

Professional Education News

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Preparing students for professional leadership in business, industry, the arts, government, or educational, human services and nonprofit organizations

Research initiates dialogue on smart grid technology implementation

There's an illustration used in the energy industry to highlight the need for updates to existing energy grid management systems. The story goes that if telephone inventor Alexander Graham Bell were to visit the 21st century, he would not recognize smartphones or the explosion of complicated modern telecommunications equipment; but Thomas Edison, inventor of the first electrical power plant and distribution network in the late 19th century, would be right at home in the "modern" power grid.

It's an exaggerated comparison, but points to the realities of a challenged energy grid, and the ever-increasing demands of today's industrial, commercial and residential energy consumers. Government and industry figures vary, but they agree that smart grid technologies have great potential to reduce consumption through real-time control and automation of electricity delivery.

Smart grid innovations are already being implemented in many sectors. University of Delaware graduate student Diane Vondrasek is conducting research on smart grid technology and how it will affect energy management strategies and profitability in the U.S. lodging industry.

"For this study, I was excited about the prospect of collaborating



Diane Vondrasek with her master's thesis committee: Prof. Paul Sestak, Vondrasek, Prof. Ali Poorani, Prof. Francis Kwansa

Photo by Evan Krape

with the people who kept the industry going despite setbacks like 9/11, SARS, crippling economic downturns and a myriad of other difficulties," said Vondrasek, who is completing UD's Master of Science in Hospitality Information Management, a program of the Department of Hotel, Restaurant and Institutional Management (HRIM) in the Lerner College of Business and Economics.

"Smart grid technology adoption is one of the emerging solutions to energy management in the U.S., and Diane's research is the first to specifically address the subject in the lodging industry," commented Vondrasek's research chair Francis Kwansa, associate chair of the HRIM department and director of the graduate program.

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What is professional education?

If this seems like an odd question, then you are not at the University of Delaware. The University currently does not have a medical or law school, the iconic images of graduate professional education, thus this question comes up often. Without these professional schools, questions arise: Does the University of Delaware provide professional education? What is the place of professional education in a research intensive university? What distinguishes professional education from other forms of graduate education?

What do we do at UD?

Indeed, the University of Delaware has, at both the undergraduate and graduate level, a number of programs that prepare students for professional practice. Most comparable to medical school are UD's Doctor of Physical Therapy and our nursing and other applied health science programs. Additionally, UD has a number of professional programs at both the undergraduate and graduate level in education, engineering, public administration and policy, business, as well as the Professional Science Master's programs in biotechnology and bioinformatics.

Is there a place for professional education in a research intensive university?

The best way to answer this question is to examine the role of research intensive universities in professional education. Top ranked professional programs (by *U.S. News and World Report*) are very well represented among the Carnegie Classification system research university/very high (RU/VH) classification. Universities holding the RU/VH classification make up the 108 most research active institutions of higher education in the U.S. Among the top 25 medical schools, 68% are located in RU/VH universities (66% of the top 50). This trend is accentuated with law schools. Of the top 25 law schools, 100% are at RU/VH universities, with a still notable 76% among the top 50 law schools. Similarly, top ranked business schools are highly represented within the Carnegie very high research classification (100% of top 25 and 84% of top 50). Is there a place for professional education at research intensive universities? The answer is a resounding, "Yes."

When the Sloane Foundation initiated funding for Professional Science Master's (PSM) programs in the late 1980s they turned to the top 20 research universities. Why? Because the Sloan Foundation was committed to assuring that the PSM programs

were rooted in the best and most current scientific knowledge in the STEM (science, technology, engineering and mathematics) disciplines. As with medical, law and business schools, who best to teach the leaders of business, industry, government, education and nonprofit organizations to apply the most advanced science than those faculty who are discovering and creating it?

So what exactly is the role of professional education in research intensive universities? Top research universities are discovering and creating new knowledge. The leaders in the professional application of knowledge need to be current, and they need the critical thinking skills that characterize cutting edge research. Research intensive universities and professional education have a mutually beneficial relationship.

What distinguishes professional education?

When we think of professional education we often think of preparation for exams or other licensure criteria that allow one to practice in a profession. Many professions such as physical and occupational therapists, nursing, education, accounting, psychologists and engineers have professional licensure or credentialing criteria required to practice in certain areas of the field. Other professional areas, such as public administration and policy and business, do not require licenses, but are nonetheless considered professional. In these professions various registrations and certifications increase the holder's employability and are required by some employers.

