UNH Research 2013
A digest of the year's research news from the University of New Hampshire

Agriculture & Biological Sciences
Business & Technology
Engineering & Physical Sciences
Health, Behavioral & Social Sciences
Humanities & the Arts
Marine & Ocean Sciences
Space Science
Sustainability & the Environment

This report 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.
Business & Technology

2013 High School Summer Internship Program
http://www.unh.edu/research/sites/unh.edu.research/files/docs/RES AREAS/Digest_13/B%26T_%20IOL_High_School_Summer _Internship_Program.pdf

During the summer of 2013, high school interns at the UNH InterOperability Laboratory worked together to create the UNH-IOL mobile website. UNH alumni from Coder Den provided invaluable expertise as project mentors for the interns. Other program sponsors whose donations made the internship program possible were Enterasys, CATechnologies, Liberty Mutual Insurance, and QA Cafe.

2013 NSF Graduate Research Fellowship Program (GRFP)
http://www.unh.edu/research/sites/unh.edu.research/files/docs/RES AREAS/Digest_13/B%26T_IOL_2013_NSFGRFP.pdf

Patrick MacArthur of the UNH InterOperability Laboratory has received a prestigious National Science Foundation Graduate Research Fellowship. The award will provide him with support to pursue a Ph.D. in computer science. Patrick plans to continue his research on high performance networks, studying the use of RDMA to transfer large amounts of data between geographically distributed sites with the goal of making the transfers much more efficient.

AIRMAR Awarded Technology Innovation Grant to Develop a Portable Lightning Sensor
http://www.unh.edu/news/releases/2013/aug/gs21nhirc.cfm

AIRMAR Technology Corporation, a Milford-based manufacturer of electronic sensors, is collaborating with Plymouth State University professor of meteorology James Koermer to prove the viability and effectiveness of a portable lightning sensor that would accurately detect and measure the lightning type, direction, and range of an atmospheric lightning event. The collaboration is made possible by a Granite State Technology Innovation Grant from the NH Innovation Research Center (NHIRC). The NHIRC, based at UNH and administered by UNH Innovation, was created in 1991 by the New Hampshire Legislature to support innovations through industry and university collaborations, thereby increasing the number of quality jobs in the state.

An Increase in the Minimum Wage Won’t Benefit Everyone Equally, New Research from UNH’s Carsey Institute Finds
http://unh.edu/news/releases/2013/jun/em18carsey.cfm
http://www.unh.edu/campusjournal/2013/06/increase-minimum-wage-won%E2%80%99t-benefit-everyone-equally-new-research

Jessica Carson, vulnerable families researcher at the Carsey Institute at UNH, found that the proposed minimum wage increase would not benefit everyone equally. Her research suggested that the increase would disproportionately benefit hourly workers who are young, less educated, nonwhite, female, and never married.
Attention, Capital-Hungry Entrepreneurs: New UNH Research Can Help ‘Show You the Money’
http://www.unh.edu/news/releases/2013/jun/lw12money.cfm

Researchers in the UNH Peter T. Paul College of Business and Economics have found that entrepreneurs who avoid changes in their workforce and revenues are more likely to obtain funding. They also found that certain types of companies can improve their creditworthiness by securing diverse sources of financing. Members of the research team included Devkamal Dutta, assistant professor of strategic management and entrepreneurship; Jeffrey Sohl, professor of entrepreneurship and director of the UNH Center for Venture Research; and Tevfik Aktekin, assistant professor of decision sciences.

Carsey Institute: Part-Time Workers Still Struggling to Find Full-Time Work
http://www.unh.edu/news/releases/2013/jul/lw23carsey.cfm

Rebecca Glauber, assistant professor of sociology and faculty fellow in the Carsey Institute at UNH, found that American workers in involuntary part-time positions are still struggling to find full-time work in the aftermath of the recent recession. They also are more likely than full-time employees to be living in poverty. In addition, Glauber found that while the overall rate of unemployment has decreased since 2010, the number of individuals in involuntary part-time positions has remained constant.

