalogued New Hampshire’s nearly 600 leafhoppers for the first time. Entomologist Don Chandler, a zoology professor who curates the University’s insect collection, oversaw the three-year project to assist New Hampshire farmers in distinguishing the “good” leafhoppers from the “bad” ones, some capable of devastating crops and causing millions of dollars in damage. To control crop-threatening leafhoppers, Chandler offers advice to farmers such as mowing regularly, removing red clover and mulch from under trees, or using herbicide strips to reduce the habitat of the invasive leafhoppers.

http://colsa.unh.edu/aes/article/nhaes/leafhoppers

From Field to Classroom
With financial support from UNH’s Roland H. O’Neal Professorship award, assistant professor of natural resources and the environment Stuart Grandy traveled to Uganda to conduct research on the unique clay minerals found in the region’s soil. Postdoctoral researcher Lisa Tiemann and environmental conservation and sustainability major Michael Casazza ’14 accompanied Grandy. The research will examine the effects of black carbon in Ugandan soil. Grandy explained: “I want to more deeply understand the unique soil processes there, which are key to sustaining agricultural productivity and improving people’s livelihoods.”

http://www.unh.edu/cie/newsletter/2014/spring/grandy.html

Governor, President Huddleston Mark 100 Years of UNH Cooperative Extension
The one-hundredth anniversary of the creation of Cooperative Extension was celebrated by Governor Maggie Hassan, UNH President Mark Huddleston, lawmakers, state commissioners, county officials, and UNH Cooperative Extension staff, volunteers, and clientele on May 7, 2014 during a ceremony in the Executive Council Chambers at the State House in Concord. The Smith-Lever Act of 1914 called for the nation’s land-grant universities to create an outreach arm dedicated to educating the citizens of the state for the public good, thus forming the nationwide Cooperative Extension network.

http://www.unh.edu/campusjournal/2014/05/governor-president-huddleston-mark-100-years-unh-cooperative-extension
http://www.unh.edu/unhtoday/veterans/2014/05/governor-unh-president-commemorate-100-years-unh-cooperative-extension
Grafton County Extension Celebrates Centennial Showcasing Work with Grafton County

Grafton County’s UNH Cooperative Extension staff showcased the collaborative work they conduct with the various county departments at an Extension Centennial Celebration in mid-May. Department heads shared their success stories of working with Extension, such as the expansion of Internet connectivity over the past several years and the “Kids to Kids” program at the county nursing home, where 4-H members partner with the residents to make quilts for local youth in need. Extension also featured other projects in the areas of youth and family, food and agriculture, natural resources, and community and economic development.

http://extension.unh.edu/articles/Grafton-County-Extension-Celebrates-Centennial-Showcasing-Work-Grafton-County

Grow Your Greens, Underwater

Professor of plant biology Christopher Neefus and Ph.D. student Lindsay Green have co-authored a guide, in collaboration with researchers from the University of Connecticut, titled *New England Seaweed Culture Handbook: Nursery Culture*. The book will meet the needs of New England’s emerging commercial seaweed industry and introduces practices that also could contribute to the sustainability of ocean ecosystems. Seaweed has been shown to remediate impacts of finfish aquaculture on coastal ecosystems by taking up fish metabolic waste products – such as nitrogen, phosphorus, and carbon dioxide – and transforming them into products of value to humans and the environment: ingredients for the production of food, cosmetics, pharmaceuticals, vitamins and supplements; fertilizer; insulation; fodder; and potentially, biofuel.

http://colsa.unh.edu/article/grow-your-greens-underwater

Growing a Solution

Iago Hale, assistant professor of specialty crop improvement in UNH’s College of Life Sciences and Agriculture, is a central member of a teaching team in an international effort to improve plant breeding in sub-Saharan Africa. The African Plant Breeding Academy was established to combat hunger across Africa by bringing plant breeders together to discuss new approaches that will improve the breeding of “orphan crops.” Orphan crops offer great nutritional benefits but previously have been ignored by researchers, who have instead focused on improving cash crops for exports.

http://www.unh.edu/unhtoday/veterans/growing-solution
Heat Pumps Show Promise for Reducing Greenhouse Heating Oil Consumption

Preliminary results of a study led by Brian Krug, UNH Cooperative Extension associate professor, indicate that excess greenhouse heat can be recycled through the use of heat pumps. In the UNH heat pump system, two air-to-water heat pumps and an insulated thermal water holding tank are used to capture excess heat in greenhouses which is then used to warm the greenhouses when needed. Storing the extra energy this way would allow growers to save money on fuel and operate through the entire heating season while reducing the environmental footprint of their greenhouses.

http://colsa.unh.edu/aes/article/nhaes/heatpumps

Invaders from the East

UNH Cooperative Extension’s fruit and vegetable team is making great strides in combating the Spotted Wing Drosophila, an invasive fruit fly species from China that has plagued New Hampshire berry growers since the species’ introduction in 2011. Led by professor and entomology specialist Alan Eaton and working alongside farmers and other research teams from across New England, Cooperative Extension has introduced a series of responses intended to monitor, identify, and control the pest while protecting crops. The team’s efforts have already cut crop losses from 25 percent in 2012 to just over 5 percent in 2013, saving growers an estimated $1 million.

http://extension.unh.edu/articles/Invaders-East

Kirk Broders, Assistant Professor of Biological Sciences, COLSA – Mexico

Kirk Broders, assistant professor of biological sciences in the UNH College of Life Sciences and Agriculture, traveled during August 2014 to Central Mexico to initiate a new line of research focused on the evolution of plant-associated microbes. Broders is specifically interested in documenting the effect plant domestication has on the associated microbiome of a particular species, the common bean (*Phaseolus vulgaris*). His trip was supported in part by a UNH Center for International Education Development Grant.

http://unh.edu/cie/kirk-broders

MacLea Joins Biology Department as Assistant Professor

Kyle MacLea joined the UNH Manchester faculty in Fall 2014 as an assistant professor of biology, teaching courses in microbiology and molecular biology. MacLea’s research interests include understanding how prions (small protein infectious agents) are transmitted between mother and daughter cells in a yeast model system, and the molecular genetics of the processes of molting and limb regeneration in crabs, lobsters, and crayfish.

http://manchester.unh.edu/blog/campus-news/maclea-joins-biology-department-assistant-professor

New App to Zap Greenhouse Diseases

UNH Cooperative Extension researchers Cheryl Smith and Brian Krug have designed a mobile app, *The Greenhouse Disease Control Guide*, which will provide horticulturalists with easy access to organized resources on plant disease identification and treatment. The tool was created for *Electronic Grower Resources Online* (e-GRO), a centralized database for the commercial greenhouse industry. The new, free app is available for download at e-gro.org.

http://extension.unh.edu/articles/New-App-Zap-Greenhouse-Diseases
New Bee ‘Hotel’ at UNH is Reserved for Pollinators

Sandra Rehan, assistant professor of biological sciences and a NH Agricultural Experiment Station researcher at the UNH College of Life Sciences and Agriculture; Cathy Neal, UNH Cooperative Extension specialist and professor of plant biology; and Woodman Farm staff have constructed a bee hotel as part of the research project, *Sustainable Solutions to Problems Affecting Bee Health.*

“This study will assess the complete diversity of native bees in the region for the first time, serve as the baseline for long-term monitoring, and provide a better understanding of pollinator diversity and ecology. This information will be used to protect native bees in New England and to raise awareness of pollinator health and how human land use practices affect native pollinators and, in turn, our food supply and ecosystems,” says Rehan.

http://www.unh.edu/news/releases/2014/06/lw10bees.cfm
https://www.youtube.com/watch?v=V_pGzX9Lewk&feature=youtu.be


In the spring of 2014, UNH Cooperative Extension secured eleven grants which will be used to fund camps for military teens and families, help farmers fight agricultural pests, continue the NH Sea Grant program, and work to develop a more sustainable fishing industry.


New Video Provides Overview of New Hampshire’s Forest-Based Industry

*NH Wood – NH Good: Working Forests for New Hampshire,* produced by UNH Cooperative Extension, showcases the state’s forestry industry, including its foresters, loggers, truckers, sawmill managers, and wood energy facilities. The video is designed to inform economic development practitioners and community decision makers about the NH forestry industry, which contributes $1.4 billion to New Hampshire’s economy. View the video here.

http://extension.unh.edu/articles/New-Video-Provides-Overview-New-Hampshire%E2%80%99s-Forest-Based-Industry

NHAES Researchers Receive USDA Grant to Study Nitrogen Loss in Soils

Researchers at the NH Agricultural Experiment Station (NHAES), UNH College of Life Sciences and Agriculture, have received a grant from the U.S. Department of Agriculture to study the loss of environmental nitrogen in agricultural systems. The multidisciplinary team that will conduct the study includes Stuart Grandy, assistant professor of natural resources and the environment; Kirk Broders, assistant professor of plant pathology; Erik Hobbie, research associate professor of terrestrial ecology; and Richard Smith, assistant professor of agroecology. The NHAES researchers’ work will advance understanding of plant-microbe controls on the nitrogen cycle, enabling agricultural systems to match nitrogen inputs more closely to plant demand, thereby reducing environmental nitrogen losses and creating more efficient, productive agricultural systems.

http://www.unh.edu/news/releases/2014/05/lw21nitrogen.cfm
http://www.unh.edu/campusjournal/2014/05/nhaes-researchers-receive-482500-grant-study-nitrogen-loss-soils
NHAES Scientists Share in USDA Research Grant – Breeding Better Strawberries Focus of UNH Research

NH Agricultural Experiment Station geneticist Tom Davis, bioinformaticist Hailong Zhang, and graduate students Lise Mahoney, David Wood, and Yilong Yang are part of a multi-institutional team that has been awarded a five-year grant to develop and apply modern DNA-based tools to deliver new cultivated varieties of rosaceous crops such as apples, peaches, strawberries, and cherries with superior product quality and disease resistance. The UNH researchers’ role in “RosBREED: Combining Disease Resistance with Horticultural Quality in New Rosaceous Cultivars” is to apply the new breeding approaches to strawberries. The grant is from the USDA National Institute of Food and Agriculture’s Specialty Crop Research Initiative, will be managed by collaborators at Michigan State University and Washington State University, and involves 35 scientists at 14 U.S. institutions and numerous international collaborators.

http://colsa.unh.edu/aes/article/nhaes/davisusdagrant

NHAES Scientists Tackle Climate-Related Challenges of Northeast Apple Growers

Scientists at the NH Agricultural Experiment Station in the UNH College of Life Sciences and Agriculture are helping northeastern apple growers manage diseases that can damage or destroy their crops. Working under the leadership of Kirk Broders, assistant professor of plant pathology, Experiment Station scientists are using sophisticated weather models to predict when an orchard is at risk for infection. This targeted approach lets orchard managers know when an outbreak could be at hand, helping the managers respond quickly to disease when it occurs and to cut costs and reduce the environmental impact of fungicides by using the expensive chemicals only when absolutely necessary.

http://colsa.unh.edu/aes/article/nhaes/climateandapples
http://www.unh.edu/news/releases/2014/09/lw10apples.cfm

NHAES Sets Research Education Sessions for 2015 NH Farm and Forest Expo

Scientists with the NH Agricultural Experiment Station and the College of Life Sciences and Agriculture will discuss their latest research on forest resource management and innovations for New Hampshire agriculture at the upcoming 2015 New Hampshire Farm and Forest Expo. According to Tori Berube, manager of the Expo, “the research UNH scientists will share during this expo workshop will undoubtedly help those working in the forestry and agriculture fields in New Hampshire make informed decisions about their own business.”

http://colsa.unh.edu/aes/article/2015farmandforest

Number Discrimination in the Clark’s Nutcracker (*Nucifraga columbiana*)

Lindsay Michaud ’15, a biomedical science major, studied the cognitive abilities of Clark’s Nutcracker birds at UNH’s psychology aviary with financial support from the UNH Hamel Center’s Summer Undergraduate Research Fellowship program. Under the guidance of her mentor, associate professor of psychology Brett Gibson, Michaud studied non-human understanding of numbers by testing the birds’ unique ability to discern amounts. Michaud reported the details of her research in *Inquiry*, UNH’s undergraduate research journal; she found that the birds displayed exceptional quantity discrimination abilities.

http://www.unh.edu/inquiryjournal/spring-2014/number-discrimination-clark%E2%80%99s-nutcracker-nucifraga-columbiana
Researchers Investigating Hydroponics Use to Meet Winter Produce Demands

Researchers at the NH Agricultural Experiment Station (NHAES) at the UNH College of Life Sciences and Agriculture have launched a hydroponics project that will explore options for farmers who are trying to meet the increasing demand for locally grown fresh produce during winter and increase profits in the off-season. Hydroponics is a method of growing plants in mineral-infused water, without the use of soil. NHAES researcher and UNH Cooperative Extension specialist Brian Krug and his team have launched several research projects to evaluate which plants grow well in a variety of hydroponics systems, the nutrients required, and the costs associated with hydroponic systems.

http://colsa.unh.edu/aes/article/hydroponics

Shedding Some Light

David Plachetzki, assistant professor of molecular, cellular, and biomedical sciences, studies cnidarians (a group of over 10,000 species of animals with gelatinous bodies, including the more commonly known jellyfish and hydra) to learn about humans’ deepest evolutionary ancestors. Plachetzki has received national acclaim for his specialized work, including the 2013 BioMed Central Research Award in Animal Science, Veterinary Research, and Zoology for his research article on cnidocytes, the stinging cells of cnidarians. “From cnidarian research we can make inferences about a very early node in animal evolution,” Plachetzki explained. “What is shared between a hydra and a human is most likely to be very important to both species.”

http://colsa.unh.edu/article/spring-2014/shedding-some-light

Strawberry Fields Forever – N.H. Agricultural Experiment Station Researchers Find Promise in Strawberry Cultivation System

Researchers at the New Hampshire Agricultural Experiment Station (NHAES) at UNH are studying the annualized plasticulture system, a commercial strawberry production method, to evaluate its potential as a new way of farming for New England berry growers. While this technique has higher start-up costs than the more commonly used perennial matted-row production system, NHAES scientists believe that the annualized plasticulture system may produce higher crop yields and allow growers to manage soil-borne diseases through rotation. In response to a survey of growers’ needs, Matt Kochka, a master’s student in plant biology, has been working with Iago Hale, assistant professor of specialty crop improvement, to conduct small-scale trials comparing the economics of the standard matted-row production system with those of the annual plasticulture system at Kingman Farm, one of five NHAES facilities at UNH.

http://www.unh.edu/unhtoday/strawberry-plasticulture

Teens Connect With... Mutant Bacteria?! Innovative STEM Lab Gets Hands-on With Evolution

Associate professor of microbiology and genetics Vaughn Cooper has been working with graduate student Taylor Warren ’13 to develop a simple, hands-on method of teaching teenagers about the complexities of evolution. The curriculum, called “Evolution in Action,” takes the abstract concept and turns it into a hands-on activity involving colonies of harmless bacteria that reproduce and mutate at astonishing speeds, allowing students to watch evolution unfold before their eyes over the span of a few weeks. Working with Cooper and Winnacunnet science teachers Mike Handwork ’98 and Winnacunnet High School students Jenna Roy, left, and Olivia Bessemer, right, examine bacteria they have grown for signs that the cells have mutated and evolved.

Credit: Lori Wright, NH Agricultural Experiment Station
Shani Scarponi, Warren is assessing the effectiveness of the curriculum as part of her thesis research. The long term goal is to create kits that will allow high school students around the country to engage in similar experiments.

http://www.unh.edu/unhtoday/2014/07/teens-connect-mutant-bacteria

The Ick of the Tick
In his role as overseer of UNH Cooperative Extension’s integrated pest management program, Alan Eaton, professor of entomology, has been surveying NH for ticks for more than two decades. During this time he’s found that more black-legged ticks (*Ixodes scapularis*, a.k.a. deer ticks) call Rockingham, Strafford, and Hillsborough counties home than anywhere else in the state. This abundance most likely is due to increased humidity along the coast and rivers, more deer, and more people. Eaton’s advice on preventing tick bites, and possible Lyme disease, includes using insecticides and pruning brush to limit the ticks one is likely to encounter, and tucking long pants into tall socks to keep ticks away from the skin.

http://www.unh.edu/unhtoday/2014/06/ick-tick

Tomato Grafting Workshop Draws a Crowd
Over the past ten years, grafting has become an increasingly important method to improve the productivity and quality of tomatoes. In February, Olivia Saunders, UNH Cooperative Extension food and agricultural field specialist, drew a large crowd for a tomato grafting workshop at Spring Ledge Farm in New London, NH that provided information and resources for growers looking to improve the vigor of their plants through grafting. The event shared groundbreaking techniques that will allow growers to continue harvesting high-quality tomatoes, an extremely valuable crop in New Hampshire, in greenhouses far into October.

http://extension.unh.edu/articles/Tomato-Grafting-Workshop-Draws-Crowd

UNH and Strafford County Conservation District Team Up to Test Cover Crops
A team of UNH scientists is working with the Strafford County Conservation District to test different combinations of cover crops in a hayfield in Dover, NH to measure the crops’ impact on fertility, productivity, and soil quality. The researchers are trying to adapt methods that have worked in the Midwest and Great Plains regions to New Hampshire’s distinct agricultural system to improve agricultural sustainability without the use of chemicals. The current tests, which are funded by the NH Agricultural Experiment Station in the UNH College of Life Sciences and Agriculture, involve a variety of cover crops, including six different types of grass. Richard Smith, assistant professor of agroecology, leads the project team, which also includes Myers Shaiyen, a graduate student in natural resources and the environment.

http://colsa.unh.edu/aes/article/nhaes/covercrop

UNH Fairchild Dairy Produces ‘Gold’ Standard of Milk
The Dairy Farmers of America (DFA) awarded a 2014 Gold Quality Award to the NH Agricultural Experiment Station’s Fairchild Dairy Teaching and Research Center. The award recognizes Fairchild Dairy’s continued attention to herd health, hygiene, and sanitation, and will ensure that the dairy will receive the highest possible price for its milk. Tim Riel, area supervisor for DFA, spoke highly of operations at Fairchild Dairy: “UNH Fairchild Dairy staff
Jon Whitehouse and John Weeks do a masterful job making high quality milk for DFA.” DFA is the leading national milk cooperative, with nearly 13,000 dairy producers in 48 states.

http://colsa.unh.edu/aes/article/2014dfaaward

UNH Greenhouses Earn Top Sustainability Credential from International Group

For the second year in a row, the Macfarlane Research Greenhouses, which are part of the NH Agricultural Experiment Station at the UNH College of Life Sciences and Agriculture, have received the top grade for sustainability by the MPS Group of the Netherlands, an independent international sustainability certification group. The MPS Group conducts a greenhouse sustainability certification program that assesses energy, water, and fertilizer use; crop protection methods; and waste management in greenhouses around the globe. The UNH facility is the only research greenhouse operation in the world with this sustainability certification.

http://colsa.unh.edu/aes/article/mps2014
http://www.unh.edu/news/releases/2014/10/lw29greenhouse.cfm

UNH Hosts Popular Poinsettia Open House Dec. 4-6: Poinsettia Trials Bring Research to Breeders, Growers, and Public

On December 4-6, 2014, the Macfarlane Greenhouses played host to the 9th annual Poinsettia Trials Open House. The collaborative event brings research to breeders, growers, and the public, showcasing unique varieties of the popular holiday plant. Visitors to the trials assist in research by recording their favorites from among new and different varieties, or cultivars. Similar trials take place at universities and commercial greenhouses across the country, allowing breeders and growers to evaluate regional differences in the growth and performance of new cultivars. This information provides a basis for choosing the best cultivars for a particular growing environment and market.

http://colsa.unh.edu/aes/article/2014poinsettiaopenhouse

UNH NHAES Researchers Leaders in Breeding Better Strawberries

At the New Hampshire Agricultural Experiment Station, a team of researchers led by professor of plant biology Tom Davis is making internationally recognized strides in strawberry research. Davis’s group was involved in the development of the IStraw90® SNP Array, a state-of-the-art genetic analysis tool that enables strawberry growers to easily select plants with specific desirable traits, such as consumer-preferred taste and resistance to disease, saving time and effort compared to previous methods of selection. RosBREED, an international plant breeding initiative funded by the United States Department of Agriculture’s National Institute of Food and Agriculture, provides funding for the work of Davis’ research group.

http://colsa.unh.edu/aes/article/nhaes/strawberries
UNH NHAES Researchers Work to Save Endangered New England Cottontail

Scientists at the NH Agricultural Experiment Station are working to restore New Hampshire’s and Maine’s only native rabbit populations after research based on genetic monitoring found that in the last decade, cottontail populations in northern New England have become more isolated and experienced a 50 percent contraction of their range. Much of this research has been conducted by John Litvaitis, professor of wildlife ecology, and Adrienne Kovach, research associate professor of natural resources at UNH. According to Kovach, fragmentation of habitats is the main threat to cottontails and occurs when cottontail habitat is reduced or eliminated due to the maturing of forests or land development.

http://colsa.unh.edu/aes/article/nhaes/cottontail

UNH Researchers Part of NASA Grant to Study Evolution of Life in Universe

Vaughn Cooper, UNH associate professor of microbiology and genetics, and his team of scientists will share in a major grant from the National Aeronautics and Space Administration (NASA), collaborating with researchers from other U.S. universities to study the origin, evolution, distribution, and future of life in the Universe. Cooper’s team will look specifically at how microbes growing on surfaces, or in biofilms, can modify their environments and evolve synergistic interactions that reflect the origins of multicellularity. The grant will be led by the University of Montana at Missoula and includes researchers from Stanford University, Penn State, and the University of Colorado at Boulder. The interdisciplinary team will become members of the NASA Astrobiology Institute, headquartered at NASA’s Ames Research Center at Moffett Field, CA.

http://colsa.unh.edu/aes/article/nhaes/coopernasagrant
http://www.unh.edu/news/releases/2014/10/lw20nasa.cfm

UNH Names Innovative Composting Facility after Sustainable Agriculture Pioneer

UNH has named its high-tech composting/energy capture facility at the Organic Dairy Research Farm in honor of the sustainable agriculture pioneer who advanced the technology. The Joshua Nelson Energy Recovery Compost Facility, the only one of its kind at a land-grant university, produces high-quality compost and captures generated heat, thereby reducing fossil fuel use on the farm. Nelson developed this compost production system with colleagues at Agrilab Technologies of Enosburg Falls, VT. The technology can be used to heat greenhouses and buildings or meet demands for hot water while producing compost on a commercial scale for use in sustainable agriculture.

http://colsa.unh.edu/aes/article/unh-names-innovative-composting-facility-after-sustainable-agriculture-pioneer

UNH Survey: Milk Prices Top Concern of Northeastern Organic Dairy Farmers

Working with the Northeast Organic Dairy Producers Alliance (NODPA), UNH researchers recently surveyed 183 organic dairy farms in the first-ever effort to assess the concerns and needs of organic dairy farmers in the Northeast. They found that the farmers’ top concern is to receive steady, fair prices for their milk from milk processors. The research team included David Townson, professor of molecular, cellular, and biomedical sciences; Lisa Townson, assistant director of UNH Cooperative Extension; André Brito, assistant professor of organic dairy management; and André
Pereira, doctoral student in dairy nutrition. The results of the needs assessment, funded by the USDA-NIFA Organic Agriculture Research and Extension Initiative, the Northeastern Regional Association of State Agricultural Experimental Station Directors, and the NH Agricultural Experiment Station in the UNH College of Life Sciences and Agriculture, will serve as the foundation for future research and educational outreach programs.

http://colsa.unh.edu/aes/article/nhaes/organicmilksurvey

Where the Wildflowers Grow

UNH Cooperative Extension horticultural specialist Cathy Neal is studying the ecological benefits of planting wildflower meadows at the UNH Agricultural Experiment Station’s Woodman Research Farm. Neal is working with Merrimack County field specialist Amy Papineau to determine the best mixes of wildflower seeds for New England ecosystems. “Adding even a small meadow of native wildflowers and grasses to your property can help by serving as a habitat for pollinators, birds, and other wildlife, providing infiltration areas for storm water, and preventing soil erosion,” Neal explained. Neal has compiled a database of about 34 region-friendly wildflower species and tips for propagating wildflower meadows. The data base and tips are available on the Wildflower Meadows page of the UNH Cooperative Extension website.

http://extension.unh.edu/articles/Where-Wildflowers-Grow

Wildcat Studies Big Cats: Alicia Walsh Delved into the Diets of Cheetahs and Leopards in Namibia

Alicia Walsh ‘15, biomedical science major and aspiring veterinarian, traveled to Africa in the summer of 2014 to study at the Cheetah Conservation Fund. With the help of a grant from the International Research Opportunities Program of the UNH Hamel Center for Undergraduate Research, Walsh researched the feeding habits of the black-backed jackal, mongoose, hyena, leopard and cheetah. Her findings will contribute to efforts to save the cheetah from extinction.

http://www.unh.edu/unhtoday/2014/10/wildcat-studies-big-cats

Winter Greens

Becky Sideman, UNH Cooperative Extension vegetable and berry specialist, and Connor Eaton, master’s student in sustainable agriculture and food systems, research reliable ways to grow spinach and other greens to meet the increasing need and popularity of winter farmers markets. Sideman and Eaton are growing and studying the winter greens at UNH’s Woodman Farm using “high tunnels,” greenhouse-like structures with insulating plastic covers. Sideman explains, “Since most of the successes using these methods have been shared anecdotally by farmers, there have not been replicated experiments evaluating the performance and suitability of various crops, varieties within a crop, planting date, and much more for these overwintering methods. Fundamental research is desperately needed for these systems.”

http://www.unh.edu/unhtoday/winter-greens
Business & Technology

Be Part of Our Newest Consortium – G.fast
The UNH InterOperability Laboratory (UNH-IOL) was selected to serve as the official test site for the international Broadband Forum’s G.fast certification program. UNH-IOL is in the process of accepting companies as founding members of this new consortium. G.fast is a new communications technology that drastically increases speed over copper wire by using wider frequency profiles than earlier versions of DSL used. The selection of UNH-IOL as the world’s first and only test site for the G.fast certification program reflects the UNH-IOL’s reputation for running neutral tests of networking technologies in partnership with the business community.

http://us8.campaign-archive2.com/?u=2dda639777f7c7a1a13630863&id=e56a294724

Carsey Institute: 39 Percent of Unemployed Americans Seeking Work for More Than Six Months
Andrew Schaefer, doctoral candidate in sociology and research assistant at the Carsey Institute at UNH, has found that 39 percent of unemployed Americans have been seeking work for six months or longer. The new research is detailed in the Carsey Institute brief, The Long-Term Unemployed in the Wake of the Great Recession. Schaefer explains that insight into these demographics is important so that researchers can “better target strategies for alleviating the negative effects of long-term unemployment.”

http://www.unh.edu/news/releases/2014/01/lw22carsey.cfm
http://www.unh.edu/campusjournal/2014/01/carsey-institute-39-percent-unemployed-americans-are-seeking-work-six-plus-months
http://cola.unh.edu/article/2014/01/carsey-institute-39-percent-unemployed-americans-are-seeking-work-six-plus-months

Comcast and UNH Manchester Partner in STEM Ambassadors Program for High School Students
Comcast’s Internet Essentials Program is partnering with UNH Manchester to offer the STEM Ambassadors program, a year-long program taking place on-site at Manchester’s Memorial and Central High Schools to support English Language Learner (ELL) students in grades 9-11 who currently are struggling with math. The program curriculum is integrated across disciplines and is comprehensive to include, but not limited to, technology, engineering, writing and the arts. Students also will have a chance to visit high tech companies in the Manchester area to see both job possibilities and the practical application of what a STEM education can mean to them.

http://manchester.unh.edu/blog/unh-stem-discovery-lab/comcast-and-unh-manchester-partner-stem-ambassadors-program-high-school

Students in the STEM Ambassadors program gathered on October 28, 2014 at UNH Manchester with Lauren Provost, UNH research assistant professor and Director of the STEM Ambassadors program (kneeling), and U.S. Senator Jeanne Shaheen (wearing pink jacket) for an event that brought together New Hampshire teachers and State and local officials to increase awareness of the STEM Ambassadors program and its goal to close the digital divide.