Characteristically, in most professional schools, education extends beyond the knowledge that can be learned from books and class assignments. Students engage in internships, practica, residency, moot court, and other learning processes to develop those tacit skills necessary to effectively practice their profession. For most professional education the strength of the connection with practicum, internship, or residency providers is critical to the viability and reputation of the program.

The Council of Graduate Schools requires that for a STEM master's program to be recognized as a Professional Science Master's it must have clear and strong ties to an employer advisory board. The input from internship providers and potential employers to program design and development is essential to assure that the program is producing graduates with the skills needed in industry.

In the STEM disciplines, deep and cutting-edge science is essential; also critical are skills that prepare the graduate to function effectively in industry. These skills are the ability to effectively communicate the science to non-specialists, skills to prepare the individual to work in multidisciplinary teams, and business skills

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John E. Sawyer, Ph.D. is Associate Provost for Professional Education in the Office of Graduate and Professional Education at the University of Delaware

Smart grid technology (from page 1)

The M.S. in Hospitality Information Management is an interdisciplinary program focusing on information management and the use of technology to solve problems in the hospitality industry, said Kwansa. “In response to industry requests to ‘send us technology savvy graduates,’ the HRIM department made a strategic decision for the graduate program’s focus,” noted Dr. Kwansa. “This has become our niche in the hospitality academy.”

In addition, the program relies on collaboration with UD’s HRIM Technology Advisory Board, composed of chief information officers or chief technology officers, as well as practitioners, from leading hospitality companies. Said Kwansa, “The Advisory Board plays an important role in helping us keep our graduate curriculum current and pointing us toward skills that are relevant for graduate students interested in careers in this field.”

Delphi methodology facilitates conversation among experts

Vondrasek selected the Delphi method for her research. Developed by RAND scientists in the 1950s, the technique has been widely used in science and technology forecasting, and more recently, in successful business forecasting. It involves surveying a panel of experts through a series of confidential questionnaires, which ensures the candid exchange of ideas among study participants.

Vondrasek’s background as an engineer with 10 years’ experience in the commercial nuclear power industry proved a good fit for her inquiry. Contacting high-profile experts and executives in the industry, Vondrasek asked them to participate in the study. “I set out to identify lodging industry innovators, people who had the ability and the inclination to look outside the lodging ‘box,’ who moved in a variety of professional circles, and could see and embrace the future. I was buoyed by the excellent reputations of the HRIM department, the Lerner College, and UD, and I am absolutely thrilled with the response,” she said.

UD’s Ali Poorani is an associate professor of hospitality education, and a member of Vondrasek’s thesis committee. “Experiential data from the hotel industry shows that energy consumption is the number one challenge for the industry’s cost savings and reduced carbon emissions,” said Poorani. “To address major challenges of energy consumption, the industry needs to have open conversation and share best practices. The Delphi technique helps to engage various constituents in this endeavor.”

“The industry is widely represented,” said Vondrasek. “Study participants are lodging industry executives responsible for energy management in their respective lodging companies, leading industry energy management system companies, and leading industry consulting companies. They represent independent hoteliers; industry giants; historic properties, new builds, and everything in between; franchise and enterprise-managed models; cutting-edge energy management solution providers and more.”

Prospects for future collaboration

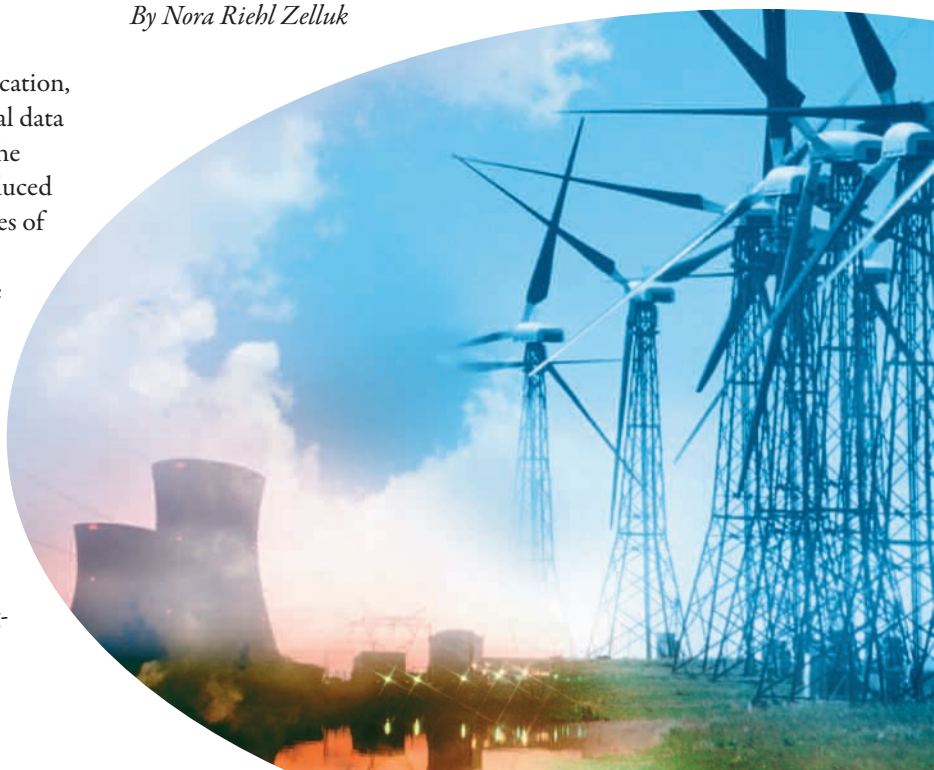
Vondrasek’s research is not yet complete, but the start of a productive dialogue is already apparent. In the study, respondents read about and reacted to the experiences and practices reported by their counterparts in the industry. “Some respondents have expressed an interest in exchanging ideas outside the study boundaries, after reading about innovations adopted by their co-respondents. Study participants are practitioners who want to discuss solutions and implement them in their own environments.” The participants remain anonymous throughout the study; however, Vondrasek noted that future collaboration among respondents may be explored.

