October, 2015

Read stories this month in these UNH research areas:

- Agriculture & Biosciences
- Business & Technology
- Engineering & Physical Sciences
- Health, Behavioral & Social Sciences
- Humanities & the Arts
- Space Science
- Sustainability & the Environment

Agriculture & Biosciences

Going to Bat for Bats – Undergraduate Research Adds to Information on Decimating Disease
Kimberly Celona ’17, a biomedical science major, spent last summer using DNA analysis to discover whether white-nose syndrome (WNS) has infected the bats inhabiting the abandoned military bunker at Odiorne Point in Rye, NH. WNS is a fungal infection that has killed nearly six million bats nationwide in nine years. Funded by a Summer Undergraduate Research Fellowship from the UNH Hamel Center for Undergraduate Research, Celona worked under the guidance of assistant professor Jeff Foster and research scientist Kevin Drees of the molecular, cellular, and biomedical sciences department. Their findings will help determine whether man-made structures are safe for overwintering by bats and possibly identify populations of bats that are genetically resistant to this devastating disease.

http://www.unh.edu/unhtoday/2015/10/going-bat-bats

NHAES Researchers Discuss Bee Health and Landscape Ecology Research at NH Pollinator Summit
At the recent New Hampshire Pollinator Summit, assistant professor of biological sciences Sandra Rehan and professor of plant biology Cathy Neal led a discussion about the bee health and landscape ecology research they are conducting with funding from the NH Agricultural Experiment Station. Their multi-year research project, “Sustainable Solutions to Problems Affecting Bee Health,” is assessing the biodiversity, floral hosts, plant-pollinator networks, and sustainability of native New Hampshire bees.

http://colsa.unh.edu/aes/nhpollinatorsummit

UNH Agriculture, Life Sciences Researchers Honored for Innovations
Several current and former faculty members and graduate students from the College of Life Sciences and Agriculture were honored for their intellectual contributions to the University this past year at the 2015 Innovators Dinner, hosted by UNHInnovation. Research products include naturally decaffeinated plants to be used for decaffeinated teas, a new method of detecting a bacterium that has been infecting New England oyster beds, and new pumpkin hybrid and squash inbred seeds.

http://colsa.unh.edu/aes/2015colsainnovations
UNH Organic Dairy Research Farm Highlighted at Nov. 4 Event
A Research Field Day hosted by the NH Agricultural Experiment Station at UNH on November 4th gave the public an opportunity to learn about the research being conducted at the UNH Organic Dairy Research Farm. The farm is managed as an integrated agro-ecosystem that includes biological, physical, and human-related components. The farm’s 300 acres include woodlands, crop and forage production land, and pastures, offering research and education opportunities across many disciplines.

http://colsa.unh.edu/aes/2015odrfresearchfieldday

UNH Research: Granite Staters Will Pay More for Local Produce
After meeting with New Hampshire farmers and surveying 200 consumers, John Halstead, professor of environmental and resource economics, and his research team have found that Granite Staters are willing to pay more for locally grown fruits and vegetables. Reasons cited include concern for healthy eating and quality of produce, and to support local farms. The results of their research, funded by the NH Agricultural Experiment Station at UNH, will be published in the journal *Agroecology and Sustainable Food Systems* and will provide NH farmers with information to help them determine what products will be profitable to produce.

http://colsa.unh.edu/aes/localproduce

UNH to Conduct Market Feasibility Study for Kiwiberries
Iago Hale, assistant professor, specialty crop improvement, and Seth Wilner, UNH Cooperative Extension field specialist, food and agriculture, will conduct a market feasibility study on the viability of cold-hardy kiwifruit, or kiwiberries, as a high-value crop that could spur economic development for small farms in northern New Hampshire. Results of their survey of consumers and producers, funded by a USDA Rural Business Development grant, will be used to develop a business plan to inform potential kiwiberry production in the region and to set cultivar and production system performance goals for the NH Agricultural Experiment Station breeding program so that it may best support growers investing in this innovative crop.