Credit: UNH Manchester
Devkamal Dutta, Associate Professor of Strategic Management and Entrepreneurship, Paul College – India & Hong Kong

Devkamal Dutta, associate professor of strategic management and entrepreneurship in the Peter T. Paul College of Business and Economics, traveled to India and Hong Kong in the summer of 2014, funded in part by an International Grant for Development and Engagement from UNH’s Center for International Education. Dutta examined growth challenges in social ventures and entrepreneurial firms that adopt a business-oriented approach to tackle some of the biggest social challenges facing a region or country, in this case, India. Dutta also visited Hong Kong Polytechnic University as an invited participant in a conference on Renewing Business Education in Asia, a subject closely related to his research.

http://unh.edu/cie/devkamal-dutta-india-hk-2014

Device May Help Solve Weighty Problem of Snow Loads on Roofs

When the founder and president of engineering company 2KR Systms LLC wanted to improve one of his products, he turned to the New Hampshire Innovation Research Center at UNH (IRC). The IRC directed him to two UNH Manchester faculty, Christopher LeBlanc, assistant professor of engineering technology, and Mihaela Sabin, associate professor of computing science, who could work with him to advance the SnowScale technology. SnowScale was designed originally to measure water content and heaviness of snow on the ground. Working with teams of UNH students, LeBlanc and Sabin are designing a smaller, more “user-friendly” version of the SnowScale that can be deployed on rooftops with the goal of preventing devastating roof collapses that are common in New England.

http://manchester.unh.edu/blog/campus-news/device-may-help-solve-weighty-problem-snow-loads-roofs
http://manchester.unh.edu/blog/campus-news/students-and-alumnus-engineer-device-measure-snow-loads-roofs
http://unh.edu/unhtoday/veterans/2014/06/weight-watchers

Exploring Agritourism in Chile

Sarah Wiggins ’15, a business administration major with a minor in hospitality management, conducted research in Chile in the summer of 2014 as part of her nine-week Summer Undergraduate Research Fellowship offered through UNH’s Hamel Center for Undergraduate Research. Wiggins traveled around the rural Maule region, interviewing local farmers as she explored the benefits of agritourism, the blend of tourism with agricultural operations such as farms or ranches. Nelson Barber, associate professor of hospitality management in the Peter T. Paul College of Business and Economics, served as Wiggins’ mentor.

http://www.unh.edu/unhtoday/2014/10/exploring-agritourism-chile

Free Webinar! Remote Sensing of Lakes: They’re not all just "blue"

While most common land remote sensing approaches treat surface water as a single class (“blue” most of the time), a great deal of information about the dynamics and water quality of lakes can be obtained through remote sensing. This recorded webinar, originally presented on May 28, 2014 by Shane Bradt (Cooperative Extension associate

Credit: UNH Cooperative Extension
professor and specialist, geospatial technologies) details important considerations when using remote sensing on inland water bodies, and summarizes some of the recent advances in the remote sensing of lakes.

http://nhepscor.org/events/free-webinar-remote-sensing-lakes-theyre-not-all-just-blue

Hackers Beware: Cyber Defense Competition Brings Region’s Brightest to UNH
UNH’s computer science department hosted the seventh annual Northeast Collegiate Cyber Defense Competition, in which some of the world’s most skilled hackers gathered to compete against student cyber defense teams from 10 universities. The three-day competition, organized by UNH computer science instructor Ken Graf, pits hackers from the U.S. military, government, and top security firms against the student teams in real-world situations in which cyber security is threatened. The students must resolve and prevent the hacker’s attacks while allowing people in their simulated company to continue working at the same time.

http://www.unh.edu/unhtoday/unhtoday/2014/06/hackers-beware

High School Students Explore Computing and Engineering at Girls Technology Day
Mihaela Sabin, associate professor and coordinator of the Computing Technology Program at UNH Manchester, organized a one-day event with her colleagues to introduce middle school and high school girls to the opportunities of careers in technology. Girls Technology Day activities, which were designed to dispel the idea that careers in computer science lack social interaction, included a series of workshop sessions that emphasized collaboration and hands-on activities. Sabin stressed the importance of having women work in technology fields: “Nobody disputes that the more diverse a high-tech team, the more successful and impactful the solution is.”

http://manchester.unh.edu/blog/campus-news/high-school-students-explore-computing-and-engineering-girls-technology-day

If You (Re)build It, Will They Come?
Christine Soutter, economic development manager for the city of Somersworth, was one of 26 community leaders to attend UNH’s Economic Development Academy, a recent series of intensive workshops created by the UNH Cooperative Extension and the Office of the Senior Vice Provost for Engagement and Academic Outreach. Soutter’s experiences in the Academy – exploring research, hearing from experts, and conversations with other Academy attendees – have inspired her as she spearheads an effort to rejuvenate downtown Somersworth.

http://extension.unh.edu/articles/If-You-Rebuild-It-Will-They-Come

IT’s Scott Valcourt Honored by Gov. Maggie Hassan
Scott Valcourt, UNH Information Technology’s director of strategic technology, received an award from New Hampshire Governor Maggie Hassan for his leadership of the Network New Hampshire Now program. The project brought 865 miles of fiber optic cable to the state, reaching areas with previously limited access to broadband service. UNH worked with the New Hampshire Department of Resources and Economic Development, with guidance from the Governor’s Telecommunications Advisory Board (TAB), and the 2008 New Hampshire Broadband Action Plan to implement the Network New Hampshire Now plan, creating one of the largest fiber networks in the country. The project was made possible by a grant from the National Telecommunications and Information Administration that was matched by private and in-kind funding.

Married Moms in U.S. Buck Trend Toward Shorter-Term Work

In a study published in the February 2014 issue of the American Sociological Review, Kristin Smith, research assistant professor of sociology and family demographer in the Carsey Institute at UNH, and a co-author from McGill University examined whether data collected through the Current Population Survey supports the popularly-held perception that workers are staying in their jobs for shorter periods of time. By looking at the data separately for men and women and by marital and parental status, Smith and her colleague found that men and never-married women have seen declines in job tenure (the number of years working for the same employer), but this overall trend was masked by increases in the job tenure of married mothers. The study indicated that the labor market as a whole is, as people perceive, experiencing a shift toward shorter-term work arrangements.

http://www.unh.edu/campusjournal/2014/02/married-moms-us-buck-trend-toward-shorter-term-work
http://cola.unh.edu/article/2014/02/married-moms-us-buck-trend-toward-shorter-term-work

Network New Hampshire Now

Network New Hampshire Now has brought next-generation communications and broadband access to the state of New Hampshire. The “fiber build,” which provides broadband availability to all of New Hampshire’s 10 counties, was made possible through a unique public-private collaboration throughout the state. The new resource will provide countless opportunities for New England-based businesses, local public safety teams, educational programs, and health care.

http://www.youtube.com/watch?v=yafDefBti-w&feature=youtu.be

Open Compute Project Comes to Durham

The University of New Hampshire InterOperability Lab (UNH-IOL) and Fidelity Investments hosted an Open Compute Project Foundation Engineering Workshop at UNH’s Durham campus in July of 2014. This engineering workshop focused on three of eight top-level projects: networking, storage, and high performance computing. The Open Compute Project Foundation is a community of engineers from around the world whose mission is to design efficient server, storage, and hardware designs for scalable computing.

https://gallery.mailchimp.com/2dda639777f7c7a1a13630863/files/c_edit_open_compute.html

Prof. Tom Laue Named Innovator of the Year at UNHInnovation Event

Tom Laue, professor of molecular, cellular and biomedical sciences, was awarded the University’s Innovator of the Year Award in October of 2014 for his work on innovative instruments and methods to analyze biomolecular interactions. The award was made in conjunction with the recent announcement by UNHInnovation (UNHI) of the establishment of a new center, mentoring network, and seed fund to expand entrepreneurship throughout the University and the state. UNHI strives to create partnerships between UNH and the business community that result in economic development, and is responsible for licensing UNH technologies and supporting start-up companies based on UNH’s innovations.

http://www.unh.edu/unhtoday/2014/10/prof-tom-laue-named-innovator-year-unnovation-event-0
SDN Proof of Concept Delivered at Light Reading's Big Telecom Event

The University of New Hampshire Interoperability Laboratory (UNH-IOL) demonstrated proof of a concept of the functionality in customer premises equipment (CPE) routers using open Software-Defined Networking (SDN) during a live demonstration at the first Light Reading Big Telecom Event in Chicago, IL in June 2014. The UNH-IOL team, led by Marion Dillon, home networking operations manager, showcased virtualization of the home networking environment via cloud technology that will improve network performance, enhance service delivery, and simplify home equipment installation and maintenance for service providers.

https://gallery.mailchimp.com/2dda639777f7c7a1a13630863/files/c_edit_sdn_proof_of_concept.html

Solar-Powered Success – Five Seniors Take Home Top Prize at a National Environmental Engineering Competition

An interdisciplinary team of UNH seniors was awarded the INTEL Innovation award for first place at the national Environmental Design Contest at New Mexico State University in April 2014. The team, composed of three business entrepreneurship majors and two mechanical engineering majors, created TiltOne, a swiveling solar panel system for commercial buildings that can harness 22 percent more energy than current models by tilting in the direction of the sun. Peter T. Paul College of Business and Economics professor and director of the Center for Venture Research Jeffrey Sohl led the team.

http://www.unh.edu/unhtoday/solar-powered-success
http://www.unh.edu/news/releases/2014/04/bp29intel.cfm
http://www.unh.edu/campusjournal/2014/04/unh-team-wins-national-engineering-contest

Summer Geospatial Workshops for Teachers

NH EPSCoR is collaborating with the NH Educational GIS Partnership to offer three teacher-focused GIS/GPS institutes in July and August 2014. At these institutes, K-12 teachers will learn the basics of GIS and GPS technologies and will be shown how these tools can be used to provide engaging experiences for their students. Research data and products produced through the NH EPSCoR Climate and Society project will be featured throughout the workshops, providing real-world examples of how mapping can be used to explore scientific questions.

http://nhepscor.org/news/summer-geospatial-workshops-teachers

Teens Investigate New Ways to Use Smartphones at Camp

Mihaela Sabin, associate professor of computer science at UNH Manchester, led the 2014 Ecosystem Computing Challenge (ECC) summer program for high school students. The educational camp, made possible with funding from New Hampshire’s EPSCoR program, engaged teens in the creation and development of sustainability-themed mobile apps for Android devices. Shane Bradt, associate extension specialist in geospatial technologies in UNH Cooperative Extension, spoke to the students about how technology can be used by experts and citizen scientists alike to monitor water resources. The ECC also offered an 8-day ECC Professional Development Institute to engage area educators in the latest approaches for teaching computing skills in the classroom.

http://manchester.unh.edu/blog/campus-news/teens-investigate-new-ways-use-smartphones-camp
Texas Instrument Grant Boosts UNH Manchester’s Engineering Technology Program

UNH Manchester has received a grant and engineering equipment from Texas Instruments Incorporated. The award will enable UNH Manchester’s Engineering Technology program to be admitted to the Cadence World Wide University Software Program, which provides students with access to the microelectronic industry’s world-class design software. All juniors and seniors in the Engineering Technology program will engage in hands-on projects using these new Engineering Lab resources.

The Innovators: Entrepreneurs Earn Top Honors, Seed Dollars in N.H. Social Venture Innovation Challenge

The N.H. Social Venture Innovation Challenge is designed to be an “innovation accelerator” as participants develop original proposals for sustainable, market-based solutions to societal challenges. Organized and hosted at UNH by the Peter T. Paul College of Business and Economics, the Carsey School of Public Policy, the Sustainability Institute at UNH, NH EPSCoR, and Net Impact UNH, the 2014 Challenge had 158 individuals representing 71 teams of college students and community members who competed to design entrepreneurial concepts to tackle major local and global challenges such as climate change, access to clean water, food access and food waste, and community economic development.

UNH Broadband Center of Excellence Completes Trial of White Space Technology

The UNH Broadband Center of Excellence (BCoE) has completed a trial of the new wireless broadband technology known as TV White Space (TVWS). TVWS uses unlicensed, high-performance frequencies reserved for television transmissions to wirelessly conduct Internet traffic. The study was part of the Gigabit Libraries Network’s White Space Project. BCoE Executive Director Rouzbeh Yassini, who is recognized as the father of the cable modem, explained that the greater mission of this project and the Center is “to empower every citizen of the world to have access to basic broadband.”

UNH Center for Venture Research: U.S. Angel Investor Market Recovery Continues on an Upward Trend in 2013

According to the 2013 Angel Market Analysis conducted by the Center for Venture Research at UNH, the angel investor market has continued to grow since 2010. Angel investments are a source of new jobs, with roughly 4.1 jobs created from each investment. Jeffrey Sohl, Peter T. Paul College of Business and Economics professor and director of the Center for Venture Research, explained: “This increase in the seed/start-up stage is an encouraging sign since seed capital is the stage of need for our nation’s entrepreneurs.”
UNH Cooperative Extension Included in National Science Foundation Award
Mihaela Sabin, associate professor of computer science at UNH Manchester, is leading a technology-centered pilot project for high school students, titled “The Ecosystem Computing Challenge: Partnership Model to Build Access to Relevant Computing Education for Underrepresented High School Students.” The program will engage underrepresented students in science, technology, engineering, and mathematics (STEM) disciplines through hands-on activities addressing topics pertinent to local ecosystems. UNH Cooperative Extension’s role is to coordinate guest speaker presentations and provide training for teachers. The project is supported by the National Science Foundation-funded NH EPSCoR program.

http://www.unh.edu/unhtoday/2014/01/unh-cooperative-extension-included-750k-national-science-foundation-award

UNH Cooperative Extension Launches Economic Development Academy
UNH Cooperative Extension launched its first Economic Development Academy on August 25, 2014. The Economic Development Academy aims to build a collaborative community network of area professionals to foster economic development in local cities and towns throughout New Hampshire. The seven-session program will span four months and engage participants through both online and face-to-face workshops. UNH’s Office of the Senior Vice Provost for Engagement and Academic Outreach and UNH Manchester will assist with the new program.

http://extension.unh.edu/articles/Economic-Development-Academy-launches-August-25-0
http://extension.unh.edu/articles/UNH-Cooperative-Extension-Launches-Economic-Development-Academy

UNH Lodging Executives Sentiment Index (LESI)
January – LESI Increases Despite Flat Future Outlook
http://www.unh.edu/news/releases/2014/01/lw23lesi.cfm
http://www.unh.edu/campusjournal/2014/01/unh-lesi-increases-despite-flat-future-outlook

February – LESI Slides on Less Than Positive Present Outlook
http://www.unh.edu/news/releases/2014/02/lw21lesi.cfm
http://www.unh.edu/campusjournal/2014/02/unh-lesi-slides-less-positive-present-outlook

March – LESI Continues to Slide as Future Outlook, Reservations Drop
http://www.unh.edu/news/releases/2014/03/lw26lesi.cfm
http://www.unh.edu/campusjournal/2014/03/unh-lesi-continues-slide-future-outlook-reservations-drop

April – LESI Continues to Slide as the Present and Future Outlook Remains Low
http://www.unh.edu/news/releases/2014/04/em23lesi.cfm

May – LESI Improves on Anticipated Strong Summer Travel Season
http://www.unh.edu/news/releases/2014/05/em30lesi.cfm

August – LESI Continues an Upward Move on Robust Present and Future Business Expectations
http://www.unh.edu/news/releases/2014/08/em04lesi.cfm

September – LESI Falls as Lodging Executives Present and Future Sentiment Wanes

October – LESI Remains Flat as Lodging Executives Sentiment Continues to Slip
http://www.unh.edu/news/releases/2014/10/em29lesi.cfm
UNH IOL Approved for OpenFlow Specification Conformance Testing
The UNH InterOperability Lab (UNH-IOL) was the third of six labs to have been ONF-accredited for testing conformance to the OpenFlow specification. According to Erica Johnson, Director of UNH-IOL, “Certification of SDN solutions speeds deployment by building market confidence and enables companies to remain at the forefront of SDN innovation and commercialization.” The Open Networking Foundation (ONF) is a non-profit organization dedicated to accelerating the adoption of open Software-Defined Networking (SDN).

http://us8.campaign-archive1.com/?u=2dda639777f7c7a1a13630863&id=f3eec5b3bc

UNH Manchester and Prominent Business Duo Launch Emerging Technology Start-up Rejjee
UNH Manchester has partnered with Rejjee founders, long-time New Hampshire advertising businessman Gary M. O’Neil, and Cambridge-based serial entrepreneur and MIT Enterprise Forum organizer/lecturer Ken Smith, to create what they call “an early-stage through completion, start-up internship program.” Twelve interns from diverse major areas of study have joined O’Neil and Smith in a strategic product review of the company’s iOS and Android mobile apps and website, tools that disrupt the cycle of personal property crime and its $50 billion direct economic impact, as well as the $90 billion in annual fraudulent insurance claims.


UNH Research Finds Growth in U.S. Angel Investor Market, Decrease in Deal Size
The UNH Center for Venture Research has observed continued moderate growth coupled with a decrease in deal size for the U.S. angel investor market in the first two quarters of 2014. There were increases in the number of ventures receiving funding and the total number of active investors, but these numbers remain lower than those recorded prior to 2008. “Historically, angels have been the major source of seed and start-up capital for entrepreneurs, and while this stabilization is an encouraging sign, it has remained consistently below the pre-2008 peak of 55 percent, signifying that there continues to be a need for seed and start-up capital for both new venture formation and job creation,” said Jeffrey Sohl, director of the Center.


UNH Rosenberg Center Franchise 50 (RCF 50) Index
2nd Quarter 2014 – UNH Franchising Index Returns Best Performance in More Than a Year

3rd Quarter 2014 – Restaurant Sector Drags Down UNH Franchising Index
http://www.unh.edu/news/releases/2014/12/em17franchising.cfm

UNHInnovation Head Named to National Board of Directors
UNHInnovation executive director Marc Sedam has been named vice president of professional development for the Association of University Technology Managers (AUTM), an international group dedicated to furthering research discoveries for the benefit of society. Sedam has participated in AUTM for almost 17 years as a member, speaker, and advocate for technology transfer. Sedam now will be responsible for identifying and clarifying professional development needs and goals of the membership, and developing and implementing programs to meet those needs and goals in coordination with AUTM’s board.

http://www.unh.edu/news/releases/2014/04/em09sedam.cfm
UNHInnovation Launches New Website to Centralize Commercialization of UNH Assets

UNH has launched a new website, http://innovation.unh.edu, as part of an ongoing effort to open its doors to the business community and underscore its active role in technology-based economic development. The new website will promote UNH research and assist in bringing research results to market, consolidate all of the business resources available at the University, and provide the contact information to learn more about the various opportunities to connect with the University. The website is also a hub for UNH news, events, blog posts, and resources for researchers and innovators on campus.

http://www.unh.edu/news/releases/2014/05/cd15innovation.cfm
http://www.unh.edu/campusjournal/2014/05/new-website-promotes-unh-assets

UNHInnovation Receives Grant to Support Entrepreneurship Opportunities

UNHInnovation (UNHI) received an 18-month grant from the National Collegiate Inventors and Innovators Alliance to develop a new course, Managing Innovation, which will focus on promoting UNH’s intellectual property (IP), creating relationships between UNH and the business community, and fostering entrepreneurship. Marc Sedam, executive director of UNHI, will teach the new course. In the words of Tim Willis, licensing manager and grant development specialist for UNHI, “UNH is committed to improving its entrepreneurial ecosystem across undergraduate programs and we saw this grant as a great opportunity to educate students on how to work with IP assets to create ideas and companies that improve productivity in the 21st century.” UNHI is a unit of the UNH Research Office and was known as the Office for Research Partnerships and Commercialization until its restructuring in October 2013.

http://www.unh.edu/news/releases/2014/03/cd06innovation.cfm
http://www.unh.edu/campusjournal/2014/03/unhinnovation-receives-grant-support-entrepreneurship-opportunities

Yixin Liu, Associate Professor Finance – Greece

Yixin Liu, associate professor of finance in the UNH Peter T. Paul College of Business and Economics, traveled to Greece in the fall of 2013 with the support of a travel grant from UNH’s Center for International Education. At the Hellenic American Education Center (HAEC), Liu supervised student-directed studies, a teaching method that operates on a nontraditional time schedule through weekly meetings to accommodate the careers of those enrolled in the course. In addition to widening her teaching experiences, Liu generated a number of ideas for future research through her interactions with not only business professors, but also professors from music, linguistics, and other disciplines.

http://unh.edu/cie/yixin-liu
Engineering & Physical Sciences

A Genius Among Us: Math Professor Tom Zhang Named 2014 MacArthur Fellow

On September 16, 2014, the MacArthur Foundation awarded UNH math professor Yitang “Tom” Zhang with a prestigious MacArthur “genius grant” for his bounded gap proof of Euclid’s twin prime conjecture. Colleagues have described Zhang’s work as “astounding,” and it has served as an academic foundation for other mathematicians to build upon. Zhang is UNH’s third MacArthur Fellow, joining poet Charles Simic and historian Laurel Thatcher Ulrich who received their awards in 1984 and 1992, respectively.

http://www.unh.edu/unhtoday/unhtoday/veterans/2014/09/genius-among-us
http://www.unh.edu/news/releases/2014/09/bp17zhang.cfm

“Bots” Build Teamwork

Two interdisciplinary student teams, the UNH Remotely Operated Vehicle team (UNH-ROV) and the Extra-Terrestrial Navigation with Particle Swarm Optimization team (ET SwarmCats), are building complex robots (“bots”). The UNH-ROV team, headed by co-captains Tyler Fausnacht ’14 and Nick Geist ’14, is constructing an underwater bot capable of maneuvering a submerged shipwreck that will serve as an experimental platform for graduate-level research. They plan to enter their robot, the ROV, in the International Marine Advanced Technology Education (MATE) ROV Competition in June 2014. Led by team captain Stephen Swanick ’14, the ET SwarmCats are focused on outer space, developing a bot that could help create the technology needed to explore other planets or asteroids in search of precious natural resources. Their goal is to employ a group of ET SwarmCats working independently, using their sensors to communicate with one another to make decisions and reach a common goal. If successful, the ETSwarmCats’ application of particle swarm optimization technology might be of interest to the National Aeronautics and Space Administration for further development.

http://www.unh.edu/unhtoday/veterans/Robots-URC-Parents-Association

CAREER Builder: Three UNH Faculty Members Receive Prestigious Awards

Three UNH faculty members received prestigious CAREER awards from the National Science Foundation (NSF). Margaret Boettcher, assistant professor of geophysics, will continue her study of earthquake processes and prediction by monitoring frequently active oceanic transform faults. Gonghu Li, assistant professor of chemistry, plans to further his efforts toward recycling carbon dioxide into fuel. Tom Weber, assistant professor of mechanical engineering, will expand his research using underwater acoustics to measure methane bubbles in bodies of water. The NSF CAREER award is given to recognize and support junior faculty members who exemplify the role of teacher-scholar through outstanding research, excellent education, and the integration of education and research within the context of the mission of their universities.


L to r: Christopher Barr and Tyler Fausnacht cut an acrylic tube for the UNH-ROV.
Credit: UNH Today

L to r: Margaret Boettcher, Gonghu Li, and Tom Weber
Credit: UNH College of Engineering and Physical Sciences
FIRST Class: UNH Hosts Teens and Their Robots at Regional Competition
On March 6-7, 2014, UNH hosted a regional FIRST (For Inspiration and Recognition of Science and Technology) Robotics Competition, a contest testing the robots that teams of high school students have built in six weeks from a common set of parts to accomplish the contest’s challenge. Founded by Dean Kamen, president of Manchester’s DEKA Research & Development, FIRST focuses on applying engineering principles, collaboration, and gracious professionalism — a way of doing things that encourages high-quality work, emphasizes the value of others, and respects individuals and the community. The result: both fierce competition and mutual gain. The event was coordinated and judged by UNH faculty, graduate students, and undergrads, several of whom were former competition participants. The teams and mentors also toured UNH’s engineering facilities and engaged in “meet-and-greet” sessions with UNH researchers and students.

http://www.unh.edu/campusjournal/2014/03/first-class-unh-hosts-teens-and-their-robots-regional-competition
http://www.unh.edu/unhtoday/unhtoday/2014/06/mind-games

‘Frozen’ Science: Magic Meets Reality in Student Snow Hydrology Paper
Three senior engineering majors took a unique perspective on “Frozen,” pitting magic against reality for their final Snow Hydrology course paper. The students -- Abby Davis ’14, Jessica Constant ’14, and Scottish exchange student Liam O’Brien – probed the science in the Disney film’s snow mountain, looking at its depth, properties, and melting power. Their findings show that while the film’s science was not entirely wrong, several details were exaggerated for cinematic effect.

http://www.unh.edu/unhtoday/2014/05/%E2%80%99frozen%E2%80%99-science

Hackers Beware – Cyber Defense Competition Brings Region’s Brightest to UNH
In March 2014, UNH’s computer science department hosted the seventh annual Northeast Collegiate Cyber Defense Competition, a contest challenging student teams from several universities to compete in a series of activities designed to test cyber defense skills in the context of real-world, contemporary challenges. The event also featured a keynote address from Brigadier General Ronald M. Bouchard ‘77, senior vice president of NCI Information Systems, a company that works closely with U.S. government agencies on cyber security. Said Greg Hilston ’15, president of UNH Cyber Security Club Wildhats, hosting the competition is an opportunity to demonstrate that UNH is “serious and invested in excelling in the area of cyber security.”

http://www.unh.edu/unhtoday/hackers-beware
http://www.unh.edu/news/releases/2014/03/bp04cyberdefense.cfm
http://www.unh.edu/campusjournal/2014/03/unh-hosts-cyber-defense-competition-march-14-%E2%80%93-16

It’s Alive! UNH Engineers Transform Memorial Bridge into "Living" Bridge
The Living Bridge Project, a collaborative effort led by UNH with funding from the National Science Foundation’s Partnerships for Innovation program and the New Hampshire Department of Transportation, will install sensors on the Memorial Bridge over the Piscataqua River in Portsmouth, NH. The sensors will provide infrastructure engineers and community members with a wide range of data, from the status of the bridge’s health, to traffic, weather, sea level, and tidal information. While the project will take up to three years to complete, community members can get a glimpse of the project on “Bridge Sundays” this fall when UNH researchers will be at the bridge to introduce the project and attach temporary structural sensors to capture bridge behavior.

http://www.unh.edu/unhtoday/2014/10/it%E2%80%99s-alive
http://www.unh.edu/news/releases/2014/10/bp06bridge.cfm
Jolly Good Fellows – Four UNH Students Receive Prestigious NSF Fellowships

Four UNH students have been awarded highly-competitive National Science Foundation Graduate Research Fellowships which support outstanding graduate students in science, technology, engineering and math. The winners are: Nicole Jaskiewicz, a Ph.D. student in molecular, cellular, and biomedical sciences; Andrea Jilling, a first-year graduate student in natural resources and the environment; Sonja Pape ‘14, a civil engineering major; and Dan Savage ‘14, a mechanical engineering major. Jaskiewicz and Jilling will use their fellowships to continue their graduate studies at UNH; Pape and Savage will begin their graduate studies in Fall 2014.

http://www.unh.edu/unhtoday/2014/05/jolly-good-fellows

Julie Bryce, Associate Professor of Geochemistry – Italy

Julie Bryce met with colleagues at the University of Ferrara in advance of a meeting of geochemists in nearby Florence during a trip to Italy last year. The UNH geochemistry research group has a strong relationship with the University of Ferrara that allows for easy access to Italy’s several volcanic provinces that provide a good research setting for geochemists as well as a steady exchange of knowledge and students. The journey provided Bryce with the opportunity to study xenoliths, rocks swept up from under the Earth’s crust as magma rises to the surface, as well as to sample the local cuisine and cappuccino.