“The most promising lines of questioning are the ones in which study participants express their vision of future smart grid technology adoption,” said Vondrasek. “Although this is the first time they have had the opportunity to share their ideas about these energy management tools, they have not been slow to consider and/or adopt smart grid technologies. Study participants are industry innovators, and they welcome the future.”

“Research that elucidates practical solutions is exciting,” said Vondrasek. “In the end, we will have a benchmark by which industry smart grid technology adoption progress may be measured. I sincerely hope that the discourse that has transpired throughout the study will sustain the conversation and allow industry experts to eventually capture a collective industry leadership role on the international energy management stage.”

Dr. Kwansa added, “Prior to Diane’s research corporate energy experts knew what they knew about their company’s efforts in the area of energy management and believed that smart grid technology adoption was not quite on corporate tables for serious discussions yet. Through the Delphi study, there is greater awareness now among the participants of what other companies are doing and not doing. It has also accelerated the need for forums and opportunities for more discussions about this topic.”

By Nora Riehl Zelluk



Longwood graduate students help design therapeutic garden

Recently, UD's Cooperative Extension and the Longwood Graduate Program in Public Horticulture began helping clients of the Delaware Department of Health and Social Services (DHSS) enjoy the uplifting benefits of nature. They developed plans for a therapeutic and community garden on DHSS's Herman M. Holloway St. Campus in New Castle.

Partners in the project include the University of Delaware's Center for Disabilities Studies, Delaware Department of Agriculture, Delaware Center for Horticulture and the National Alliance on Mental Illness. The Longwood Fellows took on the garden design as their annual professional outreach project.

Broad cooperation across UD and Delaware agencies

The garden project has been a cooperative effort. The Longwood Fellows organized design sessions with Holloway clients and other stakeholders, as well as representatives from the professional horticulture community. UD Extension and Department of Agriculture professionals developed education programs which became "Garden Day" Thursdays, when Extension and Department of Agriculture staff and Master Gardeners offered structured activities at the Holloway campus.

"It's been a win-win situation for all involved," says Bob Lyons, director of UD's Longwood Graduate Program in Public Horticulture. "The therapeutic and community garden has great



Photo by Faith Kuehn

▲ Faith Kuehn, Delaware Department of Agriculture, discusses garden plans with graduate students from UD's Longwood Graduate Program

potential to improve the experience of the clients of the Holloway campus; it also served to grow the Fellows' experience in coordinating focus groups, design sessions and conceptual designs."

Lyons described the Professional Outreach Project as central to the Longwood Fellows' experience. "Leading the outreach project gives the students an opportunity to, as a group, identify a specific area of public horticulture that they want greater exposure to and do so via a real world public horticulture client relationship," said Lyons. "The Professional Outreach Project instills a sense of both accomplishment and altruism in the students, as well as providing an incredible networking opportunity."