http://colsa.unh.edu/aes/kiwiberryfeasibilitystudy

Business & Technology

Federal Grant Awarded to UNH to Improve National Disability Employment Data
Over the next five years, the Institute on Disability at UNH (IOD) will work on 11 research projects and 12 knowledge translation projects to get a clearer picture of employment for people with disabilities, monitor their circumstances and progress, determine the effectiveness of policies and programs, and more. The project, led by Andrew Houtenville, research director of the IOD, is a renewal of the grant titled the Employment Policy & Measurement Rehabilitation Research and Training Center (EPM-RRTC), funded by the National Institute on Disability, Independent Living, and Rehabilitation Research, U.S. Department of Health & Human Services.

Lina Lee, Professor of Spanish; Languages, Literature, and Culture – Italy 2015
In an effort to expand online intercultural exchange practices and research, Lina Lee, professor of Spanish, travelled to Padova, Italy to the European Association for Computer Assisted Language Learning (EUROCALL) annual conference in August. She delivered a paper and chaired a panel on the evaluation of computer-assisted language learning research. While there, Lee and her long-time collaborator, Professor Robert O’Dowd, University of Leon, met to begin the development of an online platform that would allow UNH students and teachers to use instructional modules and training videos to enhance cross-cultural exchange. Such a program could eventually allow language instructors at all levels (K-12, community college, and university) to find different classes to serve as cultural partners with which to share and exchange ideas.


Middle Schoolers Blend Art and Science in STEM Discovery Lab
The UNH STEM Discovery Lab is sparking the interest of 27 Manchester middle schoolers in STEM (science, technology, engineering, and math) through 10 Design Make Code classes. UNH Manchester computer information systems students are working with middle school teachers as instructors for Design Make Code, challenging the students to design and create their own art machines out of recycled materials, littleBits, and Engino Simple Machine parts.

http://manchester.unh.edu/blog/unh-stem-discovery-lab/middle-schoolers-blend-art-and-science-stem-discovery-lab

nTIDE Jobs Report: Employment for Americans with Disabilities Slips for the First Time in 2015
At the start of October, the National Trends in Disability Employment – Monthly Update (nTIDE), issued by Kessler Foundation and the Institute on Disability at UNH, showed a decline in the employment of Americans with disabilities for the first time in 11 months. In September 2015, among workers ages 16-64, the 4,238,000 workers with disabilities represented 3.0 percent of the total 140,491,000 workers in the U.S.

Teachers Become the Students at Day-Long STEM Workshop
The UNH STEM Discovery Lab and the Computer Science Teacher Association NH provided STEM (science, technology, engineering, and math) teachers from high schools across the state with a free professional development workshop on October 16th. Through hands-on learning activities, attendees learned how to introduce computational thinking practices into their classrooms, as well as how to implement the Mobile Computer Science Principles, a project-based course that teaches programming and computer science by having students create mobile applications. The workshop was sponsored by the Google Computer Science for High School grant program.

http://manchester.unh.edu/blog/unh-stem-discovery-lab/teachers-become-students-day-long-stem-workshop

In partnership with the Carsey School of Public Policy at UNH, the Global Impact Investing Network published the results of a study of the U.S. Community Investing field, which seeks to deliver social benefits to low-income or marginalized communities through investments while also generating a financial return. The report makes two priority recommendations for scaling the field’s potential: the implementation of broad-based marketing efforts to better engage investors, and the development of efficient products and platforms to seamlessly enable capital flows from investors to investees. Michael Swack, coauthor of the report and faculty director of the Center on Social Innovation and Finance at the Carsey School, hopes to see more coordinated efforts in developing investment products that meet the needs of investors and help serve these communities.

http://campaign.r20.constantcontact.com/render?ca=64860bdf-b233-4904-bc12-c69f46d6eadd&c=10e4c220-45a3-11e3-b9d6-d4ae5292c40b&ch=12810d00-45a3-11e3-ba92-d4ae5292c40b