http://unh.edu/cie/julie-bryce-2013

Mastering Gravity: Gymnast Wins Research Prize for Testing Strength of Underground Structures

Civil engineering major Adrienne Hill ‘15 presented her research at the UNH Undergraduate Research Conference in April, garnering her a First-Place Poster award in the Civil-Infrastructure category at the Interdisciplinary Science and Engineering Symposium. Her project, “Experimental and Theoretical Evaluation of Internal Loads in Underground Retaining Structures,” contributed to the research and testing needed to assure the safety of underground garages and underwater highway tunnels.

http://www.unh.edu/unhtoday/veterans/mastering-gravity

Professor Tapped to Investigate Washington State Landslide

Jean Benoît, professor of civil engineering, has been selected to be part of a national team that will research the devastating Oso landslide that occurred on March 22, 2014 in Snohomish County, Washington. Benoît, who has developed technology such as “smart rocks” – aluminum capsules filled with instrumentation that can be used to record data during experimental landslides – will study the geotechnical effects and the debris flow of the Oso landslide. “We need to better understand the mechanisms associated with debris flows. They are potentially so devastating and often unexpected,” Benoît explained.

http://www.unh.edu/news/releases/2014/04/bp09landslide.cfm
http://www.unh.edu/campusjournal/2014/04/professor-tapped-investigate-washington-state-landslide

Credit: UNH College of Engineering and Physical Sciences

Adrienne Hill beside a centrifuge in Kingsbury Hall.
Credit: Lisa Nugent, UNH Photographic Services
STEM Discovery Lab Looks to Program Expansion
The STEM (Science, Technology, Engineering, and Mathematics) Discovery Lab at UNH Manchester is planning to expand its curriculum for K-12 students. With start-up assistance from UNH Durham, UNH Cooperative Extension, and the Granite United Way, the STEM Discovery Lab has completed a successful pilot year featuring hands-on, dynamic programs for students in a wide variety of STEM disciplines. Expansion plans include the hiring of a full-time STEM Discovery Lab Director to lead efforts to start providing courses in all of the STEM disciplines that would help prepare the students to be part of a well-educated local workforce.

http://manchester.unh.edu/blog/unh-stem-discovery-lab/stem-discovery-lab-looks-program-expansion

TURBOCAM Awarded Grant to Predict Feasibility of Replacing Forging and Casting with an Additive Manufactured Alloy
Turbocam Energy Solutions, LLC, a Dover-based affiliate of TURBOCAM International that develops special processes for turbomachinery products, is collaborating with Marko Knezevic, assistant professor of mechanical engineering at UNH, to evaluate the mechanical behavior of the material used by a novel additive manufacturing technology called selective laser sintering. Additive manufacturing could reduce energy use by 50 percent and reduce material costs by up to 90 percent compared with traditional manufacturing. The collaboration is made possible by a Granite State Technology Innovation Grant from the NH Innovation Research Center (NHIRC), a program administered by UNHInnovation.

http://www.unh.edu/news/releases/2014/07/gs01turbocam.cfm

UNH’s Kevin Short Named a National Academy of Inventors Fellow
UNH mathematics professor Kevin Short has been named a fellow of the National Academy of Inventors (NAI). Short’s research has catalyzed innovations in audio and video compression, audio restoration, speech recognition, improved hearing aids, and data encryption and storage. Election to NAI Fellow status is a distinction accorded to academic inventors who have demonstrated a prolific spirit of innovation in creating or facilitating outstanding inventions that have made a tangible impact on quality of life, economic development, and the welfare of society.

http://www.unh.edu/news/releases/2014/12/em16short.cfm
**Health, Behavioral & Social Sciences**

### 10 New ‘SWIFT in 60’ Mini-films Show Inclusive Educational Practices

UNH Institute on Disability filmmaker Dan Habib created 10 mini-films to showcase the positive effects of inclusive educational practices. The mini-films were created for SWIFT (Schoolwide Integrated Framework for Transformation), a national technical assistance center for academic and behavioral support. The films show inclusive schools in action so that others can learn more about the key SWIFT features, such as strong and positive school culture, inclusive academic instruction, and family partnerships. Each film is under two minutes in length and is available to be viewed on YouTube or Vimeo.

[http://iod.unh.edu/About/visionandvoice/Fall2014/SWIFT_in_60.aspx](http://iod.unh.edu/About/visionandvoice/Fall2014/SWIFT_in_60.aspx)

### 2014 Carsey Summer Scholars Named

The Carsey School of Public Policy has announced the first recipients of awards from its Summer Scholars program, which will provide financial support to researchers working on projects in social work, sustainability, and civic engagement that will yield results that can be reported in both peer-reviewed and applied research publications. The 2014 Carsey Summer Scholars and their projects are: Reagan Baughman, associate professor of economics, for “The Impact of Economic Conditions on Utilization of Long-term Care;” Cliff Brown, associate professor of sociology, for “Mobilization in Defense of Local Water Resources;” Katie Edwards, assistant professor of psychology and women’s studies, for “Dating and Sexual Violence Among New Hampshire Youth;” Rebecca Glauber, assistant professor of sociology, for “The Economic Effects of Caring for Elderly Family Members;” Mary Malone, associate professor of political science, for “Learning to Protect and Serve in Latin America;” and Alison Watts, research assistant professor of the civil engineering/environmental research group, for “Water Quality Permits and the Great Bay.”


### Apologies from Peterson to Palin

UNH professor of philosophy Nick Smith is no stranger to apologies. He has spent a good portion of the last decade examining the meaning of apologies and the philosophical, legal, spiritual, and practical ways our society responds to them. In his most recent book, *Justice through Apologies: Remorse, Reform, and Punishment*, Smith takes a look at apologies within the context of civil and criminal law.


### A Nurse in Nepal: Determining Quality of Postnatal Care in the Foothills of the Himalayas

Stephanie Winn ’14, a nursing major planning a career in midwifery, traveled to Nepal with financial assistance from a UNH International Research Opportunities Program grant to study the postnatal care experiences of women in a country with high infant and maternal mortality rates and few health resources. Winn conducted interviews with 30 women in rural villages to investigate how the women’s and babies’ postnatal care compared with the standards set by the World Health Organization. She found that most of the women who participated in the study did not receive the WHO recommended services. Her report is published in *Inquiry*, UNH’s undergraduate research journal. Her advisor was Gene Harkless, associate professor of nursing.

A Supplemented Diet: Multivitamin Use Among College Students

Leah Tully ’14, a nutrition and wellness major, used data from UNH’s College Health and Nutrition Assessment Survey to study diet quality and multivitamin use among college students. Tully’s study group was made up of students enrolled in the introductory nutrition course NUTR 400, the majority of whom are first year students who eat their meals in dining halls on campus. She hypothesized that multivitamin users at UNH have a healthier diet than non-users, and her findings supported her prediction. Tully’s research was supervised by Jesse Stabile Morrell, a lecturer of molecular, cellular, and biomedical sciences, and was reported in Inquiry, UNH’s undergraduate research journal.

http://www.unh.edu/inquiryjournal/spring-2014/supplemented-diet-multivitamin-use-among-college-students

Beyond Borders: Some of the Most Interesting Subjects Know No Bounds

The Master of Arts in Liberal Studies (MALS) program at UNH allows intellectually curious students to plan their own unique interdisciplinary programs of graduate-level research. Kelly LaBrecque ’08G used her background in graphic design to evaluate the various artistic forms present in World War I propaganda posters. Geoffrey Clark ’11G studied the disturbing survival story and legacy of Arctic explorer Adolphus Greely; Andrew Bills ’09 will research the Vatican’s recent embrace of the Internet and social media; and Emma Baillargeon ’09 is exploring the professional and personal experiences of 19th century “freak show” performers with noticeable anatomical differences. The MALS program serves as a springboard for doctoral level research and for interdisciplinary academic enrichment.

http://www.unh.edu/unhtoday/2014/11/beyond-borders

Building Blocks: The GI Bill Launches a Veteran’s Foray into Interdisciplinary Research on Stalinist Industrialization

Sean Thoel ‘15, a history and Russian double major, is leading an examination of the relationship between the Realist production novels and the massive industrialization projects that transformed the Soviet Union during the beginning of the Stalin era in the late 1920s and 1930s. The project is part of Thoel’s scholarly work for the UNH McNair Scholars Program, a federally-funded program that prepares first-generation college students with financial need and members of underrepresented groups for Ph.D. programs. Thoel’s main focus is on the construction of the steel production complex at Magnitogorsk, a project commemorated in Valentin Kataev’s novel Time, Forward! Professor of Russian and humanities Ronald LeBlanc and professor of history Cathy Frierson are Thoel’s co-mentors for the McNair Scholars Program.

http://cola.unh.edu/thecollegeletter/2014-10/building-blocks

Carolyn B. Gamtso, Associate Professor/Reference and Instruction Librarian, UNH Manchester & Patricia A. Halpin, Assistant Professor of Biology, UNH Manchester – Ireland

With assistance from the UNH Center for International Education, the UNH Manchester Humanities and Science & Technology Divisions, and the UNH Manchester Deans and Chairs, Carolyn Gamtso and Patricia Halpin travelled to Limerick, Ireland in August 2014. While there, the two UNH Manchester professors participated jointly in a panel discussion at the Information Literacy Section Satellite Meeting of the International Federation of Library Associations, presenting the results of their collaborative research on student learning and information literacy in an online environment.

http://unh.edu/cie/carolyn-gamtso-and-patricia-halpin
Carsey Institute: Granite Staters in More ‘Walkable’ Neighborhoods Have Higher Levels of Trust, Community Involvement

Researchers from the Carsey Institute at UNH have found that New Hampshire residents living in “walkable” neighborhoods report a higher quality of life and community involvement. A brief reporting the research results, titled “Walking Builds Community Cohesion: Survey of Two New Hampshire Communities Looks at Social Capital and Walkability,” was co-authored by UNH’s Kevin Gardner with colleagues from Plymouth State University and New England College. Gardner is a professor of civil engineering, senior fellow at the Carsey Institute at UNH, member of the UNH Environmental Research Group, and associate director of the NH EPSCoR program. The researchers concluded that fostering municipal efforts to increase walkability could improve community development throughout the state.

http://www.unh.edu/news/releases/2014/03/lw11carsey.cfm
http://www.unh.edu/campusjournal/2014/03/carsey-institute-granite-staters-more-%E2%80%98walkable%E2%80%99-neighborhoods-have-higher-levels-trust-comm

Carsey Institute: More Than 40 Percent of LGBTQ+ College Students Report Intimate Partner Violence

Research conducted at the Carsey Institute at UNH has shown that more than 40 percent of college students identifying as LGBTQ+ (Lesbian, Gay, Bisexual, Transgender, Queer, Questioning, and other nonheterosexual identities) experience intimate partner violence, a number that correlates with the rate reported by students identifying as heterosexual. A brief reporting the research results, titled “Intimate Partner Violence Among LGBTQ+ Students,” was authored by Katie Edwards, assistant professor of psychology and women’s studies and faculty fellow at the Carsey Institute at UNH, and by Kateryna Sylaska, a doctoral student in social psychology. The study results will help experts design prevention and intervention efforts that meet the specific needs of LGBTQ+ college students.

http://www.unh.edu/news/releases/2014/03/lw25carsey.cfm
http://www.unh.edu/campusjournal/2014/03/carsey-institute-more-40-percent-lgbtq-college-students-report-intimate-partner-violence

Carsey Institute: The Increasing Diversity of America’s Youth

The Carsey Institute at UNH has published a brief, “The Increasing Diversity of America’s Youth,” that discusses the current demographic changes among minority groups in the U.S. The brief explores reasons for the rising number of minority children and examines the declining birth rate of non-Hispanic white children. Kenneth Johnson, senior demographer at the Carsey Institute and professor of sociology, authored the brief in collaboration with Andrew Schaefer and Luke Rogers, Carsey Institute research assistants and Ph.D. candidates in sociology.

http://www.unh.edu/news/releases/2014/04/em22carsey.cfm
http://www.unh.edu/campusjournal/2014/04/carsey-institute-increasing-diversity-america%E2%80%99s-youth
Carsey School of Public Policy at UNH: First Child Poverty Decline Since Before 2007

New research from the Carsey School of Public Policy at UNH indicates that child poverty rates declined slightly across the country in 2013, the first time this has occurred since before the Great Recession. The research was conducted by the Carsey School’s Beth Mattingly, director of research on vulnerable families and research assistant professor of sociology at UNH; Jessica Carson, vulnerable families research scientist; and Andrew Schaefer, a vulnerable families research associate and a doctoral student in sociology. While some states had an increase in child poverty, the researchers found that the overall decline nationally is the result of declining child poverty rates in urban America.

http://campaign.r20.constantcontact.com/render?ca=0793eef8-03c8-486b-b341-26f489ea5487&c=10e4c220-45a3-11e3-b9d6-d4ae5292c40b&ch=12810d00-45a3-11e3-ba92-d4ae5292c40b

Catholic Scholar Available to Comment on Pope Francis’s First Year

Michele Dillon, professor of sociology and a scholar of Catholicism, has released a statement and is available to comment on Pope Francis’ first year in the papacy. Dillon’s statement describes her studies of the reactions and opinions of self-identifying liberal, moderate, and conservative Catholics and explores Pope Francis’ attitudes toward controversial issues such as sexuality, abortion, and economic inequality.

http://www.unh.edu/news/releases/2014/03/lw05catholic.cfm

Cellular Sleuth

Caelie Kern ’16, a neuroscience and behavior major, is working with professor of molecular, cellular, and biomedical sciences Chuck Walker to study the role of protein p53 in cancer development. Kern’s work focuses on understanding the causes of human Acute Myelogenous Leukemia (AML) by investigating whether p53, a protein involved in gene expression, is inactivated in an AML cell line and samples from a clinical population of AML patients. Walker’s research project is funded by a grant from the National Institutes of Health’s National Cancer Institute; Kern has received additional funding from the UNH Hamel Center for Undergraduate Research through a Research Experience and Apprenticeship Program scholarship and a Summer Undergraduate Research Fellowship.


Charles Drum Delivers Keynote at 2014 Pacific Rim Conference

Charles Drum, director of the Institute on Disability at UNH, gave the keynote presentation at the 30th Annual Pacific Rim International Conference on Disability and Diversity. In his presentation, “Disability and Public Health - Five Years Later,” Drum discussed the continuing evolution of research, policy, and practice related to public health and disability.

Citizen Schools Founder Named Carsey 2014 Social Innovator of the Year at UNH
Eric Schwarz, founding CEO of the Boston-based Citizen Schools and executive chairman of US2020, has been named the Carsey 2014 Social Innovator of the Year in recognition of his demonstrated commitment to social innovation. Schwarz was honored at the New Hampshire Social Venture Innovation Challenge in December, where he led a workshop and delivered the keynote address on social entrepreneurship and systemic social change.

http://www.unh.edu/news/releases/2014/12/em09carsey.cfm

Citizens’ Institute on Rural Design™ Selects Franklin for Workshop
The Citizens’ Institute on Rural Design™ (CIRD) selected UNH Cooperative Extension to host a two-and-a-half day rural design technical workshop in partnership with Franklin, NH and Plan NH, the Foundation for Shaping the Built Environment. The workshop will explore the use of community design to address the needs of New Hampshire’s aging population. Most older residents want to remain in their current homes as long as possible, and there are diverse challenges to such “aging in place.” The Franklin workshop will build on local and state collaborations, CIRD-provided expertise, and NH resources to provide community-based design solutions.

http://extension.unh.edu/articles/Citizen%E2%80%99s-Institute-Rural-Design%E2%84%A2-Selects-Franklin-Workshop

Communication Professor Wins Prestigious Book Award
UNH communication professor Joshua Meyrowitz has won the International Communication Association’s 2014 Fellows Book Award for his book No Sense of Place: The Impact of Electronic Media on Social Behavior. This prestigious award recognizes a book that has made a substantial contribution to communication scholarship and the broader rubric of the social sciences and has stood the test of time.

http://cola.unh.edu/article/2014/05/ica-award

Corporal Punishment Expert Available To Discuss Proposed Spanking Legislation in Kansas
Murray Straus, co-director of the Family Research Laboratory and professor emeritus of sociology at UNH, has spent nearly 50 years studying the effects of spanking on children. He is available to discuss Kansas legislation that would give school teachers and caregivers expanded rights to spank children. Straus’ research has shown that while spanking can correct misbehavior, it has long-term negative effects that may result in weakened ties with parents, violence, and stunted mental development.

http://www.unh.edu/news/releases/2014/02/lw20straus.cfm

Cosmopolitan: What Can Colleges Actually Do to Prevent Sexual Assault?
Jean Stapleton, co-director of UNH’s Prevention Innovations: Research and Practices for Ending Violence Against Women, was one of four participants in Cosmopolitan Magazine’s panel forum of educators, researchers, and activists who addressed the contemporary state of sexual assault response and prevention on college campuses nationwide. Stapleton recommended that institutions do primary intervention, including bystander intervention, with all levels of students. Research done by Stapleton and her colleagues has shown that comprehensive prevention works, and that incoming students are not the ones who are predominantly sexually assaulting other college students, but it is rather the upper-class students who are creating and sustaining environments that support sexual assault. The question-and-answer session is available in full at cosmopolitan.com.

Daughters of the American Revolution Honor UNH History Professor

Professor of history W. Jeffrey Bolster was awarded the History Award Medal from the National Society of the Daughters of the American Revolution (DAR) in Laconia, NH in October 2014. The award recognizes contributions that significantly advance understanding of our nation’s past through the study and promotion of an aspect of American history. The DAR cited contributions Bolster made through his books *The Mortal Sea: Fishing the Atlantic in the Age of Sail* (2012) and *Black Jacks: African American Seamen in the Age of Sail* (1997).

http://cola.unh.edu/article/2014/10/dar-bolster

David Finkelhor – Research to Promote Safer Children and Families

As Director of the Crimes against Children Research Center (CCRC) at UNH, David Finkelhor credits the worldwide success of the CCRC’s cutting-edge research to the tremendous support UNH provides. Since coming to UNH in 1976, Finkelhor has conducted research and published on the subjects of child maltreatment, family violence, sexual abuse, child homicide, and missing and abducted children, establishing him as a leader in these fields.


David Hagner Joins the AAIDD Delegation to Poland

Research professor David Hagner of the UNH Institute on Disability traveled to Poland with a delegation sponsored by the American Association on Intellectual and Developmental Disabilities and the College of Advancing and Professional Studies at the University of Massachusetts, Boston. In Poland, Hagner studied the country’s support systems for people with intellectual and developmental disabilities and explored ideas for future collaborative projects with Polish researchers. Hagner also presented “Current Practices in the U.S. on Employment for People with Disabilities” at the John Paul II Catholic University of Lublin and at the Jagellonian University in Krakow.

http://iod.unh.edu/About/visionandvoice/Fall2014/AAIDD_PolandDelegation.aspx

Did You Know? Disability and Poverty

Research describing the correlation between disability and poverty was presented in three publications by UNH Institute on Disability researchers in 2014. Project director Debra Brucker and director of research Andrew Houtenville published articles in the *Journal of Disability Policy Studies* and the *Journal of Vocational Rehabilitation* on the national use of public safety net programs among persons with disabilities. Debra Brucker co-authored a paper in *Social Science Quarterly* with a team of Fordham University researchers that uses different measures of poverty to illustrate how working-age citizens with disabilities experience poverty.

http://iod.unh.edu/About/visionandvoice/Fall2014/Did_You_Know.aspx

Digging in the Dirt

Students in anthropology professor Meghan Howey’s “The Lost Campus: The Archaeology of UNH” class are excavating the site of the old train station on campus in the lawn adjacent to Morrill Hall. The process will teach students the foundational methods of archaeology as they work to examine and document part of UNH’s past.

http://cola.unh.edu/article/2014/09/digging-dirt
Dr. Therese Willkomm Brings Assistive Technology Solutions to India

Therese Willkomm, director of ATinNH (Assistive Technology in New Hampshire) in the Institute on Disability at UNH, conducted twelve hands-on assistive technology workshops with over 1000 students and faculty members at three colleges in India during January. Along with occupational therapy graduate students Emily Hames and Vanessa Tocco, Willkomm promoted the continued development and use of low-budget assistive technology for people with disabilities. After they were introduced to assistive technology solutions such as a Braille Rubik’s cube and a motion-sensing cane, workshop attendees were challenged to design and build their own solutions. Over the course of the team’s visit, students created more than 300 different assistive technology solutions using products provided by Dr. Willkomm’s team and items they found on their campuses.

http://www.unh.edu/campusjournal/2014/02/professor-and-graduate-students-conduct-assistive-technology-workshops-india
http://www.chhs.unh.edu/khl/2014-03/flight-ingenuity

Education Professor Publishes Book on Legal Boundaries of Dress Codes

Todd A. DeMitchell, professor of education and justice studies, has published a book on the legal boundaries of dress codes. Student Dress Codes and the First Amendment: Legal Challenges and Policy Issues explores the legal issues that arise when a school prohibits various types of student attire. Through an analysis of major Supreme Court and other federal court cases, DeMitchell examines conflicts that arise when administrators juggle students’ right to free speech with the need to maintain an environment conducive to learning.

http://cola.unh.edu/article/2014/07/tad-dress-codes

Eleanor Harrison-Buck, Associate Professor of Archaeology – Belize

Associate professor of archaeology Eleanor Harrison-Buck and professor of soil microbial ecology Serita Frey, with the assistance of a UNH Center for International Education Development Grant, recently traveled to Belize to work on refining a technique of soil testing and take soil samples from the eastern half of the Belize watershed. According to Harrison-Buck, their technique could provide “the first viable method for identifying historic, and possibly prehistoric, cacao orchards in the archaeological record.” Although archaeological evidence of cacao (the chocolate bean) exists, currently there is no way to understand ancient cacao cultivation and production.

http://unh.edu/cie/eleanor-harrison-buck

Exploring the Potential for Sharia-compliant Microfinance in Underwriting Jordan’s Muslim Poor

Austin Perea ‘14, an economics and political science double major, traveled to Egypt and Jordan with the support of a UNH International Research Opportunities Program grant to study the role of microfinance in Middle Eastern economies. As reported in Inquiry, UNH’s undergraduate research journal, Perea explored how Islamic law and cultural attitudes toward money lending norms impact impoverished economies in Muslim countries. Of his experience, Perea reflected: “Conducting the research itself was particularly rewarding, but perhaps more transformative were the experiences and discussions I had with everyday Egyptians and Jordanians, especially during such a tumultuous period.” His advisor was Jeannie Sowers, associate professor of political science.

Families Retain Reliance on Wives’ Earnings in the Aftermath of the Great Recession

According to new research conducted at the Carsey School of Public Policy at UNH, American families have continued to rely since the Great Recession on the income of wives at record levels, with employed wives’ contribution to family earnings holding steady at 47 percent. Kristin Smith, family demographer at the Carsey School and research associate professor of sociology at UNH, presented the results of her research in the Carsey School brief “Families Continue to Rely on Wives as Breadwinners Post-Recession,” co-authored with Andrew Schaefer, a doctoral student in sociology at UNH and research assistant at the Carsey School. The researchers found that from the pre-recession to the post-recession period, 37 states experienced increases in employed wives’ share of family earnings, whereas 13 states experienced no change.

http://www.unh.edu/news/releases/2014/07/em29carsey.cfm

Founding Director Hired to Lead UNH’s New Carsey School of Public Policy

Michael Ettlinger, a senior director with The Pew Charitable Trusts, has been named the founding director of the UNH Carsey School of Public Policy. The new Carsey School will leverage the existing work of the Carsey Institute as well as the University’s diverse instructional, research, and outreach activities to train future leaders in the craft of policymaking and in the use of research to solve problems. Opening of the Carsey School is planned for late summer 2014.

http://www.unh.edu/news/releases/2014/06/em09carsey.cfm

Franklin’s Golden Moment - A City Partners with UNH Cooperative Extension for Guidance on Growth

Members of UNH Cooperative Extension’s community development grant team were awarded a highly-coveted grant funded in part by the National Endowment for the Arts. The grant is designed to help communities generate conversations and problem-solving workshops to tackle major development problems. When applying for the Citizens’ Institute on Rural Design (CIRD) grant, UNH Extension, Franklin city leaders, and Plan NH focused on three goals: revitalize the city of Franklin’s economy and community for all its residents, with a particular focus on the downtown district and the city’s older residents; involve the arts; and use Extension’s expertise in convening communities to talk about their identities and their future. The pivotal activity funded by the CIRD grant will be a two-and-a-half day community session facilitated by Cooperative Extension in the spring of 2015 when Franklin residents will convene for an organized discussion about goals for the city’s economy; homes and support for senior residents; and explicit ideas for how to accomplish those goals.

http://extension.unh.edu/articles/Franklins-Golden-Moment

From Mill Town to Metropolis, the People and Places of Manchester

Robert Macieski, associate professor of history and director of museum studies at UNH Manchester, is creating a web site that will tell the story of how Manchester grew from mill town to metropolis. With the help of Geographic Information System (GIS) mapping software, census data going back to 1790, city directories, historic maps, and multi-media resources, People and Places will provide a unique tool for exploring the history and geography of the Queen City.

http://manchester.unh.edu/blog/campus-news/mill-town-metropolis-people-and-places- manchester
Good Listeners: UNH and Dover Team Facilitate Discussion on City's K-12 Future
A meeting held by Dover Listens in February exemplified the civic engagement that N.H. Listens, an initiative of the Carsey Institute at UNH, has been working to facilitate since 2011. A unique program nationwide, N.H. Listens provides an open and welcoming platform for community conversations about public issues. This particular event, Strong Communities, Strong Schools, was attended by K-12 students, parents, local police officers, and health care workers. It was the first of three sessions intended to facilitate a dialogue on the future of education in Dover. Funded by the New Hampshire Charitable Foundation with additional support from local businesses, these meetings are tackling challenging local issues such as budget planning, accommodation for larger classes, and more support for school staff.

http://cola.unh.edu/article/2014/02/good-listeners-unh-and-dover-team-facilitate-discussion-citys-k-12-future
http://www.unh.edu/unhtoday/NH-Listens

Grant to UNH Will Enhance Workforce Development for NH Child Welfare Services
UNH’s social work program has received a National Child Welfare Workforce Institute University Partnership grant to strengthen professional ties with the New Hampshire Division for Children, Youth, and Families (DCYF). The grant will support efforts to improve implementation of data-driven decision making and evidence-based practice approaches within DCYF. The project will include establishing traineeships for UNH undergraduate and graduate students at DCYF, collaboratively designing activities addressing workforce opportunities, and developing new UNH curricula with input from those currently engaged in the field. Anne Broussard and Melissa Wells, associate professors of social work, are co-principal investigators of the project.

http://www.unh.edu/news/releases/2014/04/bp02grant.cfm

Highlights from the First Five Years of the Coös Youth Study
Eleanor M. Jaffee, project manager, and Michael S. Staunton, graduate research assistant, have published their findings from the first five years of the Coös Youth Study, a project of the Carsey School of Public Policy at UNH. The Coös Youth Study is a ten-year research project begun in 2008 that explores the decisions of rural youth in Coös County in northern New Hampshire concerning their education and job opportunities and their plans to stay in their native region or move away. The findings address youth aspirations and perceptions of regional opportunities, substance use and mental health, and other topics.

http://campaign.r20.constantcontact.com/render?ca=bfcc6a11-dd2c-441f-94df-4d0879a596a3&c=10e4c220-45a3-11e3-b9d6-d4ae5292c40b&ch=12810d00-45a3-11e3-ba92-d4ae5292c40b

Historian Recounts Efforts to Regulate Whaling Industry in New Book
Kurkpatrick Dorsey, associate professor of history, has explored the many failed attempts throughout history to create a sustainable whaling industry. Based on a deep engagement with diplomatic history and access to extensive archival resources in Norway, Great Britain, the United States, New Zealand, and Australia; the papers of the International Whaling Commission; and the papers of prominent whalers and scientists, Dorsey’s new book, Whales and Nations: Environmental Diplomacy on the High Seas, provides a unique perspective on the challenges facing international conservation projects that has profound implications for current questions of global environmental cooperation and sustainability.

http://www.unh.edu/news/releases/2014/02/lw06dorsey.cfm
http://www.unh.edu/campusjournal/2014/02/historian-recounts-efforts-regulate-whaling-industry-new-book
History Professor Wins John Lyman Book Award for "Whales and Nations"

Kurkpatrick Dorsey, professor of history, has won the 2013 John Lyman Book Award in the category “Naval and Maritime Science and Technology” for Whales and Nations: Environmental Diplomacy on the High Seas, published by the University of Washington Press. Whales and Nations explores the first global efforts at environmental sustainability agreements. The Award recognizes excellence in the publication of books that make significant contributions to the study and understanding of maritime and naval history.

http://cola.unh.edu/article/2014/05/dorsey-lyman
http://www.unh.edu/campusjournal/2014/05/kurkpatrick-dorsey-wins-book-award

History Professor Wins SHEAR Prize for First Book

Assistant professor of history Jessica Lepler has been awarded the James H. Broussard Best First Book Prize by the Society for Historians of the Early American Republic (SHEAR) for her 2013 publication The Many Panics of 1837: People, Politics, and the Creation of a Transatlantic Financial Crisis. The prize is awarded annually to the best first book by a new author published in the previous calendar year that deals with any aspect of the history of the early American republic.

http://cola.unh.edu/article/2014/06/shear-prize

In Science We Trust?