ECOCat Vehicle Selection Calculator Released
http://www.unh.edu/campusjournal/2013/05/ecocat-vehicle-selection-calculator-released

In 2013, the 300-plus transit and non-transit vehicles on UNH’s campus traveled a total of 1.6 million miles, cost more than $624,000 in fuel expenses, and emitted 1,500 tons of carbon dioxide. The ECOCat Vehicle Selection Calculator, which compares vehicle price, miles per gallon, greenhouse gas emissions, and environmental costs for a vehicle’s full life cycle, will help UNH departments and offices choose fiscally and environmentally wise vehicles when replacing the ones now in use.

Entitlement-Minded Workers More Likely to Claim Bosses Mistreat Them, New UNH Research Shows
http://www.unh.edu/campusjournal/2013/09/entitlement-minded-workers-more-likely-claim-bosses-mistreat-them-new-unh-research-shows

Paul Harvey, associate professor of organizational behavior at UNH, collaborated with researchers from across the country and Australia to find that workers with a high sense of entitlement are more likely to make claims of mistreatment from their bosses than employees with a lesser sense of entitlement. Harvey explained that workers with a higher sense of entitlement have an unjustified positive self-perception, are less willing to accept criticism, and believe they are more deserving of praise and rewards than their peers.
From Islamic Banking in Egypt to SME Development and Microfinance in Jordan
http://www.unh.edu/cie/newsletter/2013/fall/perea.html

With the support of a grant from the International Research Opportunity Program, economics and political science major Austin Perea ’13 went to Egypt and Jordan to learn about Islamic banking and microfinance. Although his trip was cut short due to the volatile political climate in Egypt, the experience fueled Perea’s passion to continue studying Arabic and business. He hopes to visit the Middle East again.

Innovation Award Used for Clinical Evaluation of Pump Prototype for Cardiopulmonary Bypass

Design Mentor, Inc., a Pelham-based developer of medical devices for Fortune 100 Med-Tech companies, has collaborated with Dartmouth College to test their patented pulsatile pressure cardiac pump, VentriFlo™. Unlike the existing continuous flow pumping processes, the VentriFlo mimics the physiological flow of blood from the human heart. A Granite State Technology Innovation Grant from the NH Innovation Research Center (NHIRC) is supporting the collaboration. The NHIRC, based at UNH and administered by UNH Innovation, was created in 1991 by the New Hampshire Legislature to support innovations through industry and university collaborations, thereby increasing the number of quality jobs in the state.

Innovation Award Yields New Materials for Efficient and Cost-Effective Solar Energy Panels

Conductive Compounds Inc. (CCI), a manufacturer of specialty conductive inks, completed a two-year project in collaboration with Dale Barkey, chemical engineering professor at UNH. The project focused on the development of stable, cost effective metal particles that can create more conductive solar energy panels and increase efficiency in other print applications. The project, which provided four UNH engineering students with a real-world research experience, was funded by a NH Innovation Research Center (NHIRC) Innovation Grant matched by Conductive Compounds and federal National Science Foundation EPSCoR funds.

Institute of Museum and Library Services Grant Will Help Build PLACE
http://www.unh.edu/campusjournal/2013/11/institute-museum-and-library-services-grant-will-help-build-place

The UNH Library partnered with the Earth Systems Research Center of UNH’s Institute for the Study of Earth, Oceans, and Space to secure a grant of $474,156 from the Institute for Museum and Library Services. The funds will be used to build PLACE, a position-based location archive coordinate explorer. PLACE is a geospatial search interface that will enable the general public to have easier access to information that is difficult to locate with text-based searching. The PLACE project represents the next step in the UNH Library’s long-standing goal of providing maps, atlases, air photos, and guidebooks online while collaborating with new partners and contributing the resulting work to the library community.
International Delegations Learn About UNH’s Green Launching Pad

Two delegations of visitors, one from Japan and another from Israel and the Palestinian Territories, traveled to UNH to learn about the Green Launching Pad and New Hampshire’s green innovation efforts. The Green Launching Pad is a partnership between UNH and the New Hampshire Office of Energy and Planning to create energy-related jobs in the state. It focuses on connecting entrepreneurs and private industry with faculty, students, and state-level resources to start and increase the growth of new, green businesses in New Hampshire.