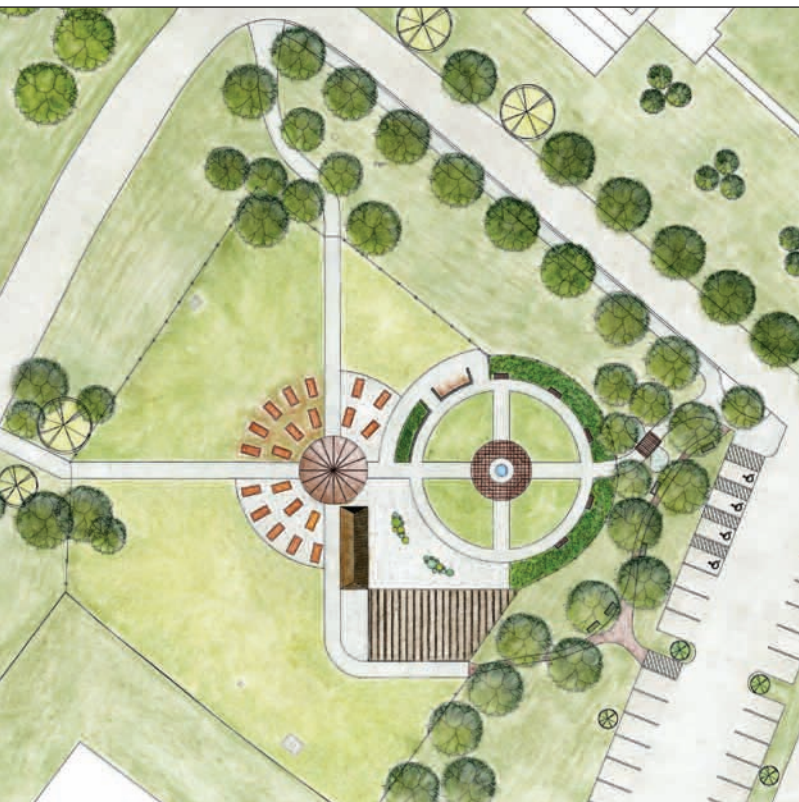
Faith Kuehn from the Delaware Department of Agriculture has been coordinating the project. "Gardens have their own magnetism and are compelling for a lot of people," said Kuehn. "It's been a positive aspect of this project that a lot of different people and different groups – including the Longwood graduate students – have been involved. They all bring different expertise, different perspectives to the project, and that's a benefit."

Design incorporates sustainable landscaping practices

The design created by the Longwood Fellows splits the one-acre garden into quadrants that feature raised beds and green walls. One quadrant will have a slate wall for chalk art, an idea suggested by clients. Sustainable landscaping practices were incorporated into every facet of the garden design, said Kuehn. The garden design includes native plants whenever possible, uses some recycled materials for garden hardscapes, designates rain collection in barrels and by other means, incorporates a composting station and utilizes solar and other green technologies.

Rebecca Pineo was the Longwood Fellows' project leader, and will

◀ DHSS Therapeutic and Community Garden Conceptual Plan submitted by UD Longwood Fellows



complete her master of science in public horticulture this year. “We are excited about the momentum behind the project and the support and interest it has received so far, and are grateful for the chance we had to contribute. We usually choose just one organization to work with, but the nature of this project meant that we got to work with a range of people from a range of organizations. It was quite a learning experience to see effective partnerships in action.”

Plans for continued funding and cooperation

Raakel Toppila was the Longwood Fellows’ assistant project leader last summer, and will lead the group’s new Professional Outreach Project this year. Although the Longwood Fellows’ formal role in the garden project ended this past fall, Toppila has been working on funding proposals for the garden as part of a grant writing seminar she completed this semester. “My goal is to continue working on grants to obtain funding for the installation of the garden as it was designed. Faith Kuehn has identified several potential funders; it is my intention to work with her in the next few months, to develop some proposals.”

Toppila is currently submitting poster abstracts to present the garden project at the American Public Gardens Association Conference this June in Philadelphia, and the American Society for Horticultural Science Conference in Hawaii next fall.

Founded in 1967, the nationally known Longwood Graduate Program represents a unique educational partnership between Longwood Gardens and the University of Delaware. A hallmark of the program is its interdisciplinary nature, with students customizing their curriculum to enhance their professional and personal goals. The program also requires and encourages the integration of Fellows into Longwood staff, as well as volunteering at other gardens in the region, and participation on boards of other organizations.

A community garden fall festival is being planned for September 10 at the DHSS Holloway Campus, opening the garden to the public for educational activities, and highlighting the concept of community gardens. The garden project will also be featured in a display at UD’s Ag Day April 30.

By Margo McDonough and Nora Riehl Zelluk

Blue Hen Jobs database is open to graduate students

Blue Hen Jobs is a database containing thousands of internships and jobs designed specifically for members of the UD community. Posted opportunities include full-time, part-time, volunteer, and summer jobs and internships. All current students—undergraduate and graduate—are automatically registered to use Blue Hen Jobs. UD alumni can also create a free account and take advantage of the valuable resources and search tools.