Lawrence Hamilton, professor of sociology and senior fellow at the Carsey School of Public Policy at UNH, and Kei Saito, a Ph.D. student in sociology at UNH, have found that climate change is currently the most divisive political issue for New Hampshire residents. Hamilton says that Republicans and Democrats are more at odds over their beliefs on climate change than on any other science and environmental issue, but also that the majority of Republicans are closer to Independents than they are to Tea Party members on this issue.

http://www.unh.edu/unhtoday/unhtoday/2014/12/science-we-trust
http://cola.unh.edu/article/2014/12/unh-research-environment-republicans-closer-independents-tea-party
http://www.unh.edu/news/releases/2014/12/bp02environment.cfm

Including Samuel – Six Years Later

Dan Habib, filmmaker in residence at the Institute on Disability at UNH, recently described projects he has been working on since filming his renowned documentary Including Samuel in 2008. Since Including Samuel's release, Habib has filmed the award-winning documentaries Who Cares About Kelsey? and Restraint and Seclusion: Hear Our Stories. He continues to serve as an advocate for inclusion nationally and internationally, and is involved in other projects and conferences dedicated to raising awareness of inclusion.

http://iod.unh.edu/About/visionandvoice/Spring2014/includingsamuel.aspx

Institute on Disability Releases Annual Disability Statistics Compendium

Data compiled in the 2013 Annual Disability Statistics Compendium, released in December by the Rehabilitation Research and Training Center on Disability Statistics and Demographics at the Institute on Disability (IOD) at UNH, highlight that much work needs to be done in order to best support Americans with disabilities. The Annual Disability
Statistics Compendium is a web-based tool that brings disability statistics published by various federal agencies together in one place in an easy-to-use format. Andrew Houtenville, research director at the IOD and principal investigator of the project funded by U.S. Department of Education National Institute for Disability and Rehabilitation Research, noted that despite an increase in economic opportunities, Americans with disabilities are still unemployed at alarming rates.


International Research by UNH Faculty
Information about UNH professors’ international research activities, grants, and related publications was presented in the Fall 2014 issue of The UNH International Educator newsletter.

http://www.unh.edu/cie/newsletter/2014/fall/intl-research.html

Interviewing Adults with Intellectual Disabilities about Oral Health in Brisbane, Australia
Meghan Maguire ’14, a biology major interested in pursuing a career in dentistry, traveled to Brisbane, Australia with the support of a UNH Summer Undergraduate Research Fellowship to interview adults with intellectual disabilities about their oral health beliefs and routines. In Inquiry, UNH’s undergraduate research journal, Maguire reported that while the adults with moderate intellectual disabilities whom she interviewed professed knowledge of oral health, many struggled to implement good practices in their daily lives. Maguire’s mentor was UNH associate professor of nursing Joan Earle Hahn.


IOD Filmmaker Dan Habib Appointed to Obama’s Disability Committee
The White House recently announced that Dan Habib, filmmaker and project director of the Inclusive Communities Project at the UNH Institute on Disability, will be appointed to the President’s Committee for People with Intellectual Disabilities. The Committee promotes policies and initiatives that support independence and lifelong inclusion of people with intellectual disabilities in their respective communities. Habib directed the award-winning film Including Samuel, about his family’s efforts to include his son, who has cerebral palsy, in all facets of their lives; and Who Cares About Kelsey?, a film that documents the life of a student with emotional and behavioral challenges and the innovative educational approaches that help her succeed.

http://www.unh.edu/news/releases/2014/07/mg16whitehouse.cfm

Jennie Marinucci Receives International Research Opportunities Program (IROP) Grant
Jennie Marinucci ’16, biomedical science major and anthropology minor, has received a UNH International Research Opportunities Program (IROP) grant to study cultural definitions of successful aging in Thailand during the summer of 2015. In her project, “Cross-Cultural Gerontology: Exploring Successful Aging in Thailand from a Health Professional View,” Marinucci will explore how biomedical policy and practice work together to advance cultural competency. Marinucci is advised by UNH assistant professor of anthropology Natalie Porter and Chulanee Thianthai, associate professor of anthropology at Chulalongkorn University in Thailand.

http://cola.unh.edu/article/2014/11/jennie-marinucci-receives-international-research-opportunities-program-irop-grant
Justiceworks Researcher Publishes Book on French Canadians in New England
Laurence Armand French, affiliate professor in Justiceworks, has authored a book titled *Frog Town: Portrait of a French Canadian Parish in New England*, published by University Press of America. *Frog Town* describes in detail a French Canadian parish in New Hampshire that was unique due to its high density of both Acadian and Quebecois settlers situated in a Yankee stronghold of Puritan stock. This demography resulted in a volatile history that accentuated the inter-ethnic and sectarian conflicts of the time.

http://cola.unh.edu/article/2014/07/laf-frog-town

Justiceworks Researcher Recognized for Distinguished Contributions to Research
Laurence Armand French ’68 ’70G ’75G, affiliate professor with Justiceworks, was awarded the Distinguished Career Contribution to Research Award by the Society for the Psychological Study of Culture, Ethnicity, and Race (Division 45) of the American Psychological Association. French’s major areas of research interest are international and comparative social, human and criminal justice; Native American and minority issues; police and criminal psychology; and neuro-, clinical, and forensic psychology.

http://cola.unh.edu/article/2014/08/justiceworks-researcher-recognized-distinguished-contributions-research

Justiceworks Researcher Wins Distinguished Scholar Award
Laurence A. French, senior research associate at UNH Justiceworks, has been awarded a 2014 Annual McGraw Hill Distinguished Scholar Award. The award recognizes quality scholarship among American Association of Behavioral and Social Sciences (AABSS) conference participants.

http://cola.unh.edu/article/2014/02/justiceworks-researcher-wins-distinguished-scholar-award

Map NH Health Brings the State’s Health Future into Focus
The NH Citizens Health Initiative (NH CHI) and the Institute for Health Policy and Practice at UNH are collaborating on the MapNH Health Project. The project includes a user-friendly, interactive website (www.mapnhhealth.org) that provides information, such as healthcare service data and health behavior projections, that can serve as a basis for community leaders, policy makers, and consumers to engage in educated discussions about the future of health policy in New Hampshire. MapNH Health has benefitted from advisory assistance from a broad range of organizations and agencies, both nationally-based and from across New Hampshire. NH CHI’s work to engage stakeholders, including outreach to consumers, policy makers, business and industry leaders, hospitals and health systems, social service providers, public health professionals, and educators, will continue through 2015.

http://www.unh.edu/campusjournal/2014/01/map-nh-health-brings-states-health-future-focus
http://www.unh.edu/news/releases/2014/09/cc08healthcare.cfm

Most of Us Have Made Best Memories by Age 25
Kristina Steiner, doctoral student in psychology at UNH, is the lead researcher of a new study that has found that when older adults are asked to tell their life stories, they overwhelmingly highlight the central influence of life transitions in their memories. Many of these transitions, such as marriage and having children, occurred early in life. Working with a team composed of researchers from within and outside UNH, Steiner took the first naturalistic approach to the topic by speaking with members of an active retirement community. By listening to their free-flowing stories, the researchers found that people compartmentalize chapters of their lives and experience a significant “reminiscence bump” – a period
of time when many memories are recalled – between the ages of 17 and 24. This insight will aid clinical therapists in life narrative therapy by helping people to see themes in their lives.

http://www.unh.edu/news/releases/2014/02/lw19memory.cfm
http://cola.unh.edu/article/2014/02/unh-research-most-us-have-made-best-memories-age-25
http://www.unh.edu/unhtoday/veterans/2014/02/most-us-have-made-best-memories-age-25
http://www.unh.edu/campusjournal/2014/02/unh-research-most-us-have-made-best-memories-age-25

MVP: Tackling Some of Football’s Biggest Safety Questions

Erik Swartz, professor of kinesiology, is a leader in the efforts to improve safety in football. He serves on the National Football League’s Head, Neck, and Spine Safety Equipment and Rules Subcommittee, and his research contributed to the league’s banning of overbuilt facemasks in the 2014-15 season. His research also affects younger players – he currently is working with the UNH Wildcats football team to test Helmet-less Tackling Training (HuTTTM) which trains players to tackle in a way that reduces head and neck injuries. Swartz will extend the HuTTTM testing to high school football players in 2015.

http://www.unh.edu/unhtoday/unhtoday/2014/12/mvp

NEGC Publishes Recommendations on State Implementation of Affordable Care Act

The New England Genetics Collaborative (NEGC) recently released its findings on the impact of the 2010 Patient Protection and Affordable Care Act on children with genetic disorders and their families, along with recommendations for policymakers regarding the state-level ongoing implementation of the Act. NEGT found that these children could fall into gaps in coverage and, according to Monica McClain, research associate professor in the UNH Institute on Disability and co-director of the NEGC, state lawmakers must act so that these children are not left behind. The NEGC is funded by a grant from the Health Resources and Services Administration/Maternal and Child Health Bureau/Division of Services for Children with Special Health Needs Genetic Services Branch.

http://iod.unh.edu/About/visionandvoice/Summer2014/NEGCRreport.aspx

New Book Explores Courts and Mental Illness in Early Modern Italy

Assistant professor of history Elizabeth W. Mellyn has published her first book, Mad Tuscans and Their Families: A History of Mental Disorder in Early Modern Italy, which uses court cases to examine four centuries of Italian policy and practice concerning citizens with mental disorders.

http://cola.unh.edu/article/2014/06/mad-tuscans

New Grants Will Fund Projects for Military Youth, Fish Conservation, and Parenting Education

UNH Cooperative Extension received grant funding in early 2014 from a number of external sponsors, including the New Hampshire Department of Health and Human Services and the Massachusetts Division of Marine Fisheries. The funding will support projects led by Extension youth and family specialists Robin Peters and Debbie Luppold; Extension fisheries specialists Erik Chapman and Gabriela Bradt; Extension youth and family field specialist Gail Kennedy; and Extension
New Hampshire Disability Statistics
The UNH Institute on Disability (IOD) has published two reports of hard-to-find statistical data on people in the State of New Hampshire who are affected by disabilities. Facts & Figures: The 2014 Annual Report on Disability in New Hampshire is a reference guide to government publications on disability in the state. To The Point: An Introduction to Disability in the Granite State presents statistics on the population of NH residents who experience a disability, compares NH data with data from neighboring states and with national averages, and features statistics from Facts & Figures.

http://iod.unh.edu/About/visionandvoice/Fall2014/NH_Disability_Stats.aspx

Credit: UNH Institute on Disability

New Hampshire Public Radio: How N.H. Colleges Are Fighting Campus Sexual Assault
Jane Stapleton (co-director of UNH’s Prevention Innovations, Research and Practice for Ending Violence on Campus program) recently appeared on NHPR with other local experts on sexual violence to discuss how best to address the problem of sexual assault on college campuses. Prevention Innovations is a collaboration between researchers and practitioners that develops, implements, and evaluates cutting-edge programs, policies, and practices that will eliminate violence against women.


Credit: UNH Institute on Disability

New Hampshire Services & Supports Website Launched
The Balancing Incentive Program (BIP) in the New Hampshire Department of Health and Human Services (DHHS) has launched a new community long-term services and supports website. Working in partnership with DHHS to develop and launch the website, the UNH Center on Aging & Community Living manages the BIP. The Center is a collaboration between the Institute on Disability at UNH and the Institute for Health Policy and Practice at UNH. The website provides a user-friendly, central location where consumers can access information about community long-term care services and supports throughout New Hampshire.

http://iod.unh.edu/About/visionandvoice/Spring2014/nhss_website.aspx

Credit: UNH Center on Aging & Community Living

New Population Projections Reflect Slower Growth and Increasing Diversity
According to Kenneth Johnson, professor of sociology and senior demographer in UNH’s Carsey School of Public Policy, new data released by the Census Bureau shows that the pace of population growth in the U.S. is slowing while the population continues to become more diverse. Johnson analyzed the Census Bureau’s projections, which he said were in keeping with recent population growth trends.

http://campaign.r20.constantcontact.com/render?ca=0ab08cc9-8fe0-4518-9815-aa8623c0221e&c=10e4c220-45a3-11e3-b9d6-d4ae5292c40b&ch=12810d00-45a3-11e3-ba92-d4ae5292c40b
http://cola.unh.edu/article/2014/12/unh-demographer-finds-new-population-projections-reflect-slower-growth-and
http://www.unh.edu/news/releases/2014/12/em10population.cfm

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New UNH Research Finds Health Insurance Coverage among Young Adults Rebounded Post Recession Due to Affordable Care Act

New research from the Carsey School of Public Policy at UNH showed that more young adults were covered by health insurance in 2012 than in previous years, substantially due to a provision of the Affordable Care Act, which extends coverage to adult children. The research was conducted by Michael Staley, a research assistant in the Carsey School and a doctoral candidate in sociology, and Jessica Carson, a Carsey School vulnerable families research scientist.

http://www.unh.edu/news/releases/2014/10/em21carsey.cfm

NH Disability and Public Health (DPH) Project Launches Obesity Prevention Blogs

The Institute on Disability at UNH’s Disability and Public Health Project has launched an obesity prevention campaign targeting youth with disabilities and their families. The campaign includes websites with interactive blogs that are regularly updated with research-based information about nutrition and exercise, dietary modifications, and tips to encourage healthy eating and physical activity. The “Promoting Healthy Habits” blog is for parents and caregivers, while “Be Active, Eat Healthy, Have Fun!” is designed for the teen through young adult age group.


NHAES Research: Health Issues, Relationship Changes Trigger Economic Spirals for Low-Income Rural Families

According to new research from the NH Agricultural Experiment Station at the UNH College of Life Sciences and Agriculture, support networks — in particular, extended families — can help ease factors such as health issues and relationship changes that can send low-income rural families into a downward spiral. The research was conducted by Elizabeth Dolan, emeritus associate professor of family studies at UNH, and her colleagues Sheila Mammen at the University of Massachusetts Amherst, and Sharon Seiling at The Ohio State University.

http://www.unh.edu/news/releases/2014/05/lw27rural.cfm

Nicoleta Gullace, Associate Professor of History, COLA – England

Nicoleta Gullace, associate professor of history, travelled to London in June for a two-week research trip to visit archives holding valuable material on the history of the First World War. Gullace’s research contributes to her next book, which will look at the way civilian casualties during the First World War — particularly those of women who had been highly publicized in war propaganda — were later eclipsed by the death toll for male soldiers. Gullace’s trip was funded by a UNH Center for International Education International Grant for Development and Engagement, which is awarded to faculty to initiate or expand their international teaching, research, or outreach activities.

http://unh.edu/cie/nicolleta-gullace

Northeast Passage Awarded HealthcareGIVES Grant for 2014

Northeast Passage, a UNH-based therapeutic recreation and adaptive sports organization that serves individuals with disabilities, has been awarded the 2014 HealthcareGIVES donation designation. This year’s theme for the donation designation was persons living with disabilities, which Northeast Passage exemplifies with its efforts to increase the health and wellness of individuals with disabilities living in New England, including children, adults, and military veterans. The donation designation will result in a grant that will allow Northeast Passage to offset costs for program
operation and to increase its capacity to meet demand, offering individuals low-cost access to sport participation and adaptive recreation equipment.

http://www.unh.edu/campusjournal/2014/05/northeast-passage-awarded-healthcaregives-grant-2014

Not in My Backyard: How Citizen Attitudes and Local Politics Affect Disaster Preparedness Policies

With the support of a UNH Summer Undergraduate Research Fellowship, Tegan O’Neill ’14, a political science major, studied how local attitudes and politics impact disaster mitigation strategies in New Hampshire’s seacoast region. In addition to interviewing local community leaders, O’Neill built a comprehensive map illustrating local risks for Rockingham and Strafford counties. She found local disaster planning to be more influenced by individual politics than quantifiable risks and conditions. O’Neill was mentored by Stacy D. VanDeveer, professor of political science, and reported the results of her research in Inquiry, UNH’s undergraduate research journal.


Oct 29th Science Café in Portsmouth: Superman or Clark Kent: What Kind of Bystander Are You?

On October 29, 2014, Sharyn Potter, associate professor of sociology and co-director of Prevention Innovations, Research and Practice for Ending Violence on Campus, and professor of psychology Victoria Banyard will speak at the Portsmouth Brewery’s Jimmy LaPanza Lounge. They will discuss prevention and community intervention efforts in stopping interpersonal violence. The discussion, part of the Portsmouth Science Café series hosted by UNH research associate professor Cameron Wake, is free and open to the public and will run from 6-8 p.m.

http://nhepscor.org/events/superman-or-clark-kent-what-kind-bystander-are-you

On Standby: A Federal Grant Funds Bystander Intervention Programs in New England High Schools

Researchers in UNH’s department of psychology and Prevention Innovations, a collaboration between researchers and practitioners that develops, implements and evaluates cutting-edge programs, policies, and practices that will end violence against women, have received a grant from the Centers for Disease Control and Prevention. The grant, led by Katie Edwards, assistant professor of psychology, will be used to test the effectiveness of Prevention Innovations’ sexual assault and relationship violence bystander prevention program, Bringing in the Bystander®, with youth in nearly 30 high schools across New England. Bringing in the Bystander is an interactive training program that teaches bystanders how to safely intervene when an incident of sexual assault may be occurring or where there may be risk of assault.

http://cola.unh.edu/thecollegeletter/2014-10/standby
http://cola.unh.edu/article/2014/11/unh-receives-grant-expand-bystander-intervention-education-high-schools
One Small Voice

Hannah Waller ’15, a political science and international affairs dual major, recently spent nine weeks in Bosnia with the support of a UNH International Research Opportunities Program grant. She had intended to study governmental strategies for promoting justice and reconciliation, but discovered that ethno-religious division, searing memories, and fresh loss persist nearly 20 years after the Bosnian War ended, and that the government policies she’d hoped to study did not exist. Instead, she spent time offering humanitarian assistance and shifted her research to the people in the Bosniak Muslim community of Sanski Most where she lived. With the help of a local translator, Waller interviewed the citizens to find out what they think is important in the transition to a stable society. Although the experience was sobering, Waller is committed to working in the field of human rights, planning to “go where I can make the most difference” after graduation.

Our Better Angels

In his new book, All Eyes Are Upon Us: Race and Politics from Boston to Brooklyn, assistant history professor Jason Sokol examines the complicated race relations in the Northeast United States. He says that the actions of white northeasterners frequently have not lived up to their professed ideals, and presents current examples to show that this pattern still exists today.

Personality Psychologist Unveils New Theory of Personal Intelligence

John Mayer, professor of psychology at UNH, has published a new book titled Personal Intelligence: The Power of Personality and How it Shapes Our Lives. Mayer uses history, psychology, and decades of research data as a foundation for his new concept of personal intelligence – how we interpret the people around us and adapt to various scenarios based on our observations. With the help of fascinating case studies, he demonstrates that there is a set of skills that may determine what sets successful people apart from the average. “People who are high in personal intelligence are able to anticipate their own desires and actions, predict the behavior of others, motivate themselves over the long term, and make better life decisions,” Mayer says.

Politics Divide Coastal Residents’ Views of Environment, UNH Research Finds

A recent study conducted by two UNH sociologists, professor Lawrence Hamilton and assistant professor Tom Safford, showed that, across the country, coastal-dwelling residents’ views of environmental concerns divide along party lines. The research was the first of its kind and offers new insights for “anyone who’s trying to manage resources,” according to Hamilton. The study provides a broad comparative look at how residents of different coastal areas view the challenges and threats to their unique environments. The study was supported in part by grants from the U.S. Department of Agriculture Rural Development program, the U.S. Environmental Protection Agency, the National Oceanic and Atmospheric Administration, the Ford Foundation, and the Kellogg Foundation.
Portsmouth Team Works With STEM Discovery Lab at UNH Manchester

The STEM Discovery Lab at UNH Manchester worked with a team of children-focused media, education, and product development experts to assure that the group’s Learniverse curriculum clicked with youngsters and met Next Generation Science Standards set by the U.S. Department of Education. The Learniverse STEM curriculum is geared toward school-age children ranging from kindergarten to second grade and uses cartoon characters that interact with children. Having developed and tested a number of episodes, the Portsmouth-based firm is now working on distributing the curriculum across New Hampshire and, eventually, the country.

http://cola.unh.edu/article/2014/10/portsmouth-team-works-stem-discovery-lab-unh-manchester

Poster as Propaganda

Kelly LaBrecque ‘08G wrote her interdisciplinary Master of Arts in Liberal Studies thesis on the United States’ World War I propaganda campaign. In her thesis, Persuasion by Design, LaBrecque examined posters from the perspectives of both political science and graphic design, exploring the role that art played in the nation’s readiness to go to war against the Germans. LaBrecque described the unique propaganda campaign as “possibly one of the most successful advertising campaigns to have ever been launched.”

http://cola.unh.edu/article/2014/04/poster-propaganda

Columbia, the female personification of America, is in the grip of a blood-thirsty brute representing the German Kaiser in this World War I propaganda poster designed to convince Americans to enlist. Credit: Library of Congress, LC-DIG-ds-03216

Prof. Finkelhor Named the First Recipient of the National Kempe Scientific Impact Award

David Finkelhor, director of the Crimes against Children Research Center and co-director of the Family Research Laboratory at UNH, was named the first recipient of the National Kempe Scientific Impact Award. This award from the Kempe Center for the Prevention and Treatment of Child Abuse and Neglect will be given annually to a research scholar who has made leading and sustained scientific contributions during the past decade to the field of child abuse and neglect. Finkelhor, who has been studying the problems of child victimization, child maltreatment and family violence since 1977, is editor and author of 12 books and over 200 journal articles and book chapters related to these topics.

http://cola.unh.edu/article/2014/05/prof-finkelhor-named-first-recipient-national-kempe-scientific-impact-award

Professor Corinna Jenkins Tucker Publishes Carsey Brief

Through the Carsey School of Public Policy at UNH, professor of human development and family studies Corinna Jenkins Tucker recently published a brief based on data from the Coös Youth Study in which she examined Coös County adolescents’ reports of household chaos. Tucker found that household chaos – characterized by high levels of environmental noise, crowding, disorganization and instability – generally is low in Coös County, but there is variability in the extent of adolescents’ experiences with chaos. She also found, consistent with previous research, that household chaos was related to adolescents’ reports of lower quality relationships with mothers and fathers.

http://chhs.unh.edu/article/2014/12/professor-jenkins-tucker-publishes-carsey-brief

Credit: UNH College of Health and Human Services
Professor Hoza Publishes Chapter on Mentorship and Team Interpreting

Jack Hoza, associate professor and director of the Sign Language Interpretation program at UNH Manchester, authored a chapter titled *Mentorship, Professional Growth, and Team Interpreting* in the book *Mentorship in Sign Language Interpreting* by Betsy Winston and Robert G. Lee, which was published in December 2013. Hoza’s chapter explores many facets of team interpreting and discusses the benefits and drawbacks of mentoring within the context of team interpreting.

http://manchester.unh.edu/blog/campus-news/professor-hoza-publishes-chapter-mentorship-and-team-interpreting

Professor's Article Named One of 75 Most Influential in Public Administration Review

Political science professor Melvin Dubnick’s article, "Accountability in the Public Sector: Lessons from the Challenger Tragedy," published in 1987, has been selected as one of the 75 most influential articles appearing in the *Public Administration Review* (PAR) since its inception in 1940. More than 3500 articles have appeared in PAR to date. Dubnick is the author of numerous works on government accountability, administrative ethics, government regulation, and civic education as well as the co-author of textbooks on American government, public administration, and policy analysis.

http://cola.unh.edu/article/2014/03/professors-article-named-one-75-most-influential-public-administration-review

Questioning the Marshall Plan in the Buildup to the Cold War

Sam O’Brien ’14, a history major at UNH Manchester, researched the United States’ motives for the Marshall Plan, an economic rebuilding strategy for Europe following the end of World War II, that some historians assert increased the tensions of the Cold War. Writing for *Inquiry*, UNH’s undergraduate research journal, O’Brien concluded: “The Marshall Plan represents a defensive measure taken by the United States to secure its previously established interests in Western Europe.” O’Brien’s advisor was John Cerullo, professor of history at UNH Manchester.

http://www.unh.edu/inquiryjournal/spring-2014/questioning-marshall-plan-buildup-cold-war

Recent Survey Center Poll: NH Watching Ebola Outbreak But Not Concerned With Catching It

A recent WMUR Granite State Poll, conducted by the UNH Survey Center, showed that most Granite Staters are paying attention to the Ebola outbreak, but few are concerned their family members will contract it. The findings, based on the responses of five hundred and forty-three randomly-selected New Hampshire adults who were interviewed by landline or cellular telephone between October 6 and October 13, 2014, mirror a national survey conducted in October by the Pew Research Center.

Research Profile: David Finkelhor, Research to Promote Safer Children and Families

David Finkelhor is the Director of the Crimes against Children Research Center (CCRC) at UNH, which works to combat crimes against children by providing high quality research and statistics to the public, policy makers, law enforcement personnel, and other child welfare practitioners. Currently, the CCRC is focusing on peer victimization, which goes beyond bullying, encompassing assault, sexual assault, gang violence, and property crimes. In addition to directing the CCRC, Finkelhor is Co-Director of the Family Research Laboratory, professor of sociology, University Professor at UNH, and is well-recognized as a researcher/scholar who has made leading and sustained scientific contributions to the field of child abuse and neglect.


Rosemary M. Caron Publishes Book Titled Preparing the Public Health Workforce: Educational Pathways for the Field and the Classroom

To help provide a clear understanding of public health and its goals for the general public, Rosemary Caron, associate professor of health management and policy in UNH’s College of Health and Human Services, has written a book that summarizes the state of the field and proposes standardizing training, establishing best practices, and coordinating public health systems with their healthcare counterparts. Preparing the Public Health Workforce: Educational Pathways for the Field and the Classroom addresses many challenges faced by public health workers and offers possible solutions that would lead to the public being more informed and healthier.


Science Can Be Slow—Like Brewing a Good Cup of Tea

Neuroscience and behavior major Laura Van Beaver ’16 spent the summer of 2014 trying to develop a new process for removing caffeine from tea while retaining its health benefits and flavor. Van Beaver’s approach is to essentially turn off caffeine production, creating a naturally decaffeinated product. To do that, she is trying to modify the gene that controls caffeine synthesis in tea plants. Her research is supervised by Subhash Minocha, professor of plant biology and genetics, and was supported in part by a Summer Undergraduate Research Fellowship from UNH’s Hamel Center for Undergraduate Research. Van Beaver will continue her research during the academic year.