Making Connections With the InterOperability Lab - 25 Years of Technological Testing and Training Future Generations of Engineers

In October of 2013, the UNH InterOperability Laboratory (UNH-IOL) celebrated 25 years as a leading independent test site for new technologies and a unique training ground for future engineers. The celebration included interactive demonstrations, tours, and networking with industry leaders, UNH-IOL alumni, and current students. Unique in its dual mission, the UNH-IOL provides independent, neutral, confidential testing of new technology for interoperability for hundreds of member companies while giving more than 100 undergraduate and graduate students each year hands-on experience with developing technologies.

Neighboring States Seek Geospatial Smarts

Increasingly, Shane Bradt, UNH Cooperative Extension state specialist in geospatial technologies, has been sought out by organizations in neighboring states that need training in his area of expertise. In 2013, Bradt trained professionals at Vermont’s Center for Geographic Information, taught GIS 101 to Massachusetts-based conservation professionals at an event sponsored by the New England chapter of URISA (a professional association for those in the GIS field), and presented at a New England URISA event for New Hampshire and Vermont-based GIS professionals held at Dartmouth College in the spring. The U.S. Department of Labor’s Employment and Training Administration lists geospatial technology as a “high growth industry” and says that “training in geospatial applications...is essential to developing the necessary pipeline of skilled workers.”
‘New Hampshire Inspires Innovation’ Hosts Workshop for Science & Tech Companies to Learn About Federal Funding
http://www.unh.edu/news/releases/2013/feb/lw28sbdc.cfm

New Hampshire Inspires Innovation offered a “Small Business Innovation Research National Science Foundation Proposal Workshop” for new science and technology companies that would benefit from additional information about the federal Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs. New Hampshire Inspires Innovation is a collaboration between UNH Innovation and the NH Small Business Development Center, which is based in the Peter T. Paul College of Business and Economics. NH Inspires Innovation provides grant information and advice to New Hampshire companies and increases opportunities for the growth of federally- and state-funded research partnerships.

New Tech Center Offers Cutting-Edge Opportunities
http://manchester.unh.edu/blog/campus-news/new-tech-center-offers-cutting-edge-opportunities
http://www.unh.edu/unhtoday/2013/03/new-tech-center-offers-cutting-edge-opportunities

The Emerging Technology Center (ETC) at UNH Manchester is a cutting-edge resource for businesses and academics to collaborate together on technology projects. It connects students and businesses, offering students the chance to work on real world projects that will benefit the Manchester community. The ETC, located in the newly renovated Pandora Mill, will support advancement in education and technology with the help of a three-year, $125,000 commitment from Manchester-based Dyn and its philanthropic entity, DynCares. Dyn is the worldwide leader in Internet performance solutions, specializing in traffic management, message management, and performance assurance.

Paul Bencal to Lead UNH’s Emerging Technology Center
http://manchester.unh.edu/blog/campus-news/paul-bencal-lead-unh-s-emerging-technology-center

In February 2013, Paul Bencal became the Director of the Emerging Technology Center at UNH Manchester. Bencal believes the Center is in a unique position to respond to the current industry trend of increased outsourcing by offering advanced student skills in software development and other areas of technology while also creating an innovative model for higher education. Bencal comes to the position with a varied background of experience in industry, teaching, and community service.

Paul College Launches Innovation Lab for Rapid Prototyping of New Products
http://www.unh.edu/news/releases/2013/10/lw23innovationlab.cfm#ixzz2pv7TYea4
http://www.unh.edu/campusjournal/2013/10/paul-college-launches-innovation-lab-rapid-prototyping-new-products

In the fall of 2013, UNH’s Peter T. Paul College of Business and Economics launched the Innovation Lab. The lab will enable students to rapidly prototype new products with a 3D printer and 3D image scanning system. Venky Venkatachalam, professor of information systems and associate dean of academic programs at Paul College, said, “The new Innovation Lab gives students a complete experience, starting from a concept and translating that creative idea into a product prototype.” Support for the Lab has been provided by Borealis Ventures, New Hampshire’s largest venture capital firm, and Unitil, a public utility holding company with operations in Maine, New Hampshire, and Massachusetts.
Paul College Professor Helps Out IMF's Fiscal Affairs Department

The International Monetary Fund (IMF) has appointed John Hasseldine, associate professor of accounting and finance at the UNH Peter T. Paul College of Business and Economics, as an external fiscal expert. Hasseldine has assisted with the IMF’s work on developing a model and estimating the tax gap for the Value Added Tax (VAT) for member countries.