UNH Hosts Aerospace and Defense Technology Day to Promote Industry Collaboration and Innovation
In recent years, New Hampshire has built a substantial aerospace and defense (A&D) industry which has become an important component of the state economy. To promote the development of this business sector, UNH hosted an Aerospace and Defense Technology Day on November 4th that provided companies in the industry with direct access to UNH researchers. Hosted by UNHInnovation in partnership with the New England Council, the NH High Tech Council, the Seacoast Aerospace Alliance, and the NH Aerospace & Defense Export Consortium, A&D Technology Day provided companies and researchers with the opportunity to come together to learn and collaborate, and allowed UNH to showcase its expertise and innovation in A&D research and development.

http://www.unh.edu/news/releases/2015/10/em08aerospace.cfm

UNH-IOL Publishes Open Compute List
The UNH InterOperability Laboratory (UNH-IOL) has released the first Open Networking Integrator’s List public directory of independently validated, interoperable combinations of networking products based on Open Compute Specifications. The devices, which were tested for interoperability and conformance at the UNH-IOL’s most recent Open Networking Plugfest, include network operating system software, 10G and 40G switches, optical modules, active optical cables, and direct attached copper cables. These test-approved products help build confidence in open networking components, drive expanded choices, reduce costs, and enable rapid innovation in the networking arena.

https://www.iol.unh.edu/news/2015/10/15/unh-iol-publishes-open-compute-list
Engineering & Physical Sciences

A Festival of STEM – UNH Engineers Bring Experiments, Activities to New Hampshire’s North Country

More than 200 elementary and middle school students and their teachers, from ten different schools across the state, gathered in Berlin, NH in September for the first North Country STEMfest, hosted by faculty and students from UNH’s College of Engineering and Physical Sciences. The event featured activities such as video game engineering, wind turbine design and construction, and robotic transportation systems that were designed to inspire and engage young students in the STEM fields. STEMfest, which generated excitement among the students and their teachers, is part of the initiative launched by NH Governor Maggie Hassan to boost overall STEM education and involvement in the state.

http://www.unh.edu/unhtoday/2015/10/festival-stem

Airbus Americas Donates Aircraft Part to UNH for Wind Tunnel Research

The UNH Flow Physics Facility, the world’s largest scientific quality boundary-layer wind tunnel facility, has been given an A320 elevator, a section of an aircraft wing, by Airbus Americas to use in aircraft aerodynamics research and education. Barry Eccleston, president of Airbus Americas, views the donation as an investment in the future of the aerospace industry in New Hampshire. Joe Klewicki, professor of mechanical engineering, said that the wing section will be used for demonstrations at first, and its use will be incorporated into future experiments.

http://www.unh.edu/news/releases/2015/10/em29airbus.cfm

Sean Tavares Co-authors Study of Screw Compressor Discharge Silencer

Sean Tavares, assistant professor in the Mechanical Engineering Technology program at UNH Manchester, recently co-authored a paper reporting the design and performance testing of a new discharge silencer for screw compressor units in crude oil/gas gathering stations that would significantly limit the discharge flow pulsations and vibrations in downstream piping. When the currently existing silencer was used, the discharge flow still created high amplitude pulsations which created strong vibrations in downstream piping. According to Tavares and his collaborators, researchers at the Southwest Research Institute with the Kuwait Oil Company, the new, innovative silencer greatly reduced the pulsations so that the vibrations were kept within allowable limits.

http://manchester.unh.edu/blog/about-our-faculty/sean-tavares-co-authors-study-screw-compressor-discharge-silencer

Health, Behavioral & Social Sciences

CACL’s Sue Fox Traveled to South Korea and Japan as Part of the AAIDD Delegation

Susan Fox, Associate Director of the Institute on Disability and Director of the Center on Aging and Community Living at UNH, travelled to South Korea and Japan in September with a delegation of service providers, professionals, teachers, and researchers from the American Association on Intellectual and Developmental Disabilities. Their goal was to research the current resources provided for people with intellectual and developmental disabilities in Japan and South
Korea. The delegation met with leading disability professionals, academic researchers, families, and self-advocates in both countries and participated in a day-long symposium at Ewha Womans University in Seoul, South Korea.