Seichepine Joins Psychology Department This Fall

Daniel Seichepine will join the UNH Manchester faculty as a lecturer in psychology in Fall 2014. Seichepine is a Massachusetts-licensed psychologist with a practice in neuropsychology; his current research is focused on better understanding the long-term cognitive and physical effects associated with the 1990-1991 Persian Gulf War. Seichepine supervised many students’ research projects while a post-doctoral researcher at Boston University and is eager to do the same at UNH Manchester, especially in areas related to neuropsychological evaluations.

http://manchester.unh.edu/blog/campus-news/seichepine-joins-psychology-department-fall
Social Connections, Safety, and Local Environment in Three Manchester, New Hampshire Neighborhoods

The Carsey School of Public Policy at UNH has published a fact sheet detailing residents’ perceptions of social connections, safety, and local environments in three distinct neighborhoods of Manchester, NH. The fact sheet reports survey data obtained from citizens living in the Bakersville, Beech Street, and Gossler Park neighborhoods. Justin Young, research assistant in the Carsey School and doctoral candidate in sociology, conducted the study.

http://campaign.r20.constantcontact.com/render?ca=0dc40a01-3ad4-4534-99b7-dc6f3f05f51b&c=10e4c220-45a3-11e3-b9d6-d4ae5292c40b&ch=12810d00-45a3-11e3-ba92-d4ae5292c40b

Step by Step – An Athletic Training Student Learns To Conduct Research

Amber Craft ’15, an athletic training major, completed research last summer on measuring muscle fatigue after taking INCO 590, Student Research Experience, which is designed as an entry-level apprenticeship to assist students in developing research skills and to prepare them for more advanced research. With the assistance of her mentor, professor of athletic training Ron Croce, Craft designed the research study and proposal, tested twelve subjects, analyzed the results, and collaborated on a journal article. She presented her work at UNH’s 2014 Undergraduate Research Conference and is exploring her options for graduate school in exercise science.

http://www.unh.edu/unhtoday/Biomechanics-Motor-Control-Laboratory

Susan Merrill, Clinical Assistant Professor – South Africa

Susan Merrill, clinical assistant professor of occupational therapy, traveled to South Africa with support from a UNH Center for International Education travel grant. In the Eastern Cape, the second poorest province in South Africa, Merrill presented workshops and attended meetings on understanding the brain, occupational therapy perspectives, and educational rebuilding. Merrill will return to South Africa in summer 2014 to begin a research project in collaboration with South Africa Partners, a Boston-based non-government organization that supports collaborative health and education initiatives in South Africa.

http://unh.edu/cie/susan-merrill

The Best Laid Plans

UNH Cooperative Extension’s Molly Donovan, Charlie French, Sue Cagle, and Sharon Cowen have developed a new series of information briefs that address current community planning challenges. The briefs, created as part of the N.H. Housing Finance Authority’s N.H. Community Planning Grant Program, will educate and inform lay planners on a range of topics that communities grapple with, such as changing demographics, planning for an aging population, and integrating health into the community planning process.

http://extension.unh.edu/articles/Best-Laid-Plans

Credit: UNH Cooperative Extension

The Eyes Have It

Rick Cote, professor of biochemistry and molecular biology, received a 5-year grant from the National Institutes of Health to study the visual signaling pathway in the human eye. Cote’s research examines the structure and mutations of phosphodiesterase (PDE), the central enzyme in the photoreceptor cells (rods and cones) in the eye that transform light into images, and its associated disorder, retinitis pigmentosa. The grant allows for a new collaboration between Cote...
and Feixia Chu, assistant professor of proteomics, who will work with Cote to use chemical cross-linking techniques to understand the structure of PDE. “Our hope is that if we can determine the molecular structure of PDE and the topology of the proteins with which it interacts during visual signaling, we will then be able to explain why an amino acid substitution causes PDE to not work properly,” Cote explained.

http://colsa.unh.edu/article/eyes-have-it
http://www.unh.edu/news/releases/2014/06/bp17blindness.cfm

The Hidden Cost of the Recession: Two Million Fewer Births and Still Counting
Kenneth Johnson, senior demographer in the Carsey School of Public Policy at UNH, has analyzed U.S. Census Bureau data and found a hidden cost of the Great Recession – a decrease in the birth rate, especially among women of age 20 to 24. According to Johnson, nearly 2.3 million fewer babies were born in the U.S. between 2008 and 2013 than would have been expected had the recession not occurred.

http://campaign.r20.constantcontact.com/render?ca=2ad49271-83c0-4ad9-b3be-5f1ca5e4d33e&c=10e4c220-45a3-11e3-b9d6-d4ae5292c40b&ch=12810d00-45a3-11e3-ba92-d4ae5292c40b

The Lost Cinemas: A Walking Tour of Manchester
Seven communication arts students at UNH Manchester designed and conducted a walking tour highlighting the locations of nine former historic cinemas in downtown Manchester. “The Lost Cinemas: A Walking Tour of Manchester” was the capstone project for a film history class taught by Jeff Klenotic, associate professor of communication. Organizing the 90-minute tour required the students to complete original research at the Manchester Historical Society and the UNH Manchester library. Klenotic also is the creator of mappingmovies.org, a website that uses GIS mapping to mark the locations of former cinemas.

http://manchester.unh.edu/blog/campus-news/lost-cinemas-walking-tour-manchester

The New York Times: California Law on Sexual Consent Pleases Many but Leaves Some Doubters
A recent New York Times article on California’s new sexual consent law featured expert comments from Jane Stapleton, co-director of the UNH Prevention Innovations, Research and Practice for Ending Violence on Campus program. Stapleton emphasized that research is needed to establish the true incidence of sexual assault on college campuses and to evaluate the effectiveness of measures implemented to combat it.


The Scholar & the Sailor
The National Endowment for the Humanities has released a 9-minute film, featuring UNH history professor Jeffrey Bolster, about the power of the written word to change lives. The film describes the transformation that Washington, D.C. native Greg White underwent after reading Bolster’s book, Black Jacks: African American Seamen in the Age of Sail, and subsequently corresponding with Bolster.

http://cola.unh.edu/article/2014/03/scholar-sailor
The Season of the Witch

Tricia Peone ’15, a Ph.D. candidate in history, teaches a course on the Salem Witch Trials and is emerging as an expert on the dark period. Her research on the trials is shaping her dissertation as she explores how beliefs about witches and magic changed in the 17th century.

http://www.unh.edu/unhtoday/2014/10/season-witch

Thom Linehan Appointed to State Study Committee

Thom Linehan, field specialist on UNH Cooperative Extension’s Children, Youth and Family Resilience team, was appointed as a representative to the New Hampshire State Senate’s Study Committee on Mental Health Implementation in New Hampshire. Linehan’s distinguished career with UNH Cooperative Extension began in 2000, and he remains involved in a variety of advocacy programs for groups facing adversity. Most recently, Linehan received certification through the Young Mental Health First Aid education program, which teaches community members how to assist teens facing mental health, addiction, and crisis challenges.

http://extension.unh.edu/articles/Note-Interim-Dean-Director-Thom-Linehan-Appointed-State-Study-Committee

Todd DeMitchell Named Peters Professor in Education

Todd A. DeMitchell, professor of education, has been named the John and H. Irene Peters Professor in Education, an endowed professorship that will support DeMitchell’s teaching, research, service, and other activities. His teaching and research focus on the impact of legal mechanisms such as court cases, statutes, and collective bargaining on schools and colleges, including such topics as sexual abuse and legal remedies, school uniforms and free speech, affirmative action, educational malpractice, and collective bargaining and educational reform.

http://cola.unh.edu/article/2014/10/peters-professor

Two UNH Professors Receive Prestigious Fulbright Awards

UNH faculty members J. William Harris, professor of history, and Tom Safford, associate professor of sociology, have received prestigious Fulbright Awards to support their international scholarship. Harris was named the Fulbright Distinguished Research Chair at the Roosevelt Study Center in the Netherlands to complete his one-volume study of the American South which examines events in the period from the aftermath of the Civil War to post-segregation. Safford accepted a Fulbright Scholar award to conduct research on the many factors that impact contemporary coastal development in Brazil. Ken Fuld, dean of the UNH College of Liberal Arts, stated, “As gratified as I am to know these two will be taking their skills to the international stage, I am equally pleased knowing they will return to UNH with new perspectives that will enhance their teaching and scholarship.”

http://www.unh.edu/campusjournal/2014/02/two-unh-professors-receive-prestigious-fulbright-awards
http://www.unh.edu/campusjournal/2014/02/j-william-harris-named-fulbright-distinguished-research-chair
http://www.unh.edu/news/releases/2014/03/1w04fulbright.cfm
http://cola.unh.edu/article/2014/03/two-unh-professors-receive-prestigious-fulbright-awards

Understanding Connections Between Rural Communities and Family Well-Being: A Study of Hampton, Iowa

The Carsey School of Public Policy at UNH has published a report by Cynthia Fletcher (professor of human development and family studies at Iowa State University) that examines the role of “place” in shaping the futures of rural residents,
especially those with lower incomes. Using data from studies conducted in 1997 and 2012-13, Fletcher’s research on the connections between place, policy, and poverty helps provide insights needed to design effective antipoverty policies and programs. Her work was supported by a Nancy Nye Fellowship in Rural Community Development awarded in 2010 by the Carsey Institute at UNH.

http://campaign.r20.constantcontact.com/render?ca=8ff3d536-efab-4909-b96a-05f34744af50&c=10e4c220-45a3-11e3-b9d6-d4ae5292c40b&ch=12810d00-45a3-11e3-ba92-d4ae5292c40b

University of New Hampshire Helping White House with Sexual Assault Prevention

UNH is one of three universities tapped by a White House task force to do further research related to ending campus sexual assault. UNH’s Prevention Innovations was featured in Not Alone: The First Report of the White House Task Force to Protect Students from Sexual Assault. The research will be led by Sharyn Potter, associate professor of sociology and co-director of Prevention Innovations. “The specific research will look at how presenting the same information using different delivery methods (online, in a class, via the Web, in residence halls, etc.) impacts what students remember and how they use the information over time,” Potter explained.

http://www.unh.edu/unhtoday/veterans/white-house-task-force-end-campus-sexual-assault
http://cola.unh.edu/article/2014/05/nhpr-why-unh-sexual-assault-program-being-lauded-white-house
http://cola.unh.edu/article/2014/05/wmur-university-new-hampshire-helping-white-house-sexual-assault-prevention

UNH Anthropologist Publishes Book on Women and Islam

Svetlana Peshkova, assistant professor of anthropology, has published a pioneering ethnographic study analyzing the role of “otinchalar,” female religious leaders in a conservative Muslim community located in the Fergana Valley of Uzbekistan. In Women, Islam, and Identity: Public Life in Private Spaces, Peshkova draws upon several years of fieldwork to chronicle both daily life and structures of social power for Muslim women in Uzbekistan.

http://cola.unh.edu/article/2014/11/s-peshkova-women-islam

UNH Database Aids Healthcare Decision Making

The Accountable Care Project, a program managed by the NH Citizens Health Initiative that is staffed by the UNH-based Institute for Health Policy and Practice, is developing an interactive system for sharing information from the state’s all-payer claims database and from electronic medical records. Rather than receiving a standard report, participating organizations—including hospitals and physicians’ groups—can now delve into the data themselves to assess how they’re doing compared to others in New Hampshire on measures related to cost, quality and use. The project’s goal is to enable easy access to the information that providers need to guide their healthcare reform efforts as they seek to provide better care for New Hampshire residents while containing spending.

http://www.chhs.unh.edu/khl/2014-03/unh-database-aids-healthcare-decision-making

UNH Experts Available to Discuss U.S. Poverty Trends

Researchers in the Carsey School of Public Policy at UNH welcome the opportunity to discuss trends in U.S. poverty and the new data released by the U.S. Census Bureau in September. Beth Mattingly, director of research on vulnerable families, Jessica Carson, vulnerable families research scientist, and Andrew Schaefer, vulnerable families research associate, are available for comment. They all play key roles in the Carsey School’s research on child poverty, and policy, programs, and labor issues affecting families.

http://www.unh.edu/news/releases/2014/09/as15poverty.cfm
UNH Experts Discuss Quality of Life on Radio Show

Charlie French, UNH Extension Community and Economic Development Program team leader, and William Maddocks, program director for the Sustainable Microenterprise and Development Program of the Carsey Institute at UNH, were featured on Portsmouth Community Radio in late January 2014. French and Maddocks discussed the Seacoast’s economy in light of contemporary environmental issues that could impact quality of life. Both offered approaches for addressing those issues while fostering sustainable economic development in New Hampshire.

http://extension.unh.edu/articles/UNH-Experts-Discuss-Quality-Life-Radio-Show

UNH Geography Graduate Nick Dowhaniuk Awarded a National Geographic Grant

Nick Dowhaniuk ‘12, a geography graduate student, has been awarded a National Geographic Society Young Explorers Grant. The Young Explorers Program funds hypothesis-based scientific research by investigators between the ages of 18 and 25. Dowhaniuk’s project, “Assessing the Impact of Industrial Oil Development in an African Biodiversity Hotspot,” focuses on understanding how the human population surrounding Murchison Falls Conservation Area in western Uganda has grown, and where localized hotspots of population growth have expanded since oil development started in this region. He also seeks to understand the landscape-level impacts of oil development in and around Murchison Falls Conservation Area.

http://cola.unh.edu/article/2014/10/unh-geography-graduate-nick-dowhaniuk-awarded-national-geographic-grant

UNH Law’s Rudman Center Announces Appointment of Leadership Fellows

Ned Helms, founding director of the Institute for Health Policy and Practice at UNH, and Tom Rath, former New Hampshire attorney general and senior national advisor for many presidential campaigns, have been selected to serve as the first leadership fellows in the Warren B. Rudman Center for Justice, Leadership and Public Policy at UNH. Known for their distinguished professional accomplishments, civility, integrity, and commitment to the public good, Helms and Rath will offer advice and consultation to support the Center’s efforts to “train our next generation of leaders to seek justice, serve their country, and work together for the common good.”

http://www.unh.edu/news/releases/2014/12/em22unhfellows.cfm

UNH Model UN Team Takes Home Two Awards

The UNH Model United Nations team, representing Estonia, participated in the National Collegiate College Association Conference in New York in late April. The UNH team won a “Distinguished Delegation” award, placing them in the top 10 percent of 5500 students from around the world. In addition, Andrew Schaefer ‘14 and Trevor Herrick ‘15 received the “Best Delegates” award, presented by their colleagues in the United Nations Environmental Programme committee. Model UN is a multidisciplinary organization that involves students from a range of majors such as biology, engineering, international affairs, and political science in a simulation of the complex dynamics of international diplomacy, statecraft, and conflict resolution.

http://cola.unh.edu/article/2014/05/MUN
UNH Prevention Innovations Director Testifies Before Senate Committee

Jane Stapleton, co-director of UNH’s Prevention Innovations: Research and Practices for Ending Violence Against Women, testified before the U.S. Senate Committee on Health, Education, Labor & Pensions (HELP) on June 26, 2014. Her testimony was part of a full committee hearing examining sexual assault on college campuses. Stapleton spoke about Prevention Innovations’ evidence-based bystander intervention strategies (which include Bringing in the Bystander®, an in-person prevention program, and the Know Your Power® bystander intervention social marketing campaign) and about the Campus Sexual and Relationship Violence Consortium. She urged lawmakers to consider ways to reform and strengthen federal law to better address issues of campus domestic violence, sexual assault, and stalking.

http://cola.unh.edu/article/2014/06/unh-prevention-innovations-director-testifies-senate-committee
http://www.unh.edu/news/releases/2014/06/em28stapleton.cfm

UNH Prevention Innovations Inducted into Hall of Fame

UNH Prevention Innovations, a multidisciplinary team of researchers working toward the common goal of ending violence against women, was inducted into the New Hampshire Coalition Against Domestic and Sexual Violence Hall of Fame. The team, co-directed by Sharyn Potter, associate professor of sociology, and research associate Jane Stapleton, was recognized for its contributions to the field, including the nationally-recognized Bringing in the Bystander In-Person Prevention Program and the Know Your Power Bystander Social Marketing Campaign. Established in October 2006, UNH Prevention Innovations is a research and training unit that develops, implements, and evaluates programs, policies, and practices to help end violence against women.

http://cola.unh.edu/article/2014/01/unh-prevention-innovations-inducted-hall-fame

UNH Prof Is NFL's MVP for Equipment Research

Kinesiology professor Erik Swartz’s research on the effectiveness of overbuilt facemasks in the National Football League has led to a ban on these facemasks. Swartz found that although the masks provide more coverage from the nose down, the added weight of the facemask compromises the structural integrity of the helmet and shifts the head’s center of gravity forward, possibly resulting in fatigue to neck muscles and a riskier tackling posture.

http://www.unh.edu/unhtoday/veterans/veterans/2014/07/unh-prof-nfls-mvp-equipment-research

UNH Professor's "Occupy" Book Wins National Recognition

The National Communication Association recently honored lecturer in communication Renee Heath with an “Outstanding Edited Book” award. The book, co-edited with C. Vail Fletcher and Ricardo V. Munoz and titled Understanding Occupy from Wall Street to Portland: Applied Studies in Communication Theory, uses economic insights and contemporary theories of communication to better understand the constantly evolving Occupy movement.


UNH Research: Children Benefit from High Quality Violence Prevention Programs

Researchers from the UNH Crimes Against Children Research Center (CCRC) have found that children benefit from high-quality prevention programs aimed at decreasing bullying and violence. Children aged 5 to 9 years who had received high-quality prevention education had lower levels of both peer victimization and perpetration. Education was also associated with more disclosure to authorities. The full report, “Youth Exposure to Violence Prevention Programs in a..."
National Sample,” was published in the April 2014 issue of the *Journal of Child Abuse and Neglect*. The study, the National Survey of Children Exposed to Violence, was funded by the U.S. Department of Justice, and was conducted through interviews with a representative sample of parents and children in 4500 families nationwide.

http://www.unh.edu/news/releases/2014/03/lw27finkelhor.cfm

**UNH Research: Positive Memories of Exercise Spur Future Workouts**

UNH researchers David Pillemer, the Dr. Samuel E. Paul Professor of Developmental Psychology, and Mathew Biondolillo, doctoral student of psychology, have found that recalling positive memories of exercise experiences can inspire people to adopt healthier lifestyles that include physical activity. The study, “Using Memories to Motivate Future Behavior: An Experimental Exercise Intervention,” was published in February in the academic journal *Memory*. It is the first study to explore how positive memories can influence future workouts.

http://www.unh.edu/news/releases/2014/03/lw17memory.cfm
http://www.unh.edu/campusjournal/2014/03/unh-research-positive-memories-exercise-spur-future-workouts

**UNH Research Finds Many School Districts Continue to Restrain and Seclude Students with a Disability at an Alarming Rate, Despite Policy Changes**

According to new research conducted at the Carsey School of Public Policy at UNH, in some U.S. school districts, students with disabilities are restrained and secluded at an alarming rate, despite numerous states’ policy revisions in recent years. In addition, the researchers found that restraint is slightly more common in more affluent districts than it is in districts with more diversity and poverty, and more common in urban areas than it is in rural. The research was conducted by Douglas Gagnon, a former research assistant at the Carsey School; Marybeth Mattingly, director of research on vulnerable families at the Carsey School and research assistant professor of sociology at UNH; and Vincent Connelly, associate professor of education at UNH.

http://www.unh.edu/unhtoday/2014/10/unh-research-school-districts-continue-restrain-and-seclude-students-disability
http://www.unh.edu/news/releases/2014/10/em28carsey.cfm

**UNH Research Highlights Extent and Effects of School Violence**

A newly-published study in the *Journal of School Violence* conducted by UNH researchers found that six percent of U.S. children and youth missed a day of school over the course of a year because they were the victim of violence or abuse at school. The study, conducted by David Finkelhor, Jennifer Vanderminde, Heather Turner, and Anne Shattuck, all of whom work in the Crimes Against Children Research Center at UNH, surveyed a national sample of students from ages 5 to 17. The U.S. Department of Justice and the Centers for Disease Control and Prevention jointly funded the study.

http://cola.unh.edu/article/2014/10/unh-research-highlights-extent-and-effects-school-violence
http://www.unh.edu/news/releases/2014/10/bp20finkelhor.cfm

**UNH Researcher Available to Discuss UN Report on North Korea’s Human Rights Violations, China’s Role**

Chris Reardon, associate professor of political science and coordinator of Asian studies at UNH, is available to discuss the recent United Nations report that outlines human rights violations and the tyrannical regime in North Korea and China’s role in "aiding and abetting crimes against humanity" by sending migrants and defectors back to North Korea to face torture or execution. Reardon is an accomplished scholar of Chinese economic policy.

http://www.unh.edu/news/releases/2014/02/lw18china.cfm
UNH Research Comments on Developments in Ferguson, MO

In a statement released September 2, 2014, Laurence Armand French, senior researcher and affiliate professor of UNH’s Justiceworks, provided commentary on the shooting death of Michael Brown in Ferguson, MO and the subsequent protests and violence. He discussed the historical and sociological factors at play behind the situation and offered suggestions for positive steps to take to diffuse and prevent similar situations in the future.

http://cola.unh.edu/article/2014/09/ferguson-mo

UNH Researchers to Create Video Game to Help Students End Sexual Violence

Prevention Innovations, a UNH research and training unit that develops and evaluates programs to reduce sexual violence on college campuses, will create a video game to extend the reach of its acclaimed bystander intervention strategies. The project, which will create an interactive simulation video game for use on the Web and mobile devices, is funded by a two-year grant from the National Institute of Justice. Working with Dartmouth College’s Tiltfactor Laboratory, a leader in designing games for social change, the researchers will develop a game in which players will be presented with situations that let them learn and practice active bystander skills. The development process will be influenced heavily by input from college students. The team anticipates having a prototype game ready by early 2016.

http://cola.unh.edu/article/2014/10/unh-researchers-create-video-game-help-students-end-sexual-violence
http://www.unh.edu/news/releases/2014/10/bp09prevention.cfm

UNH Senior Jennifer Allen Receives URA Award

Jennifer Allen ’15, biomedical sciences: medical and veterinary sciences major, has received a UNH Undergraduate Research Award to support her study “How Patients Think: An Assessment of Clinician Competence Based on Patients’ Past Experiences.” Allen will examine patient-clinician interaction through the lens of the patient to understand if past experiences are used to gauge clinician competence. Allen’s advisor for the research is Natalie Porter, assistant professor of anthropology.

http://cola.unh.edu/article/2014/11/unh-senior-jennifer-allen-receives-ura-award

UNH Students Partner with N.H. Attorney General’s Office on Jury Polling Project for Adult Sexual Assault Cases

As part of professor of psychology Victoria Banyard’s Applied Research Methods course, a group of UNH Justice Studies graduate students teamed up with the New Hampshire Attorney General’s office to conduct a jury poll aimed at understanding “not guilty” verdicts in adult sexual assault cases. The students found that jurors tend to perpetuate rape myths and victim blaming attitudes during adult sexual assault trials. The findings will help the New Hampshire Sexual Assault Resource Team (SART) in assisting victims of sexual violence. Banyard described the project as “an example of how an academic class that is teaching students new research methods can also be in the service of community engagement.”

http://www.unh.edu/news/releases/2014/01/lw06sart.cfm
http://www.unh.edu/campusjournal/2014/01/students-partner-nh-attorney-general%E2%80%99s-office-jury-polling-project-adult-sexual-assault-case
UNH Survey Finds New Hampshire Residents Continue to Trust Scientists on the Environment

New research conducted by Lawrence Hamilton, professor of sociology and senior fellow at the Carsey Institute at UNH, is presented in the policy brief “Do You Trust Scientists about the Environment?” Hamilton found that almost two-thirds of Granite State residents trust scientists as a source of information on environmental issues. However, tea party Republicans are much less likely, and New Hampshire Public Radio listeners much more likely, to trust scientists. The work was supported by grants from the National Science Foundation, the Carsey Institute, and the Sustainability Institute at UNH.

http://www.unh.edu/news/releases/2014/05/em20carsey.cfm
http://cola.unh.edu/article/2014/05/unh-survey-finds-new-hampshire-residents-continue-trust-scientists-environment
http://www.unh.edu/campusjournal/2014/05/unh-survey-finds-new-hampshire-residents-continue-trust-scientists-environment

UNH Tapped to Help White House Task Force End Campus Sexual Assault

UNH’s Prevention Innovations, a collaborative team of researchers and practitioners who develop programs and approaches to end violence against women, has been asked to do further research for Not Alone: The First Report of the White House Task Force to Protect Students from Sexual Assault. Sharyn Potter, associate professor of sociology and co-director of Prevention Innovations, will lead the research for the White House Task Force. “The specific research will look at how presenting the same information using different delivery methods (online, in a class, via the web, in residence halls, etc.) impacts what students remember and how they use the information over time,” Potter said.

http://www.unh.edu/news/releases/2014/04/em29whitehouse.cfm
http://www.unh.edu/campusjournal/2014/04/unh-tapped-help-white-house-end-campus-sexual-assault

Using Economics as a Tool for Social Change – Andrew Houtenville

Andrew Houtenville, research director of the Institute on Disability at UNH and associate professor of economics at UNH, is using economics research as a tool to inform future policy and change for the underrepresented disabled population. By providing a thorough and accurate understanding of statistical data, Houtenville is working to modernize current systems to support, educate, and allow people with disabilities to integrate comfortably into their communities.


Vatican 2.0

Andrew Bills ’09, now a Master of Arts in Liberal Studies student, is analyzing the Vatican’s use of the Internet to market the church to a younger, more global audience. Combining the fields of communication, religion, and history, his thesis, Uploading Catholicism, will explore phenomena such as Pope Francis’s first “selfie” style photograph, taken in August of 2013. “I think it’s fascinating to see how they make sense of, and leverage new technologies that they once feared,” Bills said.

http://cola.unh.edu/article/2014/04/vatican-20

Pope Francis thrills a group of teenagers at St. Peter’s Basilica in August 2013 when he poses with them for a "selfie" photo.
Credit: Riccardo Aguiari, Associated Press
Winter/Spring 2015 Portsmouth Science Café Series Announced

NH EPSCoR has announced the Winter/Spring 2015 schedule for the Portsmouth Science Café, a series of free gatherings held with a panel of experts to better communicate science to the public. The first event, “Encroaching Tides: How Sea Level Rise and Tidal Flooding Threaten U.S. East and Gulf Coast Communities over the Next 30 Years” on January 21st, featured panelists Erika Spanger Siegfried, senior analyst in the Climate and Energy Program at the Union of Concerned Scientists, and Julie LaBranche, senior planner with the Rockingham Planning Commission. Other sessions are planned for February 18th and March 25th in Portsmouth Brewery’s Jimmy LaPanza Lounge from 6 to 8 pm.

http://nhepscor.org/sciencecafe/winter2015

Women with More Severe Disabilities are Less Likely to Receive Appropriate Mammography Screening and Clinical Breast Exams

A recent review of health statistics data by the Health Disparities Project has determined that women with severe disabilities are far less likely to receive mammography screening and critical breast exams compared with women with less severe disabilities. The Health Disparities Project, conducted by researchers in the Institute on Disability at UNH, is generating new knowledge about health access and health outcomes among sub-groups of people with disabilities and translating and disseminating the findings to researchers, policy makers, and others. It is funded by a five-year, $2.25 million grant from the U.S. Department of Education’s National Institute on Disability and Rehabilitation Research.

http://iod.unh.edu/About/visionandvoice/Winter2014/Did_You_Know.aspx

Worth a Thousand Words: Summer Nursing Research Analyzed Drawings for Clues about Kids

Julianne Shimer ’15, a nursing major in the College of Health and Human Services, spent her summer in Dublin, Ireland, analyzing the drawings of disadvantaged youth. She was there as a summer staff member in the Trinity College Nursing and Midwifery Department, where, as part of the Healthy Schools Programme, she contributed to a project that will help disadvantaged children by establishing quantifiable correlations between the pictures they draw and their mental health. Shimer received a grant from UNH’s Hamel Center for Undergraduate Research to fund her nine-week study, “The Healthy Schools Programme: What Can Be Learned About the Health and Well-Being Needs of Disadvantaged Children Through Visual Content Analysis?”

http://www.unh.edu/unhtoday/2014/10/worth-thousand-words
Humanities & the Arts

2014 in Books and Recordings
The products of UNH’s College of Liberal Arts (COLA) faculty-wide variety of scholarly and creative endeavors range from books and journal articles to recordings and visual art. The College Letter, COLA’s newsletter, has compiled a list of 35 books and recordings released by COLA faculty in 2014.