Rural Workers More Likely to Work at Middle-Skill Jobs

Research by Justin Young, a doctoral student in sociology and a research assistant in the Carsey Institute at UNH, showed that rural workers are more likely than their urban counterparts to work at middle-skill jobs that do not require a four-year college degree. Middle-skill jobs are positions requiring at least some on-the-job training, an apprenticeship, or post-secondary education that requires no more than a two-year degree.

Scientists Develop New Use for Sonar Technology During Deepwater Horizon Spill

In a special edition of the journal *Proceedings of the National Academies of Science* about the 2010 Deep Water Horizon oil spill, an article co-authored by UNH researchers Larry Mayer and Tom Weber describes the various approaches of safely shutting the Macondo Well. Working with U.S. Geological Service staff and other researchers, Mayer and Weber – director and assistant professor, respectively, in UNH’s Center for Coastal and Ocean Mapping – confirmed that the sonar technology they developed for sea floor mapping can detect seeps of gas in the water column. They also found that the well was not leaking after it had been capped.
Shane Bradt Named To Boards of Two Organizations
http://extension.unh.edu/articles/Shane-Bradt-Named-Boards-Two-Organizations

Shane Bradt, UNH Cooperative Extension geospatial technologies specialist, was named to the New Hampshire Lakes Management Advisory Committee (LMAC) and the board of the Northeast Arc Users Group (NEARC). New Hampshire Governor Maggie Hassan nominated Bradt and the Governor’s Executive Council recently confirmed his appointment to the LMAC, which advises the New Hampshire Department of Environmental Services on how to carry out the Lakes Management and Protection program. The NEARC is an organization dedicated to helping users of Esri GIS software become more successful.

Social Business Innovation Challenge Winners Announced
http://www.unh.edu/news/releases/2013/sep/lw30yunus.cfm#ixzz2pv538R2T
http://www.unh.edu/campusjournal/2013/10/social-business-innovation-challenge-winners-announced

The UNH student team “PLAN: The Post-Landfill Action Network” won the first New Hampshire statewide Social Business Innovation Challenge. The students proposed to reduce the amount of reusable items that end up in landfills. Muhammad Yunus, Nobel Laureate and pioneer of the microfinance industry, presented the team with its award and gave the keynote address at the statewide New Hampshire Social Business and Microfinance Forum. The events were hosted by UNH and organized by the Peter T. Paul College of Business and Economics, the Carsey Institute at UNH, and the New Hampshire Community Loan Fund.

Student Project Tracks Building Efficiency with Twitter
http://www.unh.edu/news/releases/2013/apr/bp02twitter.cfm

A student project, “Tweeting (Dis)comfort,” is engaging students to use Twitter to tweet about classrooms and buildings that they find uncomfortably hot or cold. Civil engineering student Alex Wells ’14 is tracking the tweets throughout the fall and spring semesters to find patterns within buildings and will then present the results to the UNH energy office. Matt O’Keefe, campus energy manager, says, “The findings will most likely tell us that a system has failed...the hope is that the information will support the need for repair to areas that repeatedly cause discomfort.”

Sustainable Growth Takes Hold in U.S. Angel Investor Market, UNH Center for Venture Research Finds
http://www.unh.edu/news/releases/2013/10/lw16angel.cfm#ixzz2pv6jKIXG
http://www.unh.edu/campusjournal/2013/10/sustainable-growth-takes-hold-us-angel-investor-market-center-venture-research-finds