http://www.iod.unh.edu/about/news/15/Institute_on_Disability_Receives_Grant_to_Research_Food_Security_and_Disability.aspx

Craft – In This Year’s Lindberg Lecture, Historian Jeff Bolster Tells the Tale of How He Became a Seaman and a Scholar

Jeff Bolster, professor of history, believes there is a strong connection between a master of ships and a master of history: both require astute attention to small details as well as an understanding of the larger picture. As the 2015 recipient of the Lindberg Award, Bolster described his personal journey from professional seaman to professor of history, and also discussed his latest work *The Mortal Sea: Fishing the Atlantic in the Age of Sail*, a look at the environmental impact that humans have had on the Atlantic Ocean. Bolster describes the book as a parable of what can happen when humans ignore the warning signs of environmental disaster. The annual Gary Lindberg Award was established in 1986 to recognize exceptional scholarship and outstanding teaching and service at UNH.

http://cola.unh.edu/thecollegeletter/2015-10/craft

Emily Larson, KIN: Exercise Science Major, Receives Awards from NEACSM

Emily Larson ’16, an exercise science major in the kinesiology department, has received two awards from the New England American College of Sports Medicine in acknowledgment of her research and overall academic excellence. Larson received the Student Investigator Undergraduate Award for her research and oral presentation of her work, titled, “Identification and Prevalence of Atrial Fibrillation ECG Markers in Collegiate Cross-Country Skiers.” She also was awarded the Robert S. Axtell Undergraduate Scholarship, which is given to the top undergraduate student in the New England region. Larson conducted her research last summer under the mentorship of Timothy Quinn, associate professor of kinesiology: exercise science.


Institute on Disability Receives Grant to Research Food Security and Disability

The Institute on Disability (IOD) at UNH will receive funding through a three-year cooperative agreement with the U.S. Department of Agriculture (USDA) Economic Research Service to examine the association of economic and health outcomes with food security for persons with disabilities over time. The project, led by Debra Brucker, senior researcher at the IOD, will use data from the National Health Interview Survey and the Medical Expenditures Panel Survey and build on another USDA-funded project Brucker is leading which examines food security among young adults with disabilities.


Institute on Disability Welcomes Delegation from the South Korea

The Center on Aging and Community Living (CACL) at UNH, a collaboration between the Institute on Disability and the Institute for Health Policy and Practice at UNH, welcomed five professionals from South Korea to UNH in October as part of a program called, “The Economic Implications of a Rapidly Aging Society.” The visit enabled the group to learn more about the CACL’s research and programs addressing the needs of older populations, which they hope to apply to the needs of the aging community in South Korea. The visit was sponsored by the International Visitor Leadership Program, the U.S. Department of State’s premier professional exchange program.

NH Citizens Health Initiative Receives Behavioral Health Integration Grant

The NH Citizens Health Initiative, a program of the Institute for Health Policy and Practice at UNH, will begin a new project in November to further the efforts to integrate behavioral health into primary care. The Behavioral Health Integration Learning Collaborative will involve health care providers and practices throughout the state, along with insurers, government, and other stakeholders, in using evidence-based, sustainable models to increase access to and improve delivery of behavioral health care by including it in the primary care system. The collaboration will help the Initiative make progress toward its goal to improve the systems that finance and provide health care by bringing together leaders throughout New Hampshire and supporting innovative efforts to improve health in line with the triple aim of “better health, better care, and lower costs” for all of the people of New Hampshire.


Professor Dain LaRoche Appointed to NH Governor’s Council on Physical Activity and Health

The New Hampshire Governor’s Council on Physical Activity and Health has appointed associate professor Dain LaRoche, Department of Kinesiology, to act as a representative of NH’s higher education community on the Council. LaRoche was selected on the basis of his research and expertise regarding the role of exercise in maintaining mobility and independence in older adults. The council promotes a healthy lifestyle for all New Hampshire residents through an emphasis on physical activity and fitness and encourages exercise participation through events like Walk New Hampshire and the 90 Day Challenge.