2014 John C. Rouman Lecture: Video Now Available
The 2014 John C. Rouman Classical Lecture is now available to watch via online video. “The Psychology of Greed: Ancient and Modern Reflections” was presented by Ryan Balot, professor of political science at the University of Toronto. The John C. Rouman Classical Lecture Series, named in honor of UNH Classics Professor Emeritus John C. Rouman, is intended to promote and enhance the study of the classics in New Hampshire and around the world.
http://cola.unh.edu/article/2014/11/ryan-balot

2014 Lindberg Award Recipient Announced: Michael Ferber
Michael Ferber, professor of English and humanities, has been selected as the 2014 recipient of the Lindberg Award, given annually to the outstanding teacher-scholar in the College of Liberal Arts. Ferber’s scholarship focuses on Romantic poetry.
http://cola.unh.edu/article/2014/02/2014-lindberg-award-recipient-announced-michael-ferber

Abandoned in the Arctic
Jeff Clark ‘11G wrote his interdisciplinary Master of Arts in Liberal Studies thesis on arctic explorer Adolphus Greely. In Arctic Ambitions, Clark combined history, American studies, and photography to tell the “forgotten” story of Greely, who was viewed as depraved when, in 1884, accusations of cannibalism and government scandals overshadowed his scientific achievements. Clark, a retired gastroenterologist, cataloged over 100 photographs from the expedition for his thesis and produced the 2007 documentary, “Abandoned in the Arctic.”
http://cola.unh.edu/article/2014/04/abandoned-arctic

Art Student Explores Freedom of Expression in China
With the support of a UNH International Research Opportunities Program (IROP) grant, Jennifer Lindsay ’14, a studio arts and international affairs major, traveled to China to conduct research on Chinese artists. Under the guidance of her foreign mentor, Professor David Moser, Lindsay conducted interviews with artists living and working in Beijing for her project, titled “Contemporary Art with Chinese Characteristics: Relations Between Beijing Artists and the Chinese Government Post-1989.” Lindsay found that “self-censorship” was more common among the artists than government-mandated censorship.
http://unh.edu/unhtoday/veterans/Jennifer-Lindsay
Buried in Style: Ghana Custom Coffin Maker Visits Durham to Share Tradition with UNH Community

Visiting artist Eric Adjete Anang, from Ghana, West Africa, showed a group of UNH art and art history students that in his home country, a funeral is a celebration of life, not necessarily a somber occasion. He spent a week teaching UNH woodworking and art students to build a coffin in the shape of a lobster. Leah Woods, associate professor of art and art history who teaches woodworking and furniture design, invited Anang to UNH. She first met him when she was traveling and studying in Ghana last year. UNH was the last stop of Anang’s five-month stay in the U.S. during which he taught at other colleges, picked up tools for his workshop in Ghana, and exchanged ideas and experiences with professors such as Woods.

http://cola.unh.edu/article/2014/10/buried-style
http://www.unh.edu/unhtoday/2014/10/buried-style

Center for the Humanities Announces 2015-16 Faculty Fellows

The Center for the Humanities at UNH announced the award of its 2015-2016 Faculty Research Fellowships to five faculty members: Tom Haines (English), Janet Polasky (history), Natalie Porter (anthropology), Jeannie Sowers (political science), and Reginald Wilburn (English). Funded by the Center’s general endowment and the Ben and Zelma Dorson Endowment in the Humanities, the fellowships provide a semester-long opportunity for junior and tenured faculty to pursue humanities research with no teaching obligations.

http://cola.unh.edu/article/2014/10/humanities-faculty-fellows

Charles Simic – Inspired by New Hampshire

Good friends, beautiful winters, and great parking spaces initially drew poet, essayist, and professor emeritus of English Charles Simic to the University of New Hampshire in the early 1970’s. Now, the emerging poets he mentors in Advanced Poetry workshops in the Master of Fine Arts in Writing program provide inspiration for his work.


Charles Simic, Professor Emeritus of English, Wins the 2014 Zbigniew Herbert International Literary Award

Charles Simic, distinguished poet, essayist, translator, and emeritus UNH professor of English, has been awarded the Zbigniew Herbert International Literary Award. The award recognizes outstanding artistic and intellectual literary achievements which uphold the values of Polish poet Zbigniew Herbert’s work. A seven-member international jury composed of poets, essayists, translators and publishers selects the awardee.

http://cola.unh.edu/article/2014/03/zbigniew-award

Choral Professor Releases CD of First Recordings of Choral Music

Professor of music William Kempster has released First Impressions, a CD of the first recordings of choral music both old and new. The CD features the UNH Concert Choir and the UNH Chamber Singers. UNH pianists and faculty members Arlene Kies, Chris Kies, and Paul Merrill are featured on keyboards.

Classics Professor Publishes Anthology of Ancient Rome Sources
R. Scott Smith, associate professor of classics, and colleague Christopher Francese of Dickinson College have produced an edited and translated volume of writings by twenty three ancient Roman authors. The anthology includes history, satire, philosophy, poetry, biography, and letters that cover a full range of topics in ancient Roman life. One reviewer described it as “an impressive and well-chosen selection of key sources for the study of ancient Rome, rendered into lively and engaging English,” and recommended the anthology enthusiastically.

http://cola.unh.edu/article/2014/03/ancient-rome

Communication Professor Featured in Oral History Project
Lawrence Prelli, professor of communication, was featured in a YouTube video produced as part of the Oral History Project of the Association for the Rhetoric of Science and Technology (ARST). Prelli’s influential book, A Rhetoric of Science: Inventing Scientific Discourse, was the first to be published on the topic in 1989. The Oral History Project will document ARST’s organizational history and explore how the rhetoric of science, technology, and medicine has evolved over time.

http://cola.unh.edu/article/2014/04/communication-professor-featured-oral-history-project

Confessions of a Morphologist
On April 17, professor of English and linguistics Rochelle Lieber delivered the 2014 UNH Lindberg Lecture, titled “Confessions of a Morphologist, or How I Learned to Stop Intuiting and Love Data.” Lieber’s lecture focused on corpora, which are large language databases for collecting spoken and written text. She is an author of the recent book, The Oxford Reference Guide to English Morphology. The Lindberg Lecture is presented annually by the winner of the Lindberg Award, which recognizes an outstanding teacher-scholar from the College of Liberal Arts at UNH.

http://cola.unh.edu/thecollegeletter/2014-04/confessions-morphologist
http://cola.unh.edu/article/2014/03/english-professor-deliver-lindberg-lecture-april-17
http://www.unh.edu/campusjournal/2014/05/confessions-morphologist-1

Contemporary Art with Chinese Characteristics: Relations between Beijing Artists and the Chinese Government Post-1989
Jennifer Lindsay ’14, an international affairs and studio art double major, traveled to China with assistance from a UNH International Research Opportunities Program grant to study government censorship and artistic expression in China. Lindsay spent a summer living in Beijing, conducting interviews with Chinese artists while also working on her own art. In writing for Inquiry, UNH’s undergraduate research journal, Lindsay reflected: “I have tentatively concluded that in some ways artists in China today are freer from censorship than during the period following the Tiananmen incident in 1989.” Her advisor was David Moser, academic director of CET Beijing Chinese Studies at Beijing Capital Normal University.

Documentary About Music Legend Clark Terry Released
A new documentary about Clark Terry, music legend and UNH affiliate professor of music, opened in October, 2014. “Keep On Keepin’ On” is Alan Hicks’s look at the relationship between trumpeter Terry and the young pianist Justin Kauflin. Terry was a pioneer in jazz education whose influence, according to NY Times film critic A. O. Scott, “has extended through jazz’s heroic midcentury decades and into the present.”

http://cola.unh.edu/article/2014/10/documentary-clark-terry

English Professor Publishes Book on African American Authors’ Appropriations of Milton

http://cola.unh.edu/article/2014/05/rwilburn-milton

English Professor Publishes Book on How We Really Read and Write
Thomas Newkirk, professor of English, is the author of Minds Made for Stories: How We Really Read and Write Informational and Persuasive Texts. In this, his latest book, Newkirk suggests that effective informational writing instruction should be built upon the innate cognitive processes and human desires for storytelling. “To deny the centrality of narrative is to deny our own nature,” Newkirk explained.

http://cola.unh.edu/article/2014/08/newkirk-minds-stories

English Professor Publishes Book on Intersection of Race and Religion in Early Modern Lit


English Professor to Serve as Editor for Prestigious Pushcart Prize Anthologies
Tom Payne, assistant professor of English, has been asked to serve as an editor on the board of the Pushcart Prize. The Pushcart Prize is an American literary prize that honors the best “poetry, short fiction, or essays” published in the small presses over the previous year. Along with the Best American Short Stories and the O. Henry Award, it is one of the most prestigious award anthologies for short fiction in the U.S.

http://cola.unh.edu/article/2014/01/pushcart
English Professor Wins NEH Grant for Indigenous New England Writing Project
Siobhan Senier, associate professor of English, has received a grant from the National Endowment for the Humanities to support her project, “Writing of Indigenous New England: Building Partnerships for the Preservation of Regional Native American Language.” She will collaborate with regional Native American groups to create an online database of indigenous writings.


German Professor Publishes Translation of Work by Austrian Erich Hackl
Edward T. Larkin, professor of German, has collaborated with Thomas Ahrens on a translation of a true story, *Argentina's Angel*, written by Austrian writer Erich Hackl. *Argentina's Angel* tells the story of Gisela “Gisi” Tenenbaum's family, Austrians of Jewish origin who fled to South America in 1939, and Gisela’s struggles to overcome injustice.


Grandpa, We Don’t Pahk the Cah Anymore
The New Hampshire Language and Life Project is examining how regional dialects in New England continue to change over time. Maya Ravindranath, assistant professor of linguistics, has engaged her sociolinguistics students to interview family and friends to discover how “traditional New England speech” varies by generation. The students have found that speakers in Southeast New Hampshire, where most of the data have been collected, tend to distance themselves from the speech of both Boston and Maine speakers and ally themselves with the speech of Vermonters. The early results of the study also suggest a shift among younger generations away from regional speech and toward a form of general American speech.


Hayes Chair Publishes Anthology of Indigenous New England Writers
Siobhan Senier, associate professor of English and the James H. and Claire Short Hayes Professor in the Humanities at UNH, served as editor for the recently-published *Dawnland Voices: An Anthology of Indigenous Writing from New England*. The collection contains both classic and contemporary literary pieces from ten New England Native American nations and includes forms ranging from petroglyphs to hip-hop poetry.

http://cola.unh.edu/article/2014/08/anthology-indigenous-new-england

History Major Scares Up Consequences of Red Scare
With the support of a Summer Undergraduate Research Fellowship from UNH’s Hamel Center for Undergraduate Research, history major Joseph Juknievich ’16 spent the summer of 2014 researching the effects of the 1919-1920 Red Scare in New England. The Red Scare was a national event, spurred by “a fear of anything that resembled communism and anarchy,” Juknievich states, but his research allowed him to examine it on a smaller, more local scale. Juknievich's research was supervised by Lucy Salyer, associate professor of history.

http://cola.unh.edu/article/2014/09/juknievich
History Professor Publishes Book on Transnationalism and the German City
Jeffrey Diefendorf, Pamela Shulman Professor in European and Holocaust Studies and professor of history, has co-edited a volume of essays in urban studies on the topic of the German city, titled Transnationalism and the German City (Studies in European Culture and History). The volume brings together scholars from anthropology, architecture, cultural studies, history, and urban planning to explore how, rather than suppressing localities, regionalities, and nationalities in favor of a globalized set of identities, globalization in German cities has, if anything, reinvigorated localism.

http://cola.unh.edu/article/2014/05/diefendorf-transnationalism-german-city

Joe Biden’s ‘Shylock’ Stumble Has Long History, Doug Lanier Comments in Wall Street Journal
UNH English professor Doug Lanier recently provided commentary in a Wall Street Journal article about Vice President Joe Biden’s use of the term “shylocks” in a recent speech. Lanier, who is currently writing a book on Shakespeare’s The Merchant of Venice – where the term originated – explained the origin and derogatory significance of the word.


Meet Our 2014-2015 Faculty Fellows!
UNH’s Center for Humanities has awarded four Faculty Research Fellowships for the academic year 2014-2015, providing the opportunity for these faculty to devote a semester to their research with no teaching obligations. The new fellows are Funso Afolayan, associate professor of history; Jennifer Borda, associate professor of communication; Lucy Sayler, associate professor of history; and Scott Weintraub, assistant professor of Spanish. Funded by the Center for the Humanities' general endowment and the Ben and Zelma Dorson Endowment in the Humanities, the fellowships support excellence and innovation in humanities scholarship at UNH.


Museum of Art, UNH Presents Joo Lee Kang and Art Faculty Review
UNH will host two new art exhibitions, one focusing on ballpoint pen drawings of flowers, animals, and insects by Boston-based artist Joo Lee Kang. The second exhibit will feature studio art faculty from the department of art and art history: Michael Cardinali, Brian Chu, Julee Holcombe, Scott Schnepf, and Leah Woods. The exhibits will be on view at the Museum of Art from November 1, 2014 through December 14, 2014.

http://cola.unh.edu/article/2014/10/museum-art-unh-presents-joo-lee-kang-and-art-faculty-review

Leah Woods, Migration (detail), 2014, maple, plywood, 43” x 80” x 23.5”
Courtesy of the artist, photo by Glen Scheffer
Music Professor Releases CD of Works by Women

Professor of music and flutist Peggy Vagts has released a new CD of compositions by women. UNH Murkland Lecturer Arlene Kies accompanied Vagts on piano. Titled *Persistence, Works by Women, 1850-1950: Music for Flute and Piano*, the CD includes works by composers such as Lili Boulanger (1893-1918) and Mélanie Bonis (1858-1937).

[http://cola.unh.edu/article/2014/06/persistence](http://cola.unh.edu/article/2014/06/persistence)

New Collection Explores Asian American Graphic Narratives

Monica Chiu, professor of English, has edited a book of essays exploring Asian-American graphic narratives through a transnational lens. *Drawing New Color Lines: Transnational Asian American Graphic Narratives* explores manga, comics, and other visual representations to understand how ideas of “Asian” and “American” have changed in graphic art narratives over time. With contributions from experts based in North America and Asia, the book will be of interest to scholars in a variety of disciplines, including Asian-American studies, cultural and literary studies, comics, and visual studies. *Drawing New Color Lines* is part of the Global Connections series published by Hong Kong University Press.


Professor Nick Smith Featured in Aeon Magazine

Nick Smith, professor of philosophy, published an essay in *Aeon*, an online magazine which features writing “provided by world-leading authorities on science, philosophy and society.” Smith’s essay, “Sorry but not sorry: No longer the hardest word, a public apology is now the defense strategy of the rich and powerful. Can it still do good?” addresses the use and perhaps, misuse, of the public apology in today’s politically-charged society.


Professor Publishes Book on Surveillance in Asian North American Literature

A book by English professor Monica Chiu, titled “Scrutinized!: Surveillance in Asian North American Literature,” has been published as part of the University of Hawaii series, Asian and Pacific American Transcultural Studies. In the book, Chiu reveals how the fascination with mystery, detection, spying and surveillance seen in Asian North American novels published between 1995 and 2010 is a literary response to anxieties over race. According to Chiu, this is evidence of a state of unease during a time of racial scrutiny. Chiu teaches Asian American studies and American literature at UNH.

[http://cola.unh.edu/article/2014/03/surveillance](http://cola.unh.edu/article/2014/03/surveillance)

Professor, Alum Win NH Literary Awards

The New Hampshire Writers Project has chosen Andrew Merton's book *Evidence That We Are Descended from Chairs* (Accents Publishing, 2012) as the Outstanding Book of Poetry for 2013. Merton is professor and chairperson of UNH’s English department. Tim Horvath, an alumnus of the Masters of Fine Arts in Writing program, was recognized with the Outstanding Work of Fiction award for his collection of short fiction, *Understories* (Bellevue Literary Press, 2012). The award ceremony took place on March 22, 2014 during Writers' Day, the largest New Hampshire writing conference, which attracts bestselling authors, award winners, laureates, professional writers, editors, agents, and publishers for workshops, seminars, manuscript critiques and agent/publisher one-on-one pitch sessions.

**Research Profile: David Kaye**

The work of David Kaye, chairperson of the department of theatre and dance at UNH, is innovative and wide-ranging. Whether he is staging a “telematic” performance, directing a more traditional production, or using applied theater techniques to improve communication, address social issues, resolve conflict, and encourage professional and community development, Kaye breaks new artistic ground while also providing rich opportunities for the University community.

[http://cola.unh.edu/article/2014/02/research-profile-david-kaye](http://cola.unh.edu/article/2014/02/research-profile-david-kaye)

[http://www.unh.edu/campusjournal/2014/02/research-profile-david-kaye](http://www.unh.edu/campusjournal/2014/02/research-profile-david-kaye)

**Russian Scholar Delivers Keynote at Conference**

Ronald LeBlanc, professor of Russian, delivered the keynote address for "Culture and Cuisine in Russia and Eastern Europe," a conference held at the University of Texas at Austin in February 2014. His talk was titled "From Russian Vegetarians to Soviet Hamburgers: Tolstoy, Pilnyak, and the Ethics/Politics of Diet." LeBlanc is the author of a number of "gastrocritical" studies of food and eating in the works of such writers as Tolstoy, Dostoevsky, Gogol, Goncharov, Bulgakov, and Olesha.


**Sean Moore, Associate Professor of English, COLA – Ireland**

Sean Moore, associate professor of English, travelled to St. Patrick’s Cathedral in Dublin, Ireland to deliver a talk at the 13th Dublin Symposium on Jonathan Swift. Moore presented his paper, originally titled “The Social Network of Dublin Printers,” and also performed archival research on manuscripts at Marsh’s Library, the eighteenth-century library of the Cathedral. Moore’s trip was funded by an International Grant for Development and Engagement from the UNH Center for International Education, supplemented by support from the UNH Center for the Humanities and the UNH English department.


**Spanish Professor Publishes Book on Poet Juan Luis Martinez**

Assistant professor of Spanish Scott Weintraub has had a book on poet Juan Luis Martinez (1942-1993), titled *La Última Broma De Juan Luis Martínez: No sólo ser otro sino escribir la obra de otro*, published in Chile. The book reveals a discovery Weintraub made while researching the poet’s work: a posthumously-published book of Martinez’s poetry is composed of translations from French of the work of another poet – a Swiss-Catalan writer also named Juan Luis Martinez. Weintraub’s book also will be included as part of a longer work in English on this writer that was published by Bucknell University Press in November 2014.


Spanish Professor Publishes First English Language Book on Prominent Chilean Artist/Poet

In December 2014, Bucknell University Press published UNH assistant professor of Spanish Scott Weintraub’s first English-language book on acclaimed Chilean visual artist and poet Juan Luis Martínez. Weintraub is a renowned Martínez scholar who last year published an account of a discovery he made while researching this book: Martínez had appropriated a set of poems from a Swiss-Catalan poet of the same name.

http://cola.unh.edu/article/2014/12/weintraub-jlm-english
http://www.unh.edu/unhtoday/unhtoday/2014/12/spanish-professor-scott-weintraub-uncovers-literary-mystery

St. Botolph Club Foundation Distinguished Artist Award Goes to UNH Professor

Professor of music David Ripley received the 2014 St. Botolph Club Foundation Distinguished Artist Award. The Foundation presents the award each year to an artist who has demonstrated outstanding talent and an exceptional diversity of accomplishment, and also recognizes the recipient for his or her contributions as a teacher, mentor, or advocate.

http://cola.unh.edu/article/2014/05/dripley-botolph

The Aristocrats

Between 1840 and 1930, many people with noticeable anatomical differences gravitated toward the museums, circuses, and carnivals where the freak show was considered a popular and legitimate form of entertainment. In her thesis, Freaks: An Examination of Marginalized Aristocrats, Emma Baillargeon ’09 combined approaches from the fields of communication, sociology, and history to consider how performers lived resiliently and benefited from the solidarity found in circus groups. Baillargeon noted: “Freaks are born with their trauma. They’ve already passed their test in life. They’re aristocrats.”

http://cola.unh.edu/article/2014/04/aristocrats

The Office: Step Inside the Office of UNH's Only Puppetry Instructor, Carol Fisher

Carol Fisher, one of just a handful of puppetry instructors in the U.S., has been accumulating her puppet collection for more than 20 years. A mix of student projects, puppetry conference purchases, and her own handiwork, Fisher’s collection includes hundreds of puppets, from delicate paper shadow puppets to oversized foam figures. Take a digital tour of some of her favorites!

http://www.unh.edu/unhtoday/unhtoday/2014/06/office

UNH Holds First Classics and Humanities Research Symposium in Durham and Portsmouth, NH, October 17-19

Scholars of ancient myth from across the United States and Europe gathered October 17-19, 2014 for UNH’s first John C. Rouman Symposium for Research in the Classics and Humanities. Over a dozen scholars from across the United States and Europe presented research on how the Greeks, Romans, and modern thinkers shaped myths, as well as how these authors critically viewed their own stories. The symposium is named in honor of UNH Professor Emeritus John C. Rouman, a distinguished scholar who taught in the UNH Classics program for many years.
UNH Hosts 2014 New England Renaissance Conference, October 11

UNH will host the 2014 New England Renaissance Conference on Saturday, October 11, 2014 from 9 a.m. to 6 p.m. in the Memorial Union Building Theatre 1 on UNH’s Durham campus. This year’s theme is “Cultures of Credit and Debt in Medieval and Early Modern Europe.” The conference brings together a distinguished group of scholars from a variety of disciplines to simultaneously showcase recent research and open up new areas of inquiry into the social, cultural, intellectual, and legal history of credit and debt. The conference is made possible by funding from programs at both UNH and Harvard University.

UNH Jazz Pianist Releases Debut CD of His Band, Fugue Mill

UNH resident artist and jazz pianist Mark Shilansky has released the debut CD of his new band, Fugue Mill. The CD, also called Fugue Mill, weaves jazz through bluegrass, Celtic, and classical music. The CD was produced and arranged by Shilansky, who also wrote most of the music and lyrics.

UNH Linguist Honored with Book Award from Linguistic Society of America

Professor of linguistics Rochelle Lieber has been awarded the Linguistic Society of America’s Leonard Bloomfield Book Award for her book The Oxford Reference Guide to English Morphology, which she co-authored with Laurie Bauer and Ingo Plag. The annual award recognizes the volume published in the preceding year that makes the most outstanding contribution to developing the understanding of language and linguistics.

UNH Linguist Publishes Volume on Derivational Morphology

Professor of English and linguistics Rochelle Lieber has co-edited a linguistics book with Pavol Štekauer of P.J. Šafárik University in Slovakia. The Oxford Handbook of Derivational Morphology is the only handbook devoted exclusively to the topic. Written by distinguished scholars, its 41 chapters provide a comprehensive and thorough overview of the study of derivational morphology, the process by which one word is changed into another. The book will be of interest to morphologists as well as researchers and students in related fields of linguistics, including semantics, child language acquisition, sociolinguistics, and psycholinguistics.

UNH Philosopher Explores Nature of Morality in New Book

In Morality’s Critics and Defenders: A Philosophical Dialogue, associate professor of philosophy Timm Triplett explores the nature and scope of morality through a fictional dialogue among four college students, their teaching assistant, and the course professor. The characters embody differing viewpoints and raise broad, fundamental questions on morality in today’s world.
UNH Pianist/Composer Releases CD of Piano Works
UNH music lecturer Ryan Vigil has released a CD, *Keypunch: Music for 2 and 4 Hands*. *Keypunch* features compositions by his former teacher, John McDonald of Tufts University, along with Vigil’s own music and the music of another of McDonald’s former students, David Claman, now an assistant professor at Lehman College.


University Poet a Featured Reader at Regional Poetry Celebration Nov. 5-9
Professor of English and poet Mekel McBride will be a featured reader and panelist, along with visiting writers Cyrus Cassels and Stanley Kuusisto, at the first annual Nancy Moore Hill Poetry Celebration in Portsmouth, NH, which runs from November 5 through 9, 2014. The celebration is organized by The Portsmouth Poet Laureate Program, which appoints and supports a local poet as Poet Laureate for the city and organizes poetry events for the community.

[http://cola.unh.edu/article/2014/10/mmcbride-poetry-celebration](http://cola.unh.edu/article/2014/10/mmcbride-poetry-celebration)

UNH Poet Awarded the Jerome J. Shestack Prize from the American Poetry Review
UNH poet and professor of English David Rivard was awarded the prestigious J. Shestack Prize by the American Poetry Review. The award recognizes Rivard’s work as the best collection of poems published by the magazine in 2013. The 13 poems are included in his new book, *Standoff*, which will be published in early 2016 by Graywolf Press.


What about Bob (Connors)? Opening Up Archival Research Through Digital Media
A video, “What About Bob (Connors)?: Opening the Archives Through Digital Media,” was created by Corey McCullough, Wendy VanDellon, and Shauna Wight as a graduate student project in the Ph.D. in Composition program in the UNH English department. Using Robert J. Connors’ archival methods, the students explored the intersections between Connors’ work as an archivist and his work as an historian of rhetoric and composition. The video features rhetoricians and archivists, some of whom are members of the UNH community, who help explain the role digital media has in the archival practices of rhetoric and composition.


Wicked Cool Research: Linguistics Major Looks at Use of the Word ‘Wicked’
According to Urban Dictionary, Boston is the place where use of the word ‘wicked’ as an adverb was born. Fascinated with words and the way their use and implication can vary, UNH linguistics major Emma Brown ’15 decided to make ‘wicked’ the subject of her research project for UNH’s 2014 Undergraduate Research Conference. Brown explored whether ‘wicked’ has undergone grammaticalization, the process of a word shifting from its original meaning and taking on new context.