New data from the UNH Center for Venture Research shows sustainable growth during the first two quarters of 2013, with a 5.2 percent investment increase compared to the same period in 2012. Angel investments created 111,500 new jobs in the United States during the first half of 2013 and continue to be a significant contributor to job growth.
Tablet Computer Stand from UNH “MacGyver” Gets University’s First Design Patent

http://www.unh.edu/news/releases/2013/may/bp22tablet.cfm
http://www.unh.edu/unhtoday/2013/05/tablet-computer-stand-earns-university%E2%80%99s-first-design-patent
http://www.unh.edu/campusjournal/2013/05/tablet-computer-stand-unh-%E2%80%9Cmacgyver%E2%80%9D-gets-university%E2%80%99s-first-design-patent

Theresa Willkomm, assistant professor of occupational therapy and director of ATinNH, a statewide assistive technology program housed at UNH’s Institute on Disability, has designed a portable stand with a unique feature: a flexible center stand and swivel mounting plate which allows iPads® and other tablets to be positioned at any height, angle, or distance from a user’s face. The AT Pad Stand is highly portable, unsnapping into two lightweight pieces, and demonstrates particular promise for using the iPad®’s high-quality camera at any angle, as well as for holding a book, a hairdryer, or other item for people with a range of disabilities. The AT Pad Stand received UNH’s first-ever design patent from the U.S. Patent and Trademark Office.

Credit: UNH Innovation

Taking Care of Business at UNH’s Emerging Technology Center

http://manchester.unh.edu/blog/campus-news/taking-care-business-unh-s-emerging-technology-center

The new Emerging Technology Center (ETC) at UNH Manchester is a launching pad for college students and a resource for start-ups, small businesses, and established firms that need new talent. The ETC, which is located in the 163-year-old Pandora Mill, provides students with an opportunity to gain real-world experience in the technology industry while also helping the surrounding business community.

Credit: Emerging Technology Center at UNH Manchester

UNH Celebrates First-in-the-State Supercomputing Capabilities – Trillian is 1,000 Times More Powerful Than a Desktop Computer

http://www.unh.edu/unhtoday/trillian
http://www.unh.edu/news/releases/2013/10/ds29computer.cfm

A new supercomputer, dubbed “Trillian,” will enhance the already cutting-edge physics research at UNH’s Institute for the Study of Earth, Oceans, and Space. A $534,977 grant from the Major Research Instrumentation (MRI) Program of the National Science Foundation supported the acquisition of Trillian and the related infrastructure improvements needed to house and maintain it for optimum performance. The Cray XE6m supercomputer will be at least 15 times faster and more powerful than the computer cluster it replaces. According to Joachim “Jimmy” Raeder, astrophysicist and a lead UNH scientist on the grant, having a supercomputer on campus allows for quick data processing and efficient data storage, and it provides graduate students and post-doctoral researchers with valuable hands-on experience.
UNH Celebrates Innovation; Recognizes Commercialization Success of Operation Hat Trick
http://www.unh.edu/news/releases/2013/10/em16orpc.cfm#ixzz2pv65znyo
http://www.unh.edu/campusjournal/2013/10/unh-celebrates-innovation-recognizes-operation-hat-trick

Senior associate athletic director for external affairs Dot Sheehan was awarded UNH’s Innovator of the Year Award in 2013 for her efforts in founding and growing Operation Hat Trick, a program started at UNH to memorialize Nate Hardy and Mike Koch, two U.S. Navy SEALs killed in Iraq in 2008. When Sheehan heard in a radio broadcast that what soldiers suffering from head wounds wanted most when they came back to the U.S. was a head covering, she set out to provide collegiate caps to these soldiers. Operation Hat Trick is now a nonprofit company that has resulted in licenses with universities around the country, minor league baseball teams, and the Boston Bruins.

UNH Celebrates Manchester’s Emerging Technology Center and FIRST® Robotics
http://manchester.unh.edu/blog/campus-news/unh-celebrates-manchester-s-emerging-technology-center-and-first-robotics

In March, UNH celebrated the opening of the Emerging Technology Center at UNH Manchester, one of UNH’s strategic efforts to address the need for more STEM (Science, Technology, Engineering, and Mathematics) graduates to meet the region’s workforce needs. The event also recognized the work of the New Hampshire-based FIRST® Robotics and the support the University has received from the organization’s founder, Dean Kamen. FIRST is an acronym for “For Inspiration and Recognition of Science and Technology,” which encapsulates the organization’s mission: “To show students of every age that science, technology, and problem-solving are not only fun and rewarding, but are proven paths to successful careers and a bright future for us all.”