Graduate Students

You already have an account!

Log in to Blue Hen Jobs and use the Advanced Search to filter for master’s or doctoral level positions and view the hundreds of postings. Also, under the Search Jobs and Internships tab, make sure to log into CareerShift, a national partner database. Access your free account through your current UD email name and password at www.udel.edu/CSC/bluehenjobs.html.

Employers and Internship Partners

Connect with UD’s best and brightest

Blue Hen Jobs is completely free for businesses and organizations to post internship and job positions available in their organizations; just visit www.udel.edu/CSC/employerlogin.html. For additional resources, look for the Services for Employers link. If you have any questions, please contact UD’s Career Services Employer Relations at 302-831-2391 or recruitbluehens@udel.edu.

UD Faculty

Partner with Career Services to build your graduate internship program

The Blue Hen Jobs system can be customized to allow employers and graduate programs to target specific internships toward students within particular programs, and to allow program directors to control access for targeted internships. Graduate program directors or faculty should contact Scott Rappaport, Program Coordinator (scottrap@udel.edu), Bank of America Career Services Center, to configure the system to meet specialized needs. Consultations are available to assist faculty and graduate program directors in developing internships for graduate programs.



UD provides professional development to U.S. Army

The University of Delaware is engaged in a multifaceted partnership with U.S. Army Research, Development and Engineering Command (RDECOM) located at the Aberdeen Proving Ground (APG) in Maryland. In addition to cooperative research efforts, the University is offering professionally convenient course scheduling, on-base graduate courses and programs, and career services that are responsive to employee needs.

The partnership, through UD's Office of Economic Innovation and Partnerships, was formalized in January 2010 when UD President Pat Harker and Major General Nick Justice, Commanding General of RDECOM and Installation Commander of APG signed a RDECOM level Cooperative Research and Development Agreement (CRADA). A CRADA enables a private entity and a government agency to work together on a project through their laboratories, personnel, facilities, equipment or other resources and to conduct specific research or development efforts that are consistent with the agency's mission. The UD-APG CRADA includes collaborations involving research, graduate education, professional development and career services.

Since the CRADA signing, a number of research collaborations are underway with multiple colleges; career events have happened; the College of Engineering is offering graduate education courses on post in electrical engineering; and the University has developed a Master of Science in Software Engineering degree.

New engineering degree result of UD, Army cooperation

One facet of the educational partnership between UD and APG is the new Master of Science in Software Engineering (MSSE) degree. Initiated by a request from APG leadership, University faculty from the departments of Electrical and Computer Engineering and Computer and



Information Science designed this new program based on extensive research and conversations with Army personnel as well as industries with whom the Army

frequently works. As a result, it is ideally suited to address the professional needs of the staff at APG. A key feature is the flexibility the program offers, with specialty tracks in networks, scientific and high performance computing, hardware, communications and signal processing, information sciences/artificial intelligence, systems and architecture, and computer science, as well as the option of creating a specialty track to fit specific work/career responsibilities. Moreover, degree completion includes a practicum experience tailored to the student's technical interests, enabling the

student to use creative and critical thinking skills while contributing to a problem-solving software engineering team in a real-life setting.

On-site courses provide convenient option

Additionally, the Department of Electrical and Computer Engineering began offering graduate courses on the APG base in spring 2010. The first course – Advanced Engineering Electromagnetics – taught by Professors Dennis Prather and Mark Mirotznik, attracted six students from various departments on the base. All of those students have taken additional courses, and four are now pursuing graduate degrees in electrical engineering.

Courses taught on-base are convenient for employees not only because of location, but also time – classes on base meet once weekly rather than the typical two to three days per week on campus. Several students

UD becomes Defense Acquisition University equivalent



After a detailed application process, the University of Delaware has been approved to participate in the Defense Acquisition University (DAU) Equivalency Program. The DAU offers courses across all U.S. military units to strengthen workforce capabilities in acquisitions-related skill areas, and leadership at all levels. The DAU spans all career stages and emphasizes professional development through continuing education for military and civilian personnel.

The Equivalent Provider (EP) program allows UD to now submit courses for DAU approval that would fulfill continuing education requirements for the Department of Defense workforce. With this move, UD continues to strengthen its partnership with the U.S. Army at Aberdeen Proving Ground (APG) in Maryland by making it more convenient for APG personnel to enroll in University of Delaware courses. UD joins other universities such as University of Virginia and Georgia Tech serving U.S. military installations.