Professor David Finkelhor and Alumnus John "Jack" Smith Receive UNH's Most Prestigious Awards

One of the nation’s most renowned researchers of child maltreatment, bullying, abduction, dating abuse, and sexual assault, David Finkelhor, director of the UNH Crimes Against Children Research Center (CCRC), received UNH’s Charles Holmes Pettee Medal on September 25th. Finkelhor, a UNH alumnus and longtime UNH researcher and faculty member, was honored for his contributions to understanding violence and abuse in children’s lives, the development of the field of developmental victimology, and for the founding of the CCRC. Finkelhor was honored alongside John H. “Jack” Smith ’50 who received the UNH Foundation’s Hubbard Family Award for Service to Philanthropy.

http://www.unh.edu/news/releases/2015/10/jr09evening.cfm

Rural Adolescents Are More Likely Than Their Urban Peers to Abuse Prescription Painkillers

New research from the Carsey School of Public Policy at UNH suggests that prescription painkiller abuse is more common among rural than urban teens. The new study, led by Carsey collaborators Shannon M. Monnat, assistant professor at Pennsylvania State University, and Khary K. Rigg, assistant professor at the University of South Florida, drew its conclusions from data collected by the National Survey on Drug Use and Health for over 32,000 youth. The study comes at a critical time in the New England region’s battle with heroin abuse, as painkiller abuse is often seen as the pathway to heroin use. New research such as this could help government leaders and public health officials better address the problem of painkillers, with the hope of preventing future heroin use.

Credit: Carsey School of Public Policy at UNH
Survey Center Poll Results

Results of the most recent WMUR Granite State Poll were announced by Andrew Smith, professor of practice in political science and director of UNH’s Survey Center. Interviews for the poll were conducted between September 24 and October 2, 2015. The results include:

**At Start of Campaign, Candidates for NH Governor Unknown**
The potential candidates for New Hampshire Governor are widely unknown. Since current Governor Maggie Hassan has announced that she will make a bid for the U.S. Senate, the race for the Governor’s seat is wide open, with poll results only hinting at potential candidates.


**Ayotte and Hassan Deadlocked in 2016 Senate Matchup**
Senator Kelly Ayotte and Governor Maggie Hassan are currently deadlocked for the Senate seat. Governor Hassan’s bid for the U.S. Senate will be more challenging than if she had run for reelection as Governor. Both candidates are popular among New Hampshire residents.


**Granite Staters Say Drug Crisis is Most Important Problem in the State**
One quarter of New Hampshire adults believe that drug abuse, specifically heroin abuse, is the most important problem facing the state. Nearly half of those surveyed stated that they knew someone who abused heroin, and 88% of those surveyed believe that heroin abuse is a “very serious” problem. The poll results also revealed that 53% believe that the State and local governments should be spending more to try to reduce heroin abuse.


**Guinta Remains Unpopular in First District**
First District Congressman Frank Guinta’s ratings have continued to slide in the wake of campaign finance violations. After a settlement with the Federal Election Commission regarding his 2010 run for Congress, only 21% of adults have a favorable opinion of Guinta, and 50% have an unfavorable opinion.

http://cola.unh.edu/article/2015/10/survey-center-poll-results-guinta-remains-unpopular-first-district

**Trump and Sanders Supporters Differ Sharply on Key Scientific Fact**
The CNN/WMUR New Hampshire Primary Poll conducted in September by the UNH Survey Center showed that those NH voters who support either Donald Trump or Bernie Sanders for president differ sharply in their beliefs about key scientific facts, with similar contrasts occurring when comparing Trump supporters with Biden supporters. The poll also delved heavily into the issue of Hillary Clinton’s email use, noting that 39% of voters say they are less likely to vote for Clinton because of the controversy.

http://campaign.r20.constantcontact.com/render?ca=dd2b42-47a3-4b0e-b07f-a3af3710a08&c=10e4c220-45a3-11e3-b9d6-d4ae5292c40b&ch=12810d00-45a3-11e3-ba92-d4ae5292c40b

http://cola.unh.edu/article/2015/10/unh-survey-finds-trump-and-sanders-supporters-differ-key-scientific-fact
UNH Survey Center Finds NH Consumers Remain Optimistic About Future Economic Prospects
Andrew Smith, professor of practice in political science and Director of the UNH Survey Center, has announced new poll results showing that New Hampshire residents are optimistic that their household financial conditions will be better in the next year. The findings, based on the latest Business and Industry Associate Report on Consumer Confidence, also show that residents believe New Hampshire businesses will do better in the coming year, and that Granite Staters are becoming less pessimistic about the overall national economic outlook for the next 5 years.