UNH Center for Venture Research: Moderate Recovery Continues in 2012 for U.S. Angel Investor Market
http://www.unh.edu/news/releases/2013/apr/lw25cvr.cfm
http://www.unh.edu/campusjournal/2013/04/unh-center-venture-research-moderate-recovery-continues-2012-us-angel-investor-market

According to the 2012 Angel Market Analysis released by UNH’s Center for Venture Research, 2012’s angel investor market continued the upward trend in investment dollars and number of investments that started in 2010, albeit at a moderate pace. “The small increase in both total dollars and the number of investments resulted in a deal size for 2012 that was virtually unchanged from 2011. These data indicate that while fewer angels were active investors in 2012, those who did invest have increased their individual investments substantially in 2012,” according to Jeffrey Sohl, director of the Center, which is based in the Peter T. Paul College of Business and Economics.

UNH Economists Submit U.S. Supreme Court Brief Opposing Internet Sales Tax Effort
http://www.unh.edu/news/releases/2013/10/lw22salestax.cfm#ixzz2pv74334
http://www.unh.edu/campusjournal/2013/10/unh-economists-submit-sales-tax-brief-us-supreme-court

Neil Niman and Richard England, two UNH economists, submitted an amicus brief to the U.S. Supreme Court which supports the efforts of Amazon.com and Overstock.com to block a New York state Internet sales tax effort. The economists believe the New York sales tax effort will dampen innovation and diminish competition and overall growth.
UNH Hosts Debt Crisis Conference in Washington, D.C.
http://www.unh.edu/news/releases/2013/11/em27law.cfm#ixzz2pvGWjEmx
http://www.unh.edu/unhtoday/2013/12/unh-hosted-national-conference-nation%E2%80%99s-debt

In December 2013, UNH hosted a conference on Capitol Hill to bring attention to the importance of slowing the growth of the nation’s debt. The conference featured Washington experts, including Congressional Budget Office Director Douglas Elmendorf and former Senate Budget Committee Chairman Kent Conrad. It was organized by UNH School of Law’s Warren B. Rudman Center for Justice, Leadership, and Public Policy and UNH’s Peter T. Paul College of Business and Economics, in partnership with The Concord Coalition, The Center for Public Integrity, and Fix the Debt. UNH Law Dean John Broderick said the conference was a “wonderful opportunity to showcase our joint capacity to convene a national forum on a topic of substantive consequence to the American people.”

UNH Hosts Statewide Social Business and Microfinance Forum; Innovation Challenge

In September 2013, UNH welcomed Nobel Laureate and pioneer of the microfinance industry Muhammad Yunus as the keynote speaker for the New Hampshire Social Business and Microfinance Forum and the first Social Business Innovation Challenge. The Challenge asked college students, community members, and social entrepreneurs from across the state to discover innovative and business savvy solutions to pressing social and environmental issues at the state, national, and global level.

UNH Launches New Organization to Accelerate Commercialization
http://www.unh.edu/news/releases/2013/10/em29innovation.cfm

UNH has created UNH Innovation to serve as “the front door to the University for our partners in the business community,” said Jan Nisbet, senior vice provost for research at UNH. “This creates a clear path into the University if you’re interested in our technology, our equipment, and our expertise.” UNH Innovation comprises licensing (what was once the University’s Office for Research Partnerships and Commercialization); services (such as the InterOperability Lab, and equipment and facilities rentals); and ventures and economic development. UNH Innovation plans to create a mentorship program and increased opportunities for students to work directly with businesses.