Next, UD will identify and propose course offerings to be considered as "equivalent products" for the DAU. These could include certificates, undergraduate and graduate courses, and graduate programs.

If you would like to propose curriculum for the DAU, or have questions, please contact John Sawyer, Associate Provost for Professional Education (sawyerj@udel.edu).

divide and conquer, taking one course on-base and traveling to Newark for a second.

This spring, UD is offering two courses on-base, attracting many familiar faces and a growing list of new students. Professor Mirotznik is teaching Antenna Theory and Design, while Professor Mike Piovoso is teaching Digital Signal Processing.

Other areas in which APG personnel are currently pursuing part-time graduate studies include mechanical engineering and materials science. One avenue to both of those degree programs is UD's Graduate Certificate in Composite Materials, the courses for which are often taken prior to the student applying to a degree program

and later applied to a graduate degree in mechanical engineering or materials science. This pathway is a great way for students to determine that pursuing graduate studies really is feasible for them while working full-time.

Graduate student contributes to alcohol withdrawal study at Christiana Care

Statistics show that 20 percent of hospitalized adults have a history of alcohol problems, and of those, six percent will experience alcohol withdrawal symptoms while hospitalized. That's what a research team at Christiana Care Health System found out when they started studying the problem of how to identify the patients who are at risk of developing the most serious complications of alcohol withdrawal.

Despite being the largest acute care provider in Delaware, prior to 2009, Christiana Care did not have a standardized screening methodology for identifying alcohol withdrawal risk of hospitalized individuals. Often, patients remained unidentified until serious symptoms arose, including delirium tremens or DT, the most severe complication of alcohol withdrawal.

As a practicing RN in the University of Delaware's Master of Science in Nursing (MSN) program, Jim McWilliams completed his graduate clinical internship at Christiana Hospital, and played a contributing role in the study.

The research effort was multidisciplinary. The principal study author was a family nurse practitioner at Christiana Care hospital, and the team included Christiana Care physicians, pharmacists, nurses, UD undergraduate nursing students, and other hospital staff.

McWilliams' primary contribution to the research was to analyze data accumulated by the team. "The opportunity to work collaboratively with other disciplines and departments in a setting that encouraged teamwork was very personally rewarding for me. Every professional I reached out to was eager to help and add another piece to the puzzle."

UD's Clinical Nurse Specialist program includes a strong clinical practice component. The program's capstone course, NURS 686 Clinical Nurse Specialist Role Integration, requires students to complete a clinical project in cooperation with the health agency in which they are serving their clinical practicum.

"The clinical projects are intended to offer graduate nursing students the opportunity to contribute to the improvement of patient care," said UD's Erlinda Wheeler, associate professor and graduate program coordinator in the School of Nursing. "They learn to assess a particular problem in the clinical setting with the help of their clinical preceptor, learning to function as advanced practice nurses by completing a project that will be useful in improving quality care in the health care institution where they do their clinical experiences."

"Our whole team was impressed with Jim's contribution to the project," noted Ruth Mooney, Nursing Research Facilitator at Christiana Care, and McWilliams' clinical preceptor. "Team members commented on the importance of collaborating with graduate students in a research environment. The team benefited from Jim's current knowledge through his graduate coursework at UD."

Dr. Mooney added, "Participating as a team member in an actual case study like this does help to solidify your research technique in a real-life health care setting." McWilliams described his graduate coursework in statistics and research as invaluable to his participation: "I worked with a lot of data, and there were some challenges in presenting the data in a way that was logical and meaningful, as well as drawing conclusions from the data in a way that translated to bedside clinical practice."

"Many of UD's graduate nursing students are now leaders in their field of practice as managers, chief nursing officers, clinical nurse specialists, and directors of health clinics," noted Dr. Wheeler. "The clinical project gives them hands-on experience in working with a

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Photo by Eric Crossan



Graduate institute fosters public engagement

Amanda Norbutus is a University of Delaware Preservation Studies Program doctoral student examining outdoor murals and researching ways to preserve and protect them using specialized materials and coatings. In 2009, she participated in the University of Delaware's Public Engagement in Material Culture Institute (PEMCI) to learn about using accessible language and digital technologies to better inform and involve the public in her research.

"Although my dissertation topic is on public murals, an area of research that involves the community, I never thought of how to reach the public beyond the artists and scientists I communicate with on a professional level," said Norbutus. "Since PEMCI, I've learned that the person on the street can offer just as much information and intellectual excitement about my work as any colleague I've met in recent years."