Winner, Winner, Innovators’ Dinner – Prevention Innovations Research Center is Innovator of the Year
This year marked the fifth Innovators’ Dinner to celebrate and recognize innovation at UNH. This year’s Innovator of the Year Award was presented to the Prevention Innovations Research Center (PIRC). Founded by Jane Stapleton and Sharyn Potter, associate professor of sociology, PIRC does groundbreaking work in evidence-based practices to end sexual and relationship violence. It has gained national recognition for its collaborative sexual assault presentation strategies and for its leadership role in issues of sexual assault and violence on college campuses. The Innovators’ Dinner is hosted by UNH Innovation, a unit of the UNH Research Office that advocates for, manages, and promotes UNH’s intellectual property.

http://cola.unh.edu/article/2015/10/winner-winner-innovators%E2%80%99-dinner
http://www.unh.edu/unhtoday/2015/10/winner-winner-innovators%E2%80%99-dinner

Humanities & the Arts

Julee Holcombe, Associate Professor of Arts – Travel to China
With funding by UNH’s Center for International Education, Julee Holcombe, associate professor of art, spent two months of the summer of 2015 in the Sichuan Province of China at Chengdu University, researching fine art and teaching practices in China and collecting material for her photographic collage, “Chimerica.” She was joined by Brian Chu, professor of art, and his wife, Shiao-Ping Wang. Together they attended meetings, observed classroom teaching, gave lectures and workshops, conducted critiques, and went on teaching excursions. Their experiences helped them gain new perspectives and learn new approaches to teaching.

http://www.unh.edu/cie/julee-holcombe

Museum of Art, UNH Presents ‘Mind to Hand to Paper: Prints from the Collection’ and ‘The Artists Revealed: 2015 Studio Art Faculty Review’
The Museum of Art, UNH opened two new exhibitions in late October, featuring 20th-century prints donated in 2013 by Lawrence and Marilyn Staples, and the work of studio art faculty members Sachiko Akiyama, Michael Cardinali, Brian Chu, Grant Drumheller, Rick Fox, Julee Holcombe, Craig Hood, Jennifer Moses, Don Williams, and Leah Woods. The first exhibition features prints by leading American, European, and South American painters and sculptors; the second features faculty drawings, paintings, photographs, ceramics, and sculpture. The exhibitions run through December 13.

Music Professor Releases CD of Brazilian Art Song
Associate professor of music Jenni Cook has released a new CD, titled *Terra e Granito*, featuring Brazilian art songs with 17 selections sung in Portuguese. Cook was accompanied on piano by Lisa Raposa Millar, a freelance pianist and educator. Cook was inspired to record this CD by a former student who studied art song in Brazil with support from the UNH International Research Opportunities Program, and later, as a Fulbright Scholar.

http://cola.unh.edu/article/2015/10/music-professor-releases-cd-brazilian-art-song

New Book: Talking New Orleans Music
Burt Feintuch, professor of folklore and English and director of the UNH Center for the Humanities, has published *Talking New Orleans Music*. The book is comprised of interviews with eleven of New Orleans’ master musicians and accompanying photographs by Gary Samson. The musicians discuss their lives, the cultural contexts of their music, their experiences surrounding Hurricane Katrina, and the city they call home.