UNH Law Student Wins Holloway Prize Competition for Brain Aneurysm Clip
http://www.unh.edu/news/releases/2013/may/lw09holloway.cfm

Craig Litherland, a UNH School of Law student with a biomedical engineering background, won the 2013 UNH Paul J. Holloway Prize Innovation-to-Market competition for his zero artifact aneurysm clip, CranioVation. This clip will greatly reduce the cost of treating brain aneurysms and save lives. Hosted by the Peter T. Paul College of Business and Economics, the competition is the oldest business plan competition in New Hampshire and one of the first in the nation.
UNH Lodging Executive Sentiment Index (LESI)
Produced by the Department of Hospitality Management in the Peter T. Paul College of Business and Economics, the LESI is a tool to assist lodging executives in predicting the economic future. The LESI is expected to give lodging managers an early glimpse of the direction of the overall lodging industry beyond their own properties and markets, thereby helping them in operational and planning decisions.

December 2012  UNH Lodging Index Ticks Up
http://www.unh.edu/news/releases/2013/jan/lw24lesi.cfm

January 2013  UNH Lodging Index Continues to Climb
http://www.unh.edu/news/releases/2013/feb/lw15lesi.cfm
http://www.unh.edu/campusjournal/2013/02/unh-lodging-index-continues-climb

February 2013  U.S. Lodging Executives More Optimistic About Future
http://www.unh.edu/news/releases/2013/mar/lw18lesi.cfm
http://www.unh.edu/campusjournal/2013/03/us-lodging-executives-more-optimistic-about-future-unh-lodging-index-shows

March 2013  Lodging Executives Less Optimistic About Business Conditions
http://www.unh.edu/news/releases/2013/apr/lw22lesi.cfm
http://www.unh.edu/campusjournal/2013/04/paul-college-lodging-executives-less-optimistic-about-business-conditions-march

April 2013  UNH Lodging Executive Sentiment Index Flat
http://www.unh.edu/news/releases/2013/may/lw16lesi.cfm
http://www.unh.edu/campusjournal/2013/05/unh-lodging-executive-sentiment-index-flat-april

May 2013  Lodging Executives More Optimistic About Current Business Conditions Than Future
http://www.unh.edu/news/releases/2013/jun/lw26lesi.cfm
http://www.unh.edu/campusjournal/2013/06/unh-research-lodging-executives-more-optimistic-about-current-business-conditions-future

June 2013  LESI Falls as Present and Future Business Conditions Weaken
http://www.unh.edu/news/releases/2013/jul/lw24lesi.cfm
http://www.unh.edu/campusjournal/2013/07/unhlesi-falls-present-and-future-business-conditions-weaken

July 2013  LESI Flattens While Employment Outlook Improves
http://www.unh.edu/news/releases/2013/aug/lw22lesi.cfm
http://www.unh.edu/campusjournal/2013/08/unhlesi-flattens-while-employment-outlook-improves

August 2013  LESI Surges on Strong Business Conditions and Employment Outlook
http://www.unh.edu/news/releases/2013/sep/lw24lesi.cfm#ixzz2pV3yDHgR

September 2013  Lodging Index Falls Due to Uncertainty in Nation’s Capital
http://www.unh.edu/news/releases/2013/oct/lw25lesi.cfm#ixzz2pv8Mz3S
http://www.unh.edu/campusjournal/2013/10/unh-lodging-index-falls-due-uncertainty-nation%E2%80%99s-capital

October 2013  Lodging Index Continues its Slide
http://www.unh.edu/news/releases/2013/nov/lw26lesi.cfm
http://www.unh.edu/campusjournal/2013/11/unh-lodging-index-continues-its-slide
November 2013  LE$1 Increases Despite Flat Future Outlook
http://www.unh.edu/news/releases/2013/12/lw18lesi.cfm
http://www.unh.edu/campusjournal/2013/12/unh-lesi-increases-despite-flat-future-outlook

UNH Manchester Receives $750,000 from NSF for Computing Education for High School Students
http://www.unh.edu/campusjournal/2013/09/unh-manchester-receives-750000-nsf-computing-education-high-school-students

UNH has been awarded a $750,000 five-year grant from the National Science Foundation’s EPSCoR program to develop a pilot project for students in the state’s Career and Technical Education (CTE) centers. In partnership with UNH Cooperative Extension and the New Hampshire Department of Education, “The Ecosystem Computing Challenge: Partnership Model to Build Access to Relevant Computing Education for Underrepresented High School Students” will be led by Mihaela Sabin, associate professor of computer science in the computing technology program at UNH Manchester, the University’s urban campus. Students will monitor, map, and gain an understanding of New Hampshire’s natural ecosystems. They also will create their own mobile apps, learning important science, technology, engineering, and math skills in the process. Extension staff will help connect industry professionals to the classrooms so students can gain the professionals’ perspectives while hearing and seeing firsthand how technological innovations come to life.