Humanities grant focuses on improving public outreach

UD's Public Engagement in Material Culture Institute (PEMCI) was founded in 2008 as part of a \$500,000 challenge grant awarded by the National Endowment for the Humanities (NEH) to support graduate education and scholarship in material culture and to promote public interest and engagement in the interpretation and preservation of America's cultural heritage.

The program is co-directed by Joyce Hill Stoner, Edward F. and Elizabeth Goodman Rosenberg Professor of Material Culture and director of the UD Preservation Studies Doctoral Program; and Matt Kinservik, professor and English department chair.

The competitive ten-week summer fellowships are awarded to M.A. and Ph.D. students in the arts, humanities and social sciences pursuing research in material culture studies. Each year, a new group of participants attend the intensive hands-on program to learn by doing. They practice delivering informal talks, giving sound bites for an interview and explaining their research to media professionals while being videotaped for a later critique.

PEMCI sessions include writing press releases, photography and advice from museum professionals. "We have been so pleased to have guest instructors from the UD Professional Theatre Training Program and

◀ **Graduate student Andrew Bozanic was featured on a Smithsonian podcast discussing the cultural and social history of the acoustic guitar**



Photo by Ambre Alexander



Photo courtesy of Amanda Norbutus

▲ **UD Preservation Studies graduate student Amanda Norbutus analyzes the paint condition of a mural using a portable FTIR (fourier transform infrared spectrometer)**

nearby museums, or who are regional broadcasters and public relations experts," said Stoner.

"This program helps the graduate students become more aware of audiences beyond the university setting, helping them become advocates for their work," said Kinservik. "It's about how they communicate in clear and accessible terms the importance of their research."

'Public scholars' encouraged to interpret their research

"Communication skills are critical in all academic disciplines, but it can be difficult to find a space in every curriculum to incorporate something like this," said Kinservik. The format of a two-week institute is designed to supplement the students' coursework in their own disciplines without taking significant time away from the primary curriculum. "The PEMCI program focuses on humanities professionals, but this is a model that could be adapted across other disciplines as well, across any academic unit," added Kinservik.

Stoner noted, "We are hoping to encourage more graduate students to become 'public scholars'—professionals who are excited about engaging a wider audience in a compelling way about their research, as Carl Sagan once did with astronomy or Ken Burns has done with history. Universities should not be seen as unapproachable ivory towers but rather places where exciting research is happening that can enrich all our lives."

As part of the Institute's outreach component, the participants present their research topics each spring in a semester-long course at the University of Delaware's Osher Lifelong Learning Institute in Wilmington, a member-based teaching and learning program for individuals over 50. Coordinated by the lifelong learning course instructors, Nan Norling and Stuart Siegell, the material culture presentation course presented by PEMCI participants won an award from the University Continuing Education Association Mid-Atlantic region for its unique cooperative format.

UD doctoral student and Hagley fellow Andrew Bozanic

participated in the 2008 PEMCI and presented at the first lifelong learning seminar, "Objects as Cultural Artifacts." His research is on the historical and social significance of the acoustic guitar in American culture. "The lifelong learning course was a wonderful opportunity to present to a public audience on my subject," said Bozanic. "They were very engaged in the topic."

In 2009, Bozanic was interviewed for a podcast at the Smithsonian National Museum of American History, where he had a fellowship. "The workshop really prepared me well to present my work in a constructive and relevant way. I learned to have my talking points prepared and practiced my interview skills, which helped me immensely during the interview." Bozanic is currently completing his doctoral dissertation and also is contributing to an institutional history of the Delaware State Parks.

In 2010, Norbutus received a travel grant from UD's Office of Graduate and Professional Education to study several murals in Europe. "Since the Institute, my research has become more in-depth; I've become part of a community of muralists and mural programmers, educators and scientists who are all hoping that my research can provide answers. I've given talks in lecture halls and in front of murals, and a couple times, even on a train ride, but it was my training during PEMCI that allowed me to present my work in a way that engaged my audience and furthered my mural mission.

"Engaging with the public outside academia encourages me to be a better scientist, as I want my data to be useful and important to the people who will be most affected by my work: artists, mural programmers, conservation scientists, and the community members who want 'their' mural to last as long as possible," said Norbutus.

Article by Nora Riehl Zelluk

Alcohol withdrawal study (from page 7)

team of health care personnel. These are the same kind of problems that they will encounter as they work in their chosen fields."

McWilliams completed UD's Master of Science in Nursing (MSN) in 2010 as a Clinical Nurse Specialist with a concentration in adult health. Currently, he is pursuing a post-master's degree program at the University of Arkansas for Medical Sciences and is completing a pediatric rotation in the Family Nurse Practitioner program.