[http://unh.edu/unhtoday/veterans/2014/06/wicked-cool-research](http://unh.edu/unhtoday/veterans/2014/06/wicked-cool-research)
Marine & Ocean Sciences

Bluebloods: Horseshoe Crabs’ Contribution to Modern Medicine Comes at a Cost
Collecting blood from horseshoe crabs for use in testing vaccines and medical devices for bacterial contamination might be playing a significant role in the decline of horseshoe crab populations, thus negatively affecting ecosystems from the Gulf of Mexico to the North Atlantic. A team led by Win Watson, UNH professor of zoology, and Christopher Chabot, Plymouth State University professor of biology, found that a significant percentage of the horseshoe crabs released back into the water after bleeding die, while those who survive are less active and have low levels of hemocyanin, a blood protein that carries oxygen throughout their bodies. Based on their findings, the team advocates for an improved approach to crab containment conditions and suggests that the time of harvest be changed to after the breeding season to help ensure the sustainability of this important organism.

http://www.unh.edu/news/releases/2014/02/bz24crabs.cfm
http://www.unh.edu/campusjournal/2014/02/research-biomedical-bleeding-affects-horseshoe-crab-behavior
http://www.unh.edu/unhtoday/veterans/2014/03/research-makes-difference
http://www.unh.edu/unhtoday/2014/06/bluebloods

Cloudy With a Chance of Copepods
Kate Cart ’15 spent the summer of 2014 at the University of Maine’s Darling Marine Center, where she studied how water turbidity levels affect the foraging behavior of mysids, shrimp-like crustaceans that play an integral role in the estuarine food webs in the Gulf of Maine and many temperate estuarine ecosystems around the world. Cart’s work, was supported by a Summer Undergraduate Research Fellowship grant from the UNH Hamel Center for Undergraduate Research. The results of her research will contribute to a better understanding of how overall estuary and coastal health are affected as turbidity is changing in response to factors such as stronger storms, longer growing seasons, and increased coastal development.

http://www.unh.edu/unhtoday/unhtoday/2014/12/cloudy-chance-copepods

Exxon Valdez, Deepwater Horizon and Beyond: Experts and Witnesses Share Their Expertise
A UNH-sponsored forum, "Oil Spill Response: 25 Years After the Exxon Valdez and in the Wake of Deepwater Horizon, What Have We Learned and What Are We Missing?" took place October 28-29, 2014. Hosted by the UNH Center for Spills in the Environment and the School of Marine Science and Ocean Engineering, the forum boasted nearly 40 experts and eyewitnesses from science, government, industry and other organizations who gathered to discuss past experiences and future outlooks regarding oil spill responses. The forum concluded with an in-depth discussion of what actions can be taken to improve communications with the public, facilitate scientific research, minimize the intrusion of politics, and consider human impacts during future spill responses.

http://www.unh.edu/news/releases/2014/10/bp09oilspill.cfm
Gift Expands Student Access to UNH’s Shoals Marine Laboratory
As part of a recent major gift to UNH, alumnus J. Morgan Rutman ’84, and his wife Tara, allocated $375,000 to the Shoals Marine Laboratory, a cooperative research and education program of UNH and Cornell University. The funds will be used for new curriculum development and to provide support for 10-week summer research internships, awards, and scholarships to lower the cost of participating in a program at the Lab for current UNH students as well as high school students with an interest in science, technology, engineering, and math.

http://www.unh.edu/news/releases/2014/06/em30marine.cfm

Hope on the Halfshell: The Humble Mollusk: Superhero
Ray Grizzle, research professor of zoology, and Ray Konisky ’03G, marine conservation ecologist for The Nature Conservancy’s Oyster Conservationist Program, are on a mission to help the declining oyster population along the Great Bay Estuary – as are about 58 local “oyster sitters” who have volunteered to help. The citizen oyster program restores oyster beds by creating a layer of shells to act as a foundation for a living reef and then placing on it disease-resistant oysters that have been raised in Grizzle’s laboratory. With this head start, the mollusks will rebuild a reef, creating a giant natural water-filtering machine, helping to bring the Bay ecosystem back into balance.

http://www.unh.edu/unhtoday/2014/06/hope-halfshell
http://www.fosters.com/apps/pbcs.dll/article?AID=/20140629/GJNEWS_01/140629366/-1/FOSNEWS0413

How I Spent My Summer Vacation: Studying Crustaceans in Great Bay
Erika Moretti ’15, a zoology major, spent the summer of 2014 researching how an increase in blue or green crabs might impact the Great Bay’s lobster populations, and thus the industry. With financial assistance from a 10-week Summer Undergraduate Research Fellowship (SURF) from UNH’s Hamel Center for Undergraduate Research, Moretti studied the crustaceans’ behavior in close proximity by placing the three species in shared living spaces, using an above-the-tank camera to snap pictures every two seconds to record their activity. Moretti conducted her research with the guidance of Win Watson, associate director of education in the School of Marine Science and Ocean Engineering and professor of zoology.


Intensive Testing Coming to York Beaches
Environmental microbiologist Stephen Jones will conduct intensive testing of the levels of bacteria in the water at York, Maine’s four beaches during the summer of 2014. Jones expects to run 1,500 tests on water samples collected from Cape Neddick Beach, Long and Short Sands beaches, and Harbor Beach as part of a beach water quality testing plan that will alert swimmers when it is unsafe to go into the water.

http://nhepscor.org/news/intensive-testing-coming-york-beaches

Over Their Heads In Algae at Shoals Marine Lab
Amber Litterer ’16, a zoology and ecogastronomy major, and Kristen Mello ’14, a recent graduate of UNH’s zoology program, spent the summer of 2014 as Near Shore Ecology interns at the Shoals Marine Laboratory on Appledore Island. The new program, funded by the Rutman family, provides novel research opportunities for UNH undergraduates, such as investigating the relationship between the degree of surface area complexity in species of algae found in bays across the various Isles of Shoals and the abundance of invertebrates. “The more surface area...an alga has
is directly related to its value as a food source and habitat in which larger predators hide,” says Litterer. “We’re now seeing that half of all the species living here are non-native, and we’d like to know what types of invertebrates currently inhabit each alga,” Mello explained. The student researchers were advised by Jennifer Dijkstra, affiliate assistant professor of biological sciences.

http://www.unh.edu/unhtoday/veterans/2014/08/over-their-heads-algae-shoals-marine-lab

Regional Fisheries Catch Topic for Podcasts
A series of online podcasts will highlight the current struggles of commercial fishermen in New England. Hosted by Erik Chapman, UNH Cooperative Extension and New Hampshire Sea Grant fisheries specialist, the podcasts will explore the shifting professional options within the local fishing industry. The series will feature interviews with fishermen, researchers, managers, and others dedicated to the preservation and resilience of New England’s marine heritage and economy.

http://extension.unh.edu/articles/Regional-Fisheries-Catch-Topic-Podcasts

Research Profile: Colin Ware: Visualizing Patterns in the Data
Whatever the topic, one of Colin Ware’s primary goals is to represent data visually, allowing people to discern patterns and thus understand the meaning of the data. As director of the Data Visualization Lab at UNH’s Center for Coastal and Ocean Mapping at UNH, Ware’s current research covers a range of subjects, from tracking sea lions and humpback whales to creating more effective methods of mapping ocean and wind currents.

http://www.unh.edu/campusjournal/2014/02/research-profile-colin-ware-visualizing-patterns-data

Seeking Surface Data: Marine Bio Class Builds, Launches Drifting Datacenters to Measure Ocean Currents
Erik Chapman, assistant professor of natural resources, and students from his introduction to marine biology laboratory course are working to build vessels or “drifters” to help ocean scientists understand more about surface currents in the Gulf of Maine. These drifters will bob along the current, relaying their position periodically via satellite to scientists at the National Oceanic and Atmospheric Administration and the Northeast Regional Association of Coastal and Ocean Observing Systems. After launching their drifters, the students will study a biological process of their choosing using data from the drifters and other ocean-observation instruments such as buoys and floats.

http://www.unh.edu/unhtoday/2014/10/seeking-surface-data

The Coral Microbiome: Understanding a Piece of the Paradox
Michael Lesser, research professor of molecular, cellular and biomedical sciences in UNH’s College of Life Sciences and Agriculture, has received a grant from the National Science Foundation to study the role of coral in nutrient cycling in coral reef ecosystems. Lesser and his team will collect samples from coral reefs throughout Australia, Hawaii, and Curacao for genomic analysis and classification. The research will help scientists to better understand the crucial ecosystem services that coral reefs provide that are becoming increasingly threatened by climate change.

http://colsa.unh.edu/article/coral-microbiome
The Oyster Is Their World: How Four UNH Researchers Are Working to Keep Illness Off the Raw Bar

A multidisciplinary team of UNH researchers is investigating the presence of Vibriosis-causing bacteria among oysters in the Great Bay. Steve Jones, associate director of NH Sea Grant and research associate professor of natural resources and the environment; Vaughn Cooper and Cheryl Whistler, associate professors of microbiology; and Tom Safford, associate professor of sociology, are collaborating on a three-year study of water quality, bacterial strains, and public trust of health warnings from the scientific community. The UNH researchers are part of a larger team that includes oyster farmers and university scientists from New Hampshire and Maine.

http://www.unh.edu/unhtoday/veterans/2014/08/oyster-their-world

The Tales a Lobster Trap Tells

The lobster research lab team supervised by professor of zoology Win Watson has produced a video detailing their work studying the effectiveness of lobster traps. The video, titled “What do lobster traps tell us about the lobsters on the bottom?”, features underwater footage of the lobsters interacting with the traps. Results of the study could inform New England fishing practices and future marine research approaches. The video was selected as a finalist for the Ocean 180 Video Challenge which aims to engage non-scientists and students in timely and relevant ocean science research. It will be viewed and judged by over 30,000 middle school students internationally.

http://www.unh.edu/unhtoday/2014/01/tales-lobster-trap-tells

UNH Ocean Mappers Discover Seamount in Pacific Ocean

A team of UNH scientists headed by UNH Center for Coastal and Ocean Mapping/Joint Hydrographic Center research professor James Gardner has discovered a new seamount near the Johnson Atoll in the Pacific Ocean. Working aboard the R/V Kilo Moana, an oceanographic research ship owned by the U.S. Navy and operated by the University of Hawaii, Gardner and his team were using multibeam echosounder technology to create detailed images of the seafloor when, late at night, the feature appeared “out of the blue.” The team was in the area on a mapping mission in support of the U.S. Extended Continental Shelf Task Force, a multi-agency project to demarcate the outer edges of the U.S. continental shelf.

http://www.unh.edu/news/releases/2014/09/bp02seamount.cfm
UNH Scientist’s Image Appearing in New Godzilla Movie

An image of the Mariana Trench, which was mapped and developed by UNH scientist James Gardner, has been licensed by Warner Bros. and is being used within a quick-cut-montage sequence in the new Godzilla movie. The licensed image was taken during an underwater survey of the area by a team of researchers from the UNH Center for Coastal and Ocean Mapping/Joint Hydrographic Center that took place from August through October of 2010.

http://www.unh.edu/news/releases/2014/06/cd02godzilla.cfm
http://www.unh.edu/unhtoday/unhtoday/2014/06/unh-scientist%E2%80%99s-image-appearing-new-godzilla-movie
http://www.unh.edu/unhtoday/unhtoday/2014/12/research-professor-paleoceanographerhollywood-collaborator

Credit: James Gardner, UNH Center for Coastal and Ocean Mapping/Joint Hydrographic Center

UNH-led Fisheries Research Collaborative Calls for New Regional Projects

The UNH-led Northeast Consortium (NEC) will lead a new collaborative research initiative supported by the New England Fishery Management Council. The NEC will distribute research funds to projects researching groundfish stocks and the groundfish fishery in the Gulf of Maine and Georges Bank. Project proposals from local commercial fishers and scientists are due November 5, 2014.

Space Science

Astrophysicist Available To Discuss Powerful Solar Flares
Nathan Schwadron, an astrophysicist in the Space Science Center within the UNH Institute for the Study of Earth, Oceans, and Space, is available to discuss the implications of and provide context for the powerful solar flare that erupted from the sun on September 10, 2014. Schwadron is the project director for both the Cosmic Ray Telescope for the Effects of Radiation (CRaTER) instrument onboard the National Aeronautics and Space Administration’s Lunar Reconnaissance Orbiter mission and the Earth-Moon-Mars Radiation Environment Module under development at UNH.


Cosmic Tower of Babel
James Ryan, astrophysicist in the Space Science Center in the UNH Institute for the Study of Earth, Oceans, and Space, is converting a century’s worth of data from neutron monitoring stations into a common format for the Neutron Monitor Database (NMDB). The NMDB was created to establish an international system for representing cosmic ray data, a previously subjective field with measurement and representation approaches varying greatly from station to station around the globe. With the help of UNH undergraduate students, Ryan is standardizing data from stations on Mount Washington and in Durham, NH; Colorado; and Hawaii for inclusion in the NMDB.

http://www.eos.unh.edu/Spheres_0314/neutronmon.shtml

Electric Sparks May Alter Evolution of Lunar Soil
A recent study by UNH scientists and NASA may alter contemporary understanding of the evolution of planetary surfaces in our solar system. Published in the Journal of Geophysical Research – Planets, the new research suggests that solar storms may electrically charge the soil on the surface of the moon, a process that may also occur on the surfaces of other planets throughout the solar system, especially in extremely cold regions that are exposed to harsh radiation from space. The data for this study was collected in part by the UNH-led CRaTER project. Coauthors from the UNH CRaTER team include Jody Wilson, research scientist (lunar science); physics graduate student Colin Joyce; Nathan Schwadron, associate professor of physics; and Harlan Spence, professor of physics and director of UNH’s Institute for the Study of Earth, Oceans, and Space.

In Search of the Solar Black Swan

Scientists from the UNH Institute for the Study of Earth, Oceans, and Space (EOS) are leading the National Science Foundation’s Sun-to-Ice project, a five-year, interdisciplinary study exploring whether solar events such as coronal mass ejections contribute to chemical signatures in polar ice cores. A connection would mean that signals in the ice could help scientists predict a devastating "Black Swan" event – a rare, unexpected occurrence of large magnitude and consequence – that would cripple global power grids, render satellites useless, and bring modern-day society to its knees. In just the second year, the group has discovered that nitrate signatures in ice are caused by sources other than solar energetic particles, thus cannot be used to understand the sun’s history or predict future events. The Sun-to-Ice project, which crosses the boundaries between space physics, atmospheric science, and ice core science, is led by Harlan Spence, director of EOS.

http://www.eos.unh.edu/Spheres_0314/sunice.shtml

Lightning Researcher Is New Peter T. Paul Chair in Space Sciences at UNH

Joseph Dwyer, a leading expert on lightning, has been named the Peter T. Paul Chair in Space Sciences within the Institute for the Study of Earth, Oceans, and Space at UNH and the College of Engineering and Physical Sciences. He will join the UNH faculty at the start of the fall semester in 2014. Dwyer was most recently department head and professor of physics and space sciences at the Florida Institute of Technology.

http://www.unh.edu/news/releases/2014/05/ds27dwyer.cfm

Luna Tunes

Marty Quinn, computer scientist and team member of the UNH-led Cosmic Ray Telescope for the Effects of Radiation instrument onboard the National Aeronautics and Space Administration’s Lunar Reconnaissance Orbiter, is making scientific data more accessible and meaningful to people who are blind or visually impaired by allowing them to hear what goes on in space. He has “sonified” the mission’s raw data into musical tones that represent radiation around the moon. Auditory explanations accompany the radiation “notes” that are represented by instruments such as piano, strings, and steel drums. The often soothing tunes change based on the calmness or intensity of current radiation conditions.

http://www.unh.edu/unhtoday/veterans/Crater-radio

Mark McConnell – Ballooning for Science

Mark McConnell, professor of physics, uses high altitude balloons to position detectors 130,000 feet above the Earth’s surface. At this height, the balloons hover between the edge of space and the outermost limits of the Earth’s atmosphere. This allows for collection of unhindered measurements of gamma radiation from space. “We are attempting a type of measurement that gives new insights into high energy phenomena in the Universe and provides training for the next generation of scientists,” he explains. The current experiment is known as the Gamma Ray Polarimeter Experiment, or GRAPE.

Oct 8th Science Café in Portsmouth: Space Weather: Radiation with a Chance of Solar Flares

Harlan Spence, professor of physics and director of UNH’s Institute for the Study of Earth, Oceans, and Space, and research professor of physics Antoinette Galvin discussed solar storms, flares, and eruptions, also known as space weather, at the Science Café held at the Portsmouth Brewery’s Jimmy LaPanza Lounge on October 8, 2014. The two astrophysicists offered insight into space weather and its possible impacts on humanity. The Portsmouth Science Café series, hosted by UNH faculty member Cameron Wake, is free and open to the public.

http://nhepscor.org/events/space-weather-radiation-chance-solar-flares

Scientific Sojourn: From the Hands of High-Schoolers, a Balloon Takes Flight

Tenth- and eleventh-grade students spent three weeks working in UNH’s physics laboratories as part of Project SMART (Science and Mathematics Achievement through Research Training), a four-week, science-intensive camp for high-schoolers. They built and launched an octagonal flight vehicle for a high-altitude balloon that took photos and video and gathered atmospheric data. The balloon build and launch was the team element of Project SMART’s space science module headed up by research professor of physics Charles Smith. Smith works with UNH faculty, graduate and undergraduate students, and science educators from three New Hampshire high schools to deliver the annual program.

http://www.unh.edu/unhtoday/2014/07/scientific-sojourn

Scientists Reveal Cosmic Roadmap to Galactic Magnetic Field

Nathan Schwadron, lead scientist for NASA’s Interstellar Boundary Explorer (IBEX) Science Operations Center at the UNH Institute for the Study of Earth, Oceans, and Space, and his collaborators have identified a “ribbon” of energy and particles at the edge of the solar system. The findings, published in Science Express in February 2014, are not consistent with data collected by the National Aeronautics and Space Administration’s Voyager 1 mission, but Schwadron considers the discrepancies to be clues to further understanding how interstellar magnetic fields shape, deform, and transform Earth’s heliosphere. Learning more about these magnetic fields is crucial to understanding not only the environment of our galaxy, but also of the environment on Earth.

http://www.unh.edu/news/releases/2014/02/ds13roadmap.cfm
http://www.unh.edu/campusjournal/2014/02/scientists-reveal-cosmic-roadmap-galactic-magnetic-field

Scientists Using UNH Detector Illuminate Cause of Sun’s “Perfect Storm”

Noé Lugaz, Charles Farrugia, and Antoinette Galvin, researchers in UNH’s Space Science Center within the Institute for the Study of Earth, Oceans, and Space, are members of an international team of scientists studying the extreme weather storm that occurred on the Sun on July 22, 2012. A UNH-designed instrument onboard the National Aeronautics and Space Administration’s twin-satellite Solar Terrestrial Relations Observatory (STEREO) mission made new, essential...
measurements of this rare, powerful storm event triggered by two successive solar eruptions known as coronal mass ejections (CMEs). The goal of the STEREO mission is to gain a better understanding of what causes these space storms to form and evolve in order to prevent potential damage the storms may cause to technological systems such as satellites and ground-based electricity grids.

http://www.unh.edu/news/releases/2014/03/ds18storm.cfm
http://www.unh.edu/campusjournal/2014/03/scientists-using-unh-detector-illuminate-cause-sun%E2%80%99s-%E2%80%9Cperfect-storm%E2%80%9D

UNH Scientific Balloon Set to Measure Gamma Rays from the Crab Pulsar

In September 2014, UNH scientists launched a massive weather balloon carrying instruments that will measure gamma rays from the Crab Pulsar, the remains of a supernova explosion that occurred in 1054 A.D. over 6,500 light years from Earth. The Gamma Ray Polarimeter Experiment (GRAPE) is led by Mark McConnell, a professor in the Space Science Center within the UNH Institute for the Study of Earth, Oceans, and Space and chair of the UNH department of physics. The team hopes the data collected with GRAPE’s new type of detector technology will provide information about the cause of the gamma rays and, ultimately, more insight into the poorly-understood process of particle acceleration.


UNH Scientist: Cosmic Rays Threaten Future Deep-Space Astronaut Missions

In a paper published online in the journal Space Weather, associate professor Nathan Schwadron of the UNH Institute for the Study of Earth, Oceans, and Space and the department of physics presents data and critical information on the radiation hazards that will be faced by astronauts on extended missions to deep space such as Mars. The study is the capstone article in the Space Weather CRaTER Special Issue, which provides comprehensive findings on space-based radiation as measured by the UNH-led Cosmic Ray Telescope for the Effects of Radiation (CRaTER) on the National Aeronautics and Space Administration’s Lunar Reconnaissance Orbiter. Schwadron is lead author of the paper and project director for CRaTER.

http://www.unh.edu/news/releases/2014/10/ds21nasa.cfm

UNH Space Scientist Honored by European Geosciences Union

Noé Lugaz, research assistant professor in the UNH Institute for the Study of Earth, Oceans, and Space, has received the Arne Richter Award for Outstanding Young Scientists from the European Geosciences Union (EGU). Lugaz was recognized for his work studying coronal mass ejections, which are eruptions on the sun that can impact technology on Earth. He has been involved in the STEREO mission, a National Aeronautics and Space Administration initiative to construct three-dimensional views of the sun using satellite-mounted instrumentation built at UNH. Lugaz accepted his award and delivered the award lecture at the EGU 2014 General Assembly meeting in Vienna, Austria.

http://www.unh.edu/campusjournal/2014/04/unh-space-scientist-honored-european-geosciences-union
Sustainability & the Environment

A River Runs Through It
Danielle Grogan, a Ph.D. candidate in natural resources and environmental studies, spent 10 weeks studying hydrologic models in Japan with support from the National Science Foundation’s (NSF) East Asia and Pacific Summer Institutes for U.S. Graduate Students program. Grogan became involved in this area of research while working on an NSF-funded research project led by Steve Frolking. Frolking is a biogeochemical modeler and research professor with joint appointments in the Earth sciences department and the Earth Systems Research Center/UNH Institute for the Study of Earth, Oceans, and Space. Grogan, who also holds a prestigious NSF Graduate Research Fellowship, will use the results of the modeling work she completed in Japan to help the New Hampshire EPSCoR Ecosystems and Society research team develop scenarios that will provide projections of how land cover and climate might change across New Hampshire over the next 50 years.

http://www.eos.unh.edu/Spheres_1114/grogan.shtml

Antarctic Ice Sheet Is Result of CO₂ Decrease, Not Continental Breakup
In a paper published in Nature, Matthew Huber of the UNH Institute for the Study of Earth, Oceans, and Space and department of Earth sciences provides evidence that the most likely explanation for the initiation of Antarctic glaciation during a major climate shift 34 million years ago was decreased carbon dioxide (CO₂) levels. The finding counters a 40-year-old theory suggesting that massive rearrangements of Earth’s continents caused global cooling and the abrupt formation of the Antarctic ice sheet.

http://www.unh.edu/news/releases/2014/07/ds30climate.cfm
http://nhepscor.org/news/antarctic-ice-sheet-result-co2-decrease-not-continental-breakup

Back to the Future (Part Two)
In part two of an interview for Spheres Online, climate modeler Matthew Huber, a professor of Earth sciences in the UNH Institute for the Study of Earth, Oceans, and Space, discussed his work and views on the importance of studying paleoclimatology, or the history of the Earth’s climate, to better understand our changing weather patterns today. He also explained the value of research that remains actively engaged with the public, and the ethical dilemma of communicating uncertain findings in a productive way.

http://www.eos.unh.edu/Spheres_0314/huber2.shtml

Carbon Bomb with a Long Fuse
Claire Treat ‘14G, now a postdoctoral researcher at the University of Alaska and the U.S. Geological Survey in Menlo Park, California, will build on the research she completed at UNH by exploring fossilized wetland vegetation datasets to better understand panarctic peatland and species composition. Treat will examine how peat samples provide evidence indicative of high methane emissions during the Holocene Epoch. Treat is collaborating with Steve Frolking, a biogeochemical modeler and research professor with joint appointments in the Earth sciences department and the Earth Systems Research Center/UNH Institute for the Study of Earth, Oceans, and Space. Frolking served as a member of Treat’s Ph.D. dissertation committee.

http://www.eos.unh.edu/Spheres_1114/treat2.shtml
Community Retrospective
Jennifer Dijkstra, affiliate assistant professor in the College of Life Sciences and Agriculture and UNH’s Center for Coastal and Ocean Mapping/Joint Hydrographic Center, works alongside her mentor Larry Harris, professor of zoology and chairperson of the department of biology, to better understand invasive tunicates, or sea slugs, and their impact on the region’s valuable shellfish industry. Tunicates, which adhere to the shells of mussels and compete with them for nutrients, are having a negative impact on aquaculture farms worldwide by clogging up netting, overgrowing the shellfish, and eating the shellfish’s food. Dijkstra’s research will help members of the aquaculture industry forecast the number of tunicate species and individuals in their regions as the industry determines a course of action to control the invasive organism.

http://colsa.unh.edu/article/fall-2014/community-retrospective

Crystal Clear Volunteers: Citizen Scientists Put NH Lakes Monitoring Program in National Spotlight
As a winner of a W.K. Kellogg Foundation Engagement Scholarship Award for 2014, UNH’s Lakes Lay Monitoring Program (LLMP) is now one of four national finalists for the C. Peter Magrath University Community Engagement Award. Started in the 1970s as a UNH student project on Chocorua Lake, the LLMP brings together UNH research faculty, UNH Cooperative Extension specialists and students, the UNH Center for Freshwater Biology, local volunteers, lake associations, and communities in a program that has proven critical to safeguarding NH’s famous lakes and valuable freshwater resources.

http://www.unh.edu/unhtoday/2014/10/crystal-clear-volunteers

Expert Available to Comment on Exxon Valdez 25th Anniversary
Nancy Kinner, professor of civil and environmental engineering and director of UNH’s Center for Spills in the Environment, is available to comment on the 25th anniversary of the ecologically devastating Exxon Valdez oil spill. Kinner, a leading independent expert on the fate of spilled oil, has worked closely with media outlets and has testified before federal lawmakers concerning major events such as the Exxon Valdez and BP Deepwater Horizon oil spills. She also has taken a leadership role in creating and sharing scientific knowledge in support of clean-up efforts with spill responders, scientists, and other stakeholders in the Gulf of Mexico spill region. In October 2014, UNH will host a comprehensive two-day forum to explore the past, present, and future of these types of accidents — “Oil Spill Response 25 Years After Exxon Valdez and in the Wake of Macondo 252: What Have We Learned and What Are We Missing?”

http://www.unh.edu/news/releases/2014/03/bp25valdez.cfm

Extension Well Represented at UNH Climate Hub Meeting
Several UNH Cooperative Extension staff showcased Extension’s efforts to address the impacts of climate change during a UNH-sponsored meeting in May, 2014 with U.S. Department of Agriculture (USDA) Climate Change Program Director William Hohenstein. UNH and David Hollinger (USDA Forest Service, Northern Research Station and Hub Leader, Northeast Regional Hub for Risk Adaptation and Mitigation to Climate Change) hosted the event at UNH to inform Hohenstein about the work taking place on campus focused on climate change, mitigation, and adaptation.
Glacial Race: With a Prestigious NASA Fellowship, Doctoral Student Ryan Cassotto Tracks the World’s Fastest Glacier

UNH doctoral student Ryan Cassotto is studying the increasingly rapid movement of a Greenland tidewater glacier, Jakobshavn Isbrae, with funding from a prestigious Earth System Science Fellowship from the National Aeronautics and Space Administration. Researching the movement of glaciers will shed light on the complex relationship between glacier movement, oceans, and rising sea levels. “I was quite fortunate to get this grant to be able to use this dataset, process it, then make it available to the public through the National Snow and Ice Data Center,” Cassotto explained. Cassotto is advised by Margaret Boettcher, assistant professor of earth sciences, and Mark Fahnestock, affiliate research professor in UNH’s Institute for the Study of Earth, Oceans, and Space.

Have Funding, Will Travel

Sophia Burke ’13, Ph.D. candidate in the natural resources and Earth system science program, has received a Fulbright Fellowship to study at the University of Waikato in New Zealand. “I’ll be learning about peatlands that formed in a vastly different climate than what I’m used to – that is, subtropical versus subarctic,” said Burke. “And I’ll also learn about different ways that carbon flux is monitored in peatland ecosystems by taking measurements from a flux tower for the first time as well as doing incubation work.” As an undergraduate, Burke spent time in New Zealand through the EcoQuest program and traveled to Sweden three times with the Northern Ecosystems Research for Undergraduates (NERU) program, which is sponsored by the National Science Foundation and the American-Swedish Institute. Ruth Varner, associate professor of biogeochemistry and Earth sciences and director of NERU, is Burke’s advisor.