UNH Showcases Technologies for Innovators and Investors at Tech Summit
http://www.unh.edu/campusjournal/2013/05/unh-showcases-technologies-innovators-and-investors-tech-summit

In May, UNH presented technologies developed at the University to some of the world’s leading innovators and investors at the TechConnect WORLD Summit in Washington D.C. Representatives from the Office for Research Partnerships and Commercialization showcased three technologies: NSPECT, a portable neutron and gamma-ray imaging spectrometer developed by James Ryan, professor in the Space Science Center at the UNH Institute for the Study of Earth, Oceans, and Space; ERMA®, a Web-based data visualization program originally developed for monitoring environmental disasters by professor of civil and environmental engineering Nancy Kinner in partnership with UNH Research Computing and Instrumentation and the National Oceanic and Atmospheric Administration; and high-performance organic semiconductors for flexible electronics, developed by Glen Miller, professor of chemistry and director of the UNH materials science program.

Venky Venkatachalam – Helping Small Businesses Profit

Venky Venkatachalam, professor of information systems in the Peter T. Paul College of Business and Economics, created the Angel Capital Electronic Network (ACE-Net) in the mid-nineties to address the needs of small businesses. He also developed PRONet, a program used by the U.S. Department of Defense to assist the more than 195,000 small businesses seeking procurement opportunities. Currently, he is working on The Green Launching Pad, a program that will improve New Hampshire’s economy and environment by fostering green entrepreneurship that connects businesses, faculty members, and students at UNH and across the state.
Wake-Up Call
http://unhmagazine.unh.edu/sp13/wakup.html

Shaojun Yao ‘12G was a chemistry doctoral student also working toward his MBA when he developed a "smart" hydrogel that, on contact with the skin, releases aromatic oils that increase alertness. Wakeup, a patent-pending, anti-fatigue, time-release gel, comes in a small tube that can be wiped under the nose to deliver a minty aromatic pick-me-up that lasts up to an hour. His idea has flourished into a start-up company, Wakeupinc, which is raising capital and hoping to have the product available soon for sale by gas stations and convenience stores.

Wendy’s Surge Boosts UNH Franchising Index in Q3 2013
http://www.unh.edu/news/releases/2013/11/lw06wendy.cfm#ixzz2pvDY7iBt
http://www.unh.edu/campusjournal/2013/11/wendy%E2%80%99s-surge-boosts-unh-franchising-index-q3-2013

UNH’s Rosenberg Center’s Franchise 50 Index tracks publicly traded companies in the U.S. engaged in business format franchising. The RCF 50 Index rose 2.2 percent in the third quarter of 2013, boosted by a strong performance from Wendy’s. According to Hachemi Aliouche, co-director of the Rosenberg International Franchise Center at the UNH Peter T. Paul College of Business and Economics, thirty six components of the RCF 50 Index made positive gains in the quarter, while 14 lost value.

With Mosaic Parcel Map, UNH Helps State Agencies Work Smarter
http://www.unh.edu/unhtoday/2013/01/mosaic-parcel-map-unh-helps-state-agencies-work-smarter

The Mosaic Parcel Map, a project of UNH’s Technology Transfer Center (T2), combines the tax maps of all of New Hampshire’s 234 cities and 22 unincorporated areas to create the first sustainable statewide parcel map in the United States. By knitting all the property maps into one digital file, the Mosaic Parcel Map will provide quick access to the essential information gleaned from towns’ computer assisted mass appraisal (CAMA) systems (e.g., property location and boundaries, ownership, date of sale, land area, building area, and land and building assessments). This will enable state officials to assess damage totals in the aftermath of disasters quickly and efficiently. According to UNH professor of civil engineering Charles Goodspeed, director of T2, the map is the result of nearly two decades of work in partnership with New Hampshire’s Department of Revenue Administration.