"Western Arkansas is a medically under-served area. I hope to establish myself in family practice, as well as serving as a parish nurse working with Hispanic immigrants and their families," said McWilliams. "I plan to maintain dual credentialing as a Clinical Nurse Specialist and Nurse Practitioner, and would like to conduct research and publish on topics that are population focused, especially the rural poor and immigrant agricultural workers."

McWilliams also served as a clinical project leader at Christiana Care Visiting Nurse Association (VNA) while a UD graduate student, and earlier this year, published an article about a pediatric fall risk assessment developed by Christiana Care VNA that appeared in the journal *Home Healthcare Nurse*.

As an RN for 16 years following a decade in the U.S. Navy, McWilliams also worked as an RN at Jennersville Regional Hospital in West Grove, Pa., while a graduate student at UD. "I enjoy being part of the change processes that occur in health care. I see nursing becoming more rooted in science than earlier in my career and advanced practice nurses are in a very good position to be the facilitators of evidence-based practice."

Article by Nora Riehl Zelluk

Two writing instructors join English faculty

The Department of English has been strengthening its expertise in professional writing and communication, with the goal of supporting strong instruction across the disciplines at both undergraduate and graduate levels. Two new faculty were hired to start this September, and both will contribute to new initiatives in graduate professional education.

"Improving students' skills in oral and written communication is critical in all fields, but many faculty members worry that they don't have the time in their curriculum or the training to incorporate a lot of this type of instruction," said English department chair Matt

Kinservik. "Our goal is to continue to develop ways to share the expertise of our writing experts with faculty across the disciplines in order to improve the communication skills of our students—something everyone agrees is a priority."



Candice Welhausen earned a Ph.D. in English from the University of New Mexico and brings over 10 years of workplace experience as a professional

technical communicator in the health care field. Her research interests include visual rhetoric, rhetorical theory and technical communication. Most recently, Welhausen taught technical communication and professional

communication for pre-med students at the Georgia Institute of Technology through the Brittain Fellowship post-doctoral program.



Phillip Mink has been teaching writing at the University of Delaware since 2005 as a part-time faculty member. He earned a J.D. from the University

of Mississippi and also was a Hoynes Fellow at the University of Virginia, studying writing under the mentorship of Peter Taylor. His 20 years' experience practicing law give him a unique perspective on teaching, and he has consistently earned extremely high ratings from his students.

Annual sports medicine seminar shares UD's athletic training expertise

The athletic training education program at the University of Delaware has the distinction of being one of the oldest accredited programs in the nation, and the only one in the state of Delaware. In addition, for 42 years, the program has been sharing the University's expertise in this field with the region's professionals through the Medical Aspects of Sports Seminar.

The annual event features presentations and workshops by UD faculty as well as physical therapists and other practitioners from the region. This year's presenters from the University's Intercollegiate Athletics Program included current UD head athletic trainer John Smith and assistant athletic trainer Dan Watson, as well as assistant director of athletics for strength and conditioning Augie Maurelli.

Undergraduate and graduate students contribute

Graduate students from UD's degree programs in kinesiology and applied physiology also present workshops and mini-clinics at the event. Each year, an interactive taping clinic is conducted by undergraduates in UD's athletic training program. Senior athletic training students demonstrate athletic taping techniques, with underclassmen serving as the patient models.

Since 1988, the seminar director has been Keith Handling, associate professor of kinesiology and applied physiology at the University of Delaware. "This event provides UD's athletic training students a valuable opportunity to present to an audience of practitioners, and to network and interact with professionals in their field," he said.

Handling, who joined UD in 1972, served as head athletic trainer from 1988 to 2008 and as director of the UD Athletic Training Education Program from 1988 to 2002.



Photo by Kathy Atkinson

▲ UD's undergraduate athletic training students demonstrate sports taping techniques at the annual Medical Aspects of Sports Seminar

"Just as importantly, it helps meet the needs of area practitioners who must participate in continuing education activities to keep current in the field and maintain their certifications," said Handling. "It also gives our students a concrete experience which makes them aware of a very important aspect of the field: the need for continuing professional development for athletic trainers."

This year's Medical Aspects of Sports Seminar took place at the University of Delaware's John M. Clayton Hall on February 5, and covered topics like concussions in adolescent sports, sports injuries to the wrist and hand, youth baseball, common foot and ankle injuries in sports, and other current issues and topics in sports medicine.

A forum for professional exchange

Craig Oates is a graduate student in the kinesiology and applied physiology department and