Increased Crop Productivity Has Deepened Atmospheric "Breathing"

A team of researchers that includes an Earth system scientist from UNH has found that a previously unexplained increase in Earth's annual atmospheric "breathing" cycle over the last 50 years is due, in part, to a dramatic rise in agricultural productivity in the Northern Hemisphere. Using production statistics and a carbon accounting model, the team showed that increases in maize, wheat, rice, and soybean production explain as much as a quarter of the observed changes in atmospheric carbon dioxide seasonality. Steve Frolking, a biogeochemical modeler and research professor with joint appointments in the Earth sciences department and the Earth Systems Research Center/UNH Institute for the Study of Earth, Oceans, and Space, is a member of the research team and co-author of the recent Nature article reporting this research.
Joel Johnson, Associate Professor of Geology – Sweden

With funding from a UNH Faculty International Development Grant, Joel Johnson, associate professor of geology, served as a research mentor for undergraduate students on a National Science Foundation Research Experiences for Undergraduates trip to the Stordalen Mire research site in subarctic Sweden. As part of a team comprised of researchers and students from UNH and other universities, Johnson’s group studied changes in the shallow lake sedimentary environment caused by melting permafrost.

http://unh.edu/cie/joel-johnson

John Aber – Organic Farming with the Former “Provost of Compost”

When University Professor John Aber stepped down from his role as Provost and Vice President for Academic Affairs in 2013, he returned his full attention to research, focusing on the sustainability of UNH’s innovative Organic Dairy Research Farm. With funding provided by a series of three agroecosystems research grants from Northeast SARE (Sustainable Agriculture Research and Education), a program of the U.S. Department of Agriculture, Aber leads a team studying the nutrient cycling that takes place at the farm. In keeping with UNH’s sustainability mission, Aber researches ways in which the farm’s environmental footprint might be reduced while increasing productivity.


Keeping New Hampshire Waters Fresh

The New Hampshire Lakes Lay Monitoring Program is a 2014 winner of the W.K. Kellogg Foundation Engagement Scholarship Award. The award recognizes the outreach and engagement partnership efforts of four-year public universities, particularly those that have redesigned their learning, discovery, and engagement functions to become even more involved with their communities. The New Hampshire Lakes Lay Monitoring Program is a citizen-scientist partnership program that started in 1978 as a UNH student project and now is overseen by UNH Cooperative Extension. Its program model has informed the creation of similar groups nationwide.

http://extension.unh.edu/articles/Keeping-New-Hampshire-Waters-Fresh

Kevin Gardner – Creating Knowledge that Leads to Action for Sustainability

As a professor of civil engineering and faculty fellow in the Office of the Senior Vice Provost for Research, Kevin Gardner strives to create knowledge that leads to action. He conceptualizes and organizes interdisciplinary teams to work collaboratively to accomplish the goal of educating and inspiring action towards sustainability in the environment. One of his current efforts is to raise awareness that sustainability science needs and uses many different disciplines, even those that most people may not associate with this area of research.

http://www.unh.edu/campusjournal/2014/02/research-profile-kevin-gardner
Marshes Called Key in Combating Sea-level Rise
David Burdick, associate research professor in the department of natural resources and the environment, took community members to the salt water marshland near the Seacoast Science Center in Rye to explain its important role as a buffer from ocean surge and sea-level rise. In addition to providing places for storm surge to collect and preventing further coastal erosion, the marshes play an integral role in supporting biodiversity within human and animal food chains, and wildlife habitats.

http://www.seacoastonline.com/articles/20140617-NEWS-406170368

National Climate Fellows Program, Campus Carbon Calculator Come Home to UNH
The Climate Fellows Program and the Carbon Management and Analysis Platform (CarbonMAP)/Campus Carbon Calculator have proven to be valuable tools and learning experiences for responding to the challenge of climate change. These innovative, nationwide programs, previously managed by the environmental action organization Clean Air – Cool Planet, will now be based in the Sustainability Institute at UNH. Clean Air – Cool Planet and the Sustainability Institute have worked together for nearly 13 years to advance sustainable solutions to climate challenges, including developing the Carbon Calculator in 2000. So, the transfer of the management of these programs to the Sustainability Institute was a natural choice.

http://us1.campaign-archive2.com/?u=f961de241cfb5cbfcd3ddf440&id=d2f0ecba33
http://www.unh.edu/news/releases/2014/02/sc10carbonmap.cfm
http://www.unh.edu/campusjournal/2014/02/climate-fellows-program-campus-carbon-calculator-come-home-unh

Near and Far: The Global Effects of Non-native Species
Jeffrey Foster, assistant professor of molecular, cellular and biomedical sciences in UNH’s College of Life Sciences and Agriculture, will help research the loss of native flora and fauna on a large parcel of land near Army installations on Oahu, Hawaii. Foster brings his background as a wildlife biologist with expertise in studying the effects of non-native birds on Hawaiian ecosystems to this collaboration with scientists from a variety of organizations and academic institutions, all working to maintain the island’s fragile ecosystem. Foster is grateful for this opportunity from the U.S. Dept. of Defense to return to the field and join forces with colleagues who are just as passionate as he is about maintaining the imperiled Hawaiian ecosystem.


N.H. Lakes Lay Monitoring Program Regional Winner of C. Peter Magrath Engagement Award
The New Hampshire Lakes Lay Monitoring Program is a regional winner and finalist for the national 2014 C. Peter Magrath University Community Engagement award from the Association of Public and Land-Grant Universities. The New Hampshire Lakes Lay Monitoring Program is an internationally-known volunteer water quality monitoring program in which UNH faculty, Extension specialists, students from UNH’s Center for Freshwater Biology, and lake associations and their respective communities work collaboratively to collect data about the state’s lake water quality and encourage lake stewardship.

http://extension.unh.edu/articles/NH-Lakes-Lay-Monitoring-Program-Regional-Winner-C-Peter-Magrath-Engagement-Award
NHAES Research: New England Lakes Recovering Rapidly From Acid Rain

New research funded by the NH Agricultural Experiment Station (NHAES) at the UNH College of Life Sciences and Agriculture indicates that lakes in New England and the Adirondack Mountains are recovering rapidly from the effects of acid rain. NHAES researcher William McDowell, professor of environmental science and director of the NH Water Resources Research Center, and his team of scientists found that the sulfate concentration in rain and snow declined by more than 40 percent in the 2000s, and sulfate concentration in lakes declined at a greater rate from 2002 to 2010 than during the 1980s or 1990s. During the 2000s, nitrate concentration in rain and snow declined by more than 50 percent and nitrate concentration declined in lakes.

http://colsa.unh.edu/aes/article/nhaes-research-new-england-lakes-recovering-rapidly-acid-rain
http://www.unh.edu/news/releases/2014/06/lw09acidrain.cfm

Participants Learn More about the New Hampshire Method

Twenty-eight natural resources professionals, representatives from state agencies and town conservation commissions, and conservation-minded individuals from across New Hampshire recently completed a two-day training on the updated Method for Inventorying and Evaluating Freshwater Wetlands in New Hampshire, commonly referred to as the New Hampshire Method. The New Hampshire Method provides a practical way for communities, conservation groups and natural resources consultants to evaluate wetland functions. A recent update to the New Hampshire Method is the addition of the web-based New Hampshire Wetlands Mapper as a resource for users.


Pinpointing a Pint-sized Pest From On High

With the support of the U.S. Forest Service’s mentorship-based Pathways Program, master’s student Justin Williams devised a way to use satellite imagery to track the hemlock woolly adelgid, an invasive Asian insect that is the single greatest threat to hemlock health and sustainability in the eastern U.S. “[Williams] has documented the ability to remotely detect hemlock woolly adelgid infestation using remote sensing methods and, most importantly, also showed there is an initial increase in needle chlorophyll concentrations before the trees eventually succumb to the disease, which appears to be the initial response in the trees’ attempt to ‘fight off’ the infection,” explained Barry Rock, professor emeritus of natural resources and the environment and Williams’ advisor. As a participant in the Pathways Program, Williams was employed full-time and paired with a mentor from the Forest Service, giving him access to Forest Services resources such as vehicles and scientific instruments to use while conducting his research as a graduate student at UNH.

http://www.eos.unh.edu/Spheres_1114/williams.shtml

Pollution Solutions: Smart Dogs, Smart Pavement, Smart Gardens

Three practices are currently in use in New Hampshire that may help to solve water pollution problems and promote water conservation. Two dogs from Environmental Canine Services in Michigan are working in Durham, sniffing out stinky sewage from leaky pipes, bad plumbing joints, seeping septic systems – anywhere untreated wastewater is escaping. In Greenland, a small section of porous pavement has been so successful at cleaning runoff that the water flowing back into Pickering Brook, and eventually into Great Bay, is cleaner than the water in the brook itself. The third initiative is Soak Up the Rain Great Bay, a new state-funded program that is helping
homeowners become stakeholders simply by taking action in their own yards by building rain gardens to catch runoff from driveways and lawns before the runoff reaches the Great Bay.

http://www.unh.edu/unhtoday/2014/06/pollution-solutions

Profile in Sustainability: Mary Malone
Mary Malone, associate professor of political science, is co-directing the Race and Ethnic Studies minor in the College of Liberal Arts and working to expanding its impact. With her experience studying sustainability and crime politics in Latin America, she hopes to highlight the connections among interdisciplinary minors and encourage students to explore pressing domestic and international issues.

http://cola.unh.edu/article/2014/02/profile-sustainability-mary-malone
http://www.unh.edu/campusjournal/2014/02/profile-sustainability-mary-malone

Rain Gauge Will Help Derry Students Collect Data
A 12-inch rain gauge was recently set up with the help of Steven Hale of UNH’s Leitzel Center for Math, Science and Engineering Education to help Pinkerton Academy meteorology students gain hands-on experience collecting data on precipitation. With funding from a grant from the National Science Foundation to the New Hampshire EPSCOR program, Pinkerton students can participate in groups or individually to observe and collect data on the rainfall that accumulates in the gauge.

http://nhepscor.org/news/rain-gauge-will-help-derry-students-collect-data

Renaissance Woman: EOS Researcher Goes From Reading T.S. Eliot at Harvard to Running Earth System Mathematical Models
Katharine Duderstadt, a research scientist in the Earth Systems Research Center in the UNH Institute for the Study of Earth, Oceans, and Space, quickly became adept at her new task of managing the Whole Atmosphere Climate Community Model for the National Science Foundation-supported Sun-to-Ice project, a five-year study of the relationship between solar flares and climate history markers preserved in ice cores. In addition to her work as a climate modeler, Duderstadt holds a bachelor’s degree in English from Harvard University and a Ph.D. in atmospheric and space science from the University of Michigan. She served in the Peace Corps, has taught high school physics, and is mother to two daughters with husband Nathan Schwadron, an astrophysicist in the UNH Space Science Center and co-member of the Sun-to-Ice project team. Of her dynamic and impressive background, Duderstadt said: “You take whatever opportunities come along, and I tend to become interested in whatever I’m doing at the time.”

http://www.eos.unh.edu/Spheres_0314/duderstadt.shtml

Restoring Dunes
Greg Moore, research assistant professor in UNH’s School of Marine Science and Ocean Engineering, will direct a key component of a National Wildlife Federation project recently funded by a restoration grant from the U.S. Department of the Interior. His goal will be to rebuild some of the eroded dunes at Salisbury Beach, MA, and restore native dune plants to Salisbury and Plum Island. Dune plants are seen as a natural
defensive barrier against storms, because their roots hold the dune together and their grasses collect drifting sand.

http://www.newburyportnews.com/local/x1927804311/-2-9-million-eyed-for-dune-marsh-protection

Spring Science Cafés Explore Tides, Rain, Changing Families in Portsmouth
The Portsmouth Science Café, is a unique opportunity for Seacoast residents to learn about contemporary science in the relaxed setting of the Portsmouth Brewery. Hosted by Cameron Wake, research associate professor in the UNH Institute for the Study of Earth, Oceans, and Space, it allows for the exchange of ideas and lively discussion between scientists and the community. Topics for the Spring 2014 series include the changing nature of tides, families, and stormwater management.

http://www.unh.edu/news/releases/2014/02/bp19sciencecafe.cfm
http://www.unh.edu/campusjournal/2014/02/spring-science-cafes-explore-tides-rain-changing-families-portsmouth

State of Flux
With funding from the National Science Foundation, the NH EPSCoR Ecosystems and Society project has installed four new state-of-the-art “eddy” towers to study land-use/land-cover interactions with climate to better assess climate conditions in NH under future change scenarios. Managed by Andrew Ouimette, a research scientist in the Earth Systems Research Center in the UNH Institute for the Study of Earth, Oceans, and Space, the towers have been placed strategically in forest, field, farmland, and urban/residential environments to measure changes in CO2 and water in turbulent air. Ouimette explained: "The towers allow us to very accurately measure how these different landscapes ‘breathe and sweat’ and reflect light and heat throughout the day and night as environmental conditions change. The effect of land cover on both local and larger scale climate processes is a result of all three of these processes.”

http://www.eos.unh.edu/Spheres_0314/flux.shtml

Survival, a Fish Story
Daniel Zotos ’14, a political science and international affairs major at UNH, spent the summer of 2013 traveling in Spain to research the almost-mythical Atlantic bluefin tuna and the depletion of fisheries in the Atlantic. With the support of a grant from the Hamel Center for Undergraduate Research, Zotos conducted his research under the supervision of Jeffrey Bolster, associate professor of history at UNH. Together they made contacts with conservationists, government officials, and fishermen in Spain to allow Zotos to examine the practices and policies of bluefin tuna fisheries along the coast of Spain. After many visits and interviews, Zotos was introduced to a traditional fishing method that he believes could help improve and sustain tuna fisheries if adopted more broadly.

http://cola.unh.edu/thecollegeletter/2014-03/survival-fish-story
http://www.unh.edu/unhtoday/2014/04/survival-fish-story

Sustainability Briefings Launched
The Sustainability Institute at UNH has launched the Sustainability Briefings initiative, a collection of essays, thought pieces, case studies, and research briefings through which UNH faculty, staff and students can connect with larger audiences on the complex issues of sustainability. The first installment is a series of 12 case studies on climate change and the New England food system, written by Ruby Woodside, the Institute’s 2014 Thomas W. Haas Climate Fellow.

http://www.sustainableunh.unh.edu/briefings

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Take a Hike: Scientific Research and Environmental Advocacy Merged on a Week’s Trek Along the Portland-Montreal Pipeline

UNH environmental science major Kaity Thompson ’14 has woven together her passion for science and her call to advocacy. The potential reversal of the Portland-Montreal oil pipeline inspired Thompson to travel along and research the 236-mile World War II-era pipeline. Accompanied by local environmental activist Brett Chamberlin, funded by a National Wildlife Federation National Wildlife Campus Ecology Fellowship, and mentored by UNH research associate professor of climatology and glaciology Cameron Wake, Thompson explored the landscapes, communities, and ecosystems that could be compromised by a spill from the pipeline. Thompson wants those living along the pipeline to know the risks that the project could pose to their drinking water, property values, and recreation. She plans to expand her research of the pipeline’s impact on ecosystem services to Vermont and Maine while continuing her outreach efforts to ensure that all of those involved have a chance to be heard.

http://www.unh.edu/unhtoday/2014/02/take-hike
http://www.unh.edu/campusjournal/2014/02/take-hike-scientific-research-and-environmental-advocacy-merged-week%E2%80%99s-trek-along-portland-m

The Battle Continues: Eelgrass, Nitrogen, and the Complexities of Sewage

Fred Short, research professor of natural resources and marine science, has found in the 30 years he has been studying the Great Bay that the total area of marine eelgrass coverage is shrinking and the density within the beds also has decreased dramatically. Called an "ecosystem engineer" for its ability to stabilize the seabed and slow currents, eel grass, or Zostera marina, has become the focus in a new battle for Great Bay. UNH’s Water Resources Research Center has worked to help Great Bay communities understand the rationale for the U.S. Environmental Protection Agency’s new limits on nitrogen water discharge from wastewater treatment plants so that the communities will accept and comply with the new rules. Excess nitrogen is the main cause of the decline of eelgrass and resulting loss of habitat for the tiny fish and other invertebrates that serve as food for herons, egrets, and other wading birds.

http://www.unh.edu/unhtoday/2014/06/battle-continues

The View from the Coast

Tom Safford, assistant professor of sociology and faculty fellow in the Carsey Institute at UNH, is exploring the health of coastal Maine and New Hampshire and the human activity that may pose threats to its ecosystem. Working with scientists from various disciplines, Safford is bringing his sociological perspective to a three-year, National Science Foundation-funded study that has as its goal supplying the data that will allow people to make informed decisions regarding environmental issues and policies. Safford believes that it is not simply economics vs. environment, or people vs. environment, but that all these points of view are interrelated. His hope is to bring a more complete understanding to policy-makers and to extend his research to other locales, such as coastal Brazil.

http://www.unh.edu/unhtoday/Tom-Safford
Touchdown in the Ozone—Granite State White Pines Have Regained Health in Lockstep with Declining Levels of Smog

Barry Rock, professor emeritus of natural resources in the Earth Systems Research Center in the UNH Institute for the Study of Earth, Oceans, and Space, and founder of UNH’s Forest Watch program, has found that 20 years’ worth of data collected by K-12 students and their teachers mirrors conclusions drawn by state officials. While the Forest Watch analysis had shown that tree vigor is tied to improved air quality, it wasn’t until he examined ozone, or smog, records from the NH Department of Environmental Services Air Resources Division that Rock discovered that the pattern of steadily declining ozone levels since 1991 fits the year-to-year improvements in white pine health documented by Forest Watch. Rock noted: “Here’s a great example of federal and state regulations...having a dramatic, positive impact on air quality and white pine health.”

http://www.eos.unh.edu/Spheres_0314/forestwatch.shtml
http://www.unh.edu/unhtoday/veterans/ozone
http://unh.edu/unhtoday/veterans/2014/06/forest-sentinels
http://www.unh.edu/news/releases/2014/02/ds25forestwatch.cfm
http://www.unh.edu/campusjournal/2014/02/unh-state-data-show-healthier-white-pines-improved-air-quality

UNH Alumna, Undergraduate Receive Fulbright Grants

Environmental science major Sophia Burke ’13 and Spanish major Kelly Taveras ’14 have received Fulbright grants for the 2014-2015 academic year. Burke will travel to New Zealand to conduct independent research on carbon dioxide and methane emissions in peatlands, while Taveras will teach English at the Universidad del Atlántico in Barranquilla, Colombia.

http://www.unh.edu/unhtoday/veterans/Fulbright-grants

UNH Cooperative Extension, Department of Resources and Economic Development Renew Partnership

In February, UNH Cooperative Extension and the New Hampshire Department of Resources and Economic Development’s Division of Forests & Lands renewed a 90-year-old agreement that will extend their joint commitment to support the stewardship roles of private owners of forested lands. UNH Extension professor and specialist in forest resources Karen Bennett is looking forward to the continued relationship, as eighty percent of New Hampshire’s forests are owned by private citizens. Working with Extension and the Division of Forests & Lands, forest owners — individuals and families, foresters and loggers — join a partnership that supports urban and community forestry, the economic viability of towns and the state, and natural resource conservation and education.

http://extension.unh.edu/articles/UNH-Cooperative-Extension-Department-Resources-and-Economic-Development-Renew-Partnership
http://www.unh.edu/campusjournal/2014/02/cooperative-extension-department-resources-and-economic-development-recommit

Credit: Martha Carlson, UNH Forest Watch


Credit: UNH Cooperative Extension
UNH, Extension Researchers Find a New Lens for Measuring the Health of Lakes Worldwide

Working with a team of international collaborators, Shane Bradt, UNH Cooperative Extension associate professor and specialist of geospatial technologies, and Tim Moore, research scientist in the Ocean Process Analysis Laboratory at UNH’s Institute for the Study of Earth, Oceans, and Space, have contributed to the creation of a new method for measuring the health of lakes. Using light profiles derived from data gathered through remote satellite technology, the team developed an internationally-applicable, original technique for estimating chlorophyll levels, an indicator of lake health that previously was determined through laborious, time-consuming physical sampling. With imagery from any lake, a researcher can now make a match to one of seven distinct optical lake type models, which can then be used to turn a satellite image into a chlorophyll “map.” The method even allows different areas of a lake (for example, shallow areas or deep holes) to belong to more than one of the seven types.


UNH Hosts New England Geography Conference

UNH’s department of geography hosted the annual New England - St. Lawrence Valley Geographical Society (NESTVAL) conference in Durham on October 24 and 25, 2014. The conference, "Water in a Changing World," focused on the importance of coastal and inland water resources on New England’s settlement, development, and future. NESTVAL was the nation’s first regional professional geography organization and has been holding conferences, supporting regional geographers, and promoting geography education and research since 1922.

http://cola.unh.edu/article/2014/10/nestval

UNH Joins USDA Northeast Climate Hub

UNH recently joined the USDA Northeast Climate Hub, a Durham-based collaboration of U.S. Department of Agriculture agencies, state agencies, and land-grant university partners that will address climate and weather-related risks to agriculture. The move is ideal for both the University and the Climate Hub, says Jon Wraith, dean of the UNH College of Life Sciences and Agriculture and director of the NH Agricultural Experiment Station, as both are interested in climate adaptation research and disseminating helpful information to the public. Wraith and Ken La Valley, dean of UNH Cooperative Extension, will serve as UNH’s points of contact for the Climate Hub.

http://colsa.unh.edu/aes/article/climatehub
UNH Receives Grant to Study Climate Change Adaptation in Wildfire-Prone Area

UNH has received a grant from the U.S. Department of Agriculture’s National Institute for Food and Agriculture to study climate change adaptation in the Blue Mountains of Oregon, an area prone to wildfires and drought that have impacted the area’s economy. Building on previous community and environment research through the Carsey Institute at UNH, the project is a collaborative effort involving Mark Ducey in the department of natural resources and the environment, Larry Hamilton in the department of sociology, Michael Palace in Earth Systems Research Center at the UNH Institute for the Study of Earth, Oceans, and Space, and colleagues from the University of Colorado, the University of Florida, the Oregon State University College of Forestry Extension, and Wallowa Resources in Enterprise, Oregon.

http://www.unh.edu/news/releases/2014/05/em07climate.cfm
http://www.unh.edu/campusjournal/2014/05/unh-receives-grant-study-climate-change-adaptation-wildfire-prone-area

UNH Reports: New Hampshire Getting Warmer, Wetter as Climate Changes

Cameron Wake, research associate professor in the UNH Institute for the Study of Earth, Oceans, and Space and director of Climate Solutions New England, was lead author on two new reports which predict that by the mid-21st century, temperatures in New Hampshire will rise by 3 to 5 degrees Fahrenheit, and extreme precipitation events will double. The reports, Climate Change in New Hampshire: Past, Present, and Future, were commissioned by the Granite State Future project and cover northern and southern New Hampshire. They are intended to provide decision-relevant information as municipalities and regions face challenging choices regarding future investments.

http://www.unh.edu/news/releases/2014/04/ds04climate.cfm
http://www.unh.edu/campusjournal/2014/04/unh-reports-nh-getting-warmer-wetter-climate-changes

UNH Scientists Find Urban Ecosystems "Evolve," Require Sustainable Management

The journal Biogeochemistry released a special issue in September that presents 14 related studies in which scientists from across the country show that urban and suburban environments are dynamic biological, chemical, and even geological ecosystems that can change relatively quickly in response to human activities. The researchers noted that scientists, managers, and citizens must work together to sustainably manage these ecosystems. William McDowell, professor of natural resources and the environment (NREN), and Wil Wollheim, assistant professor of NREN and in the UNH Institute for the Study of Earth, Oceans, and Space, co-edited the issue and co-authored many of the studies. The research reported was funded in part by the National Science Foundation and the New Hampshire Agricultural Experiment Station.

http://nhepscor.org/news/river-runs-through-it-us-cities-waterways-show-consistent-patterns-evolution

A stream restoration project in Baltimore, MD in an early stage of evolution towards sustainability
Credit: Tamara Newcomer Johnson
UNH Scientists to Conduct NASA Interdisciplinary Amazon Forest Project

The National Aeronautics and Space Administration’s Interdisciplinary Research in Earth Science program has funded scientists from UNH to conduct a comprehensive assessment of Amazonian forest resilience and vulnerability to drought in the wake of two Amazon megadroughts in 2005 and 2010. The three-year project is led by environmental scientist Michael Palace of UNH’s Institute for the Study of Earth, Oceans, and Space (EOS) and leverages the expertise of six current and former scientists from the EOS Earth Systems Research Center. The interdisciplinary project will take a novel approach by integrating multi-sensor remote sensing from satellites and aircraft platforms, contemporary physiological measurements that can determine how much a forest “drinks,” and analysis of an extensive paleoecological dataset, including pollen records dating back thousands of years that can identify periods of severe drought.

http://www.unh.edu/news/releases/2014/05/ds12amazon.cfm
http://www.unh.edu/campusjournal/2014/05/unh-scientists-conduct-nasa-amazon-forest-project

UNH Stormwater Center Awarded Grant for Philadelphia Green Infrastructure Project

The UNH Stormwater Center, a leader in tackling urban stormwater issues, was awarded a grant by the U.S. Environmental Protection Agency to assist the city of Philadelphia in a project called “Green Infrastructure for Sustainable Philadelphia Communities.” The team will work to reduce runoff from overflowing sewer systems and to redirect the water through natural filtration systems. UNH was the only university from outside Pennsylvania to be selected to work on this initiative.

http://www.unh.edu/news/releases/2014/01/bp22stormwater.cfm
http://www.unh.edu/campusjournal/2014/01/unh-stormwater-center-awarded-nearly-1m-epa-philadelphia-green-infrastructure-project

UNH Student Project Brings Sustainable Energy to Ghana

The UNH Solar Power for Education in Ghana Project Team is an interdisciplinary senior student project working to implement a solar energy system at a school in the Toh-Kpalime village in rural Ghana. So far, the team has designed the solar energy system and conducted a life cycle analysis of the system’s environmental impacts. To ensure that the solar energy system can be implemented, the team is raising funds to pay for the system and a site visit to Ghana in August 2014 to gather the additional information needed for the system’s installation. Final implementation of the system is scheduled for Winter 2015.

http://us1.campaign-archive1.com/?u=f961de241cfd5cbbcd3dd440&id =63b55174b3
UNH Student Project Diverts Nitrogen-Rich Urine from Great Bay to Farm Field

Four UNH seniors carried out a project called “Durham Urine Diversion & Recycle” in which they harvested urine from college students in an effort to create fertilizer for agricultural use while cutting down on the amount of sewage waste entering the Great Bay. Business major Liz McCrary ’14 and environmental engineering students Taylor Walter ’14, Alyson Packhem ’14, and Adam Carignan ’14 developed the project with support from their mentors, professor of environmental engineering Nancy Kinner and Durham town engineer David Cedarholm ’94G. The team built a custom Porta-Potty nicknamed the “Peebus,” set it up in a central parking lot, and experienced great success in gathering donations from students on weekend evenings. Local farmers already have expressed interest in testing the human urine-derived fertilizer on their hay fields.

http://www.unh.edu/news/releases/2014/04/bp10diversion.cfm
http://www.unh.edu/campusjournal/2014/04/student-project-makes-use-nitrogen-rich-urine
http://www.unh.edu/unhtoday/2014/06/reduce-reuse-peeycle

UNH Updates Coastal Flood Hazard Maps for NH Communities

As part of the FEMA (Federal Emergency Management Agency) nationwide program to update coastal flood hazard maps, coastal New Hampshire communities in Strafford and Rockingham counties have received updated preliminary flood hazard maps created with data from UNH. The maps are the result of a long-term study led by the N.H. Geographically Referenced Analysis and Information Transfer System (GRANIT). The new maps use the latest state-of-the-art technologies to inform citizens about flooding risks in their local communities. Fay Rubin, GRANIT director and project director in the Earth Systems Research Center in the UNH Institute for the Study of Earth, Oceans, and Space, said: “We now have topographical data that provide for a very accurate representation of the landscape.” NH GRANIT is a collaborative effort between UNH and the NH Office of Energy and Planning to create, maintain, and make available a statewide geographic database serving the information needs of state, regional, and local decision-makers.

http://www.unh.edu/news/releases/2014/04/ds22mapping.cfm
UNH Research 2014 is produced by the Research Development and Communications unit of the UNH Research Office

Find it on the Web at http://www.unh.edu/research/UNH-Research-Digest