Seth Abramson: Is Stephen Colbert Bringing Poetry Back to America?
Seth Abramson, assistant professor of English and writing specialist at UNH Manchester, has published an article in the Huffington Post in which he explains Stephen Colbert’s status among American literati as a “metamodern” poet. “Metamodernism” is described as the seamless combination of opposing qualities in literature, such as sincerity and irony, high art and low art, competence and incompetence, and so on. Abramson discusses how Colbert and other modern performers and artists are starting to fit this definition.

http://manchester.unh.edu/blog/about-our-faculty/seth-abramson-stephen-colbert-bringing-poetry-back-americ

The Multiparity of Pigs
Nicole J. Ruane, lecturer of humanities in the Classics, Humanities, and Italian Studies Department, has published an article in the *Journal of Biblical Literature*, titled “Pigs, Purity, and Patrilineality: The Multiparity of Swine and Its Problems for Biblical Ritual and Gender Construction.” In the article, Ruane argues that pigs were considered impure and unfit to eat because they give birth in litters, which is not a proper reflection of human sexuality and reproduction.

http://cola.unh.edu/article/2015/10/multiparity-pigs

UNH Center for the Humanities Announces 2016-17 Faculty Fellows
The UNH Center for the Humanities has announced its 2016 faculty research fellows, who will pursue a semester of humanities research and participate in the 2016 Faculty Fellows Lecture Series. The new Faculty Fellows are: Harriet Fertik, assistant professor of classics; Nicole Fox, assistant professor of sociology; Eliga Gould, professor of history and chair of the History Department; and Subrena Smith, assistant professor of philosophy.

http://cola.unh.edu/article/2015/10/center-humanities-announces-2016-2017-faculty-fellows
Wind Symphony Releases CD Featuring Music of Professor Michael Annicchiarico

The UNH Wind Symphony, conducted by Andrew Boysen, Jr., has released a CD featuring the music of UNH music professor Michael Annicchiarico. The CD contains five pieces: “Mythologies,” “Landscapes,” “Chelmsford Common,” “…that which feeds the soul...,” and “S’aín’t Funk.” Annicchiarico has composed for film; orchestra; band; chorus and chamber ensembles; and jazz band and choir.


Space Science

Satellite with UNH Components Sheds New Light on Solar System Boundary

Seven UNH scientists were members of a team that recently published 14 papers in an Astrophysical Journal Supplement Special Issue on findings from the direct observations of NASA’s Interstellar Boundary Explorer (IBEX) mission. Scientists and engineers in the Space Science Center in UNH’s Institute for the Study of Earth, Oceans, and Space (EOS) designed and built major portions of the two ultra-high sensitivity cameras on board IBEX. Launched in 2008, IBEX has now consolidated and refined the physical conditions of the material that surrounds our solar system – the interstellar medium – and has opened a new and unique view of the interface just outside our solar system’s boundary. This is important because this is the region where the giant bubble emanating from the sun – the heliosphere – begins to protect our solar system from the hazards of interstellar space, particularly high-energy cosmic radiation.

http://www.unh.edu/news/releases/2015/10/ds20space.cfm

UNH-Led Study Solves Mysteries of Voyager 1’s Journey into Interstellar Space

Astrophysicist Nathan Schwadron of the UNH Institute for the Study of Earth, Oceans, and Space is the lead author on a paper reporting findings made by UNH scientists that answer the mysterious question raised during NASA’s Voyager 1 space mission, the first probe sent to enter interstellar space. Voyager 1, which is still journeying through space, observed a magnetic field that appeared inconsistent with previous spacecraft observations. Using triangulation of four different datasets gathered by other spacecraft, Schwadron and his team determined that the initial direction of the magnetic field observed by Voyager 1 was deflected by the edge of the heliosphere – the immense magnetic bubble containing our solar system, solar wind, and the entire solar magnetic field – and thus the spacecraft’s journey into interstellar space will take longer than expected.

http://www.unh.edu/news/releases/2015/10/ds29voyager.cfm
A Volunteer, a Smartphone & a Mission: How Citizens are Transforming Scientific Research

Anyone with a passion for science can now participate in research thanks to the increasing prevalence of citizen science programs across the country. In this interview, Malin Clyde, a UNH Cooperative Extension natural resources specialist in community volunteer development, discusses the future of citizen science and her work as project manager of The Stewardship Network: New England, which has promoted over 50 citizen science volunteer opportunities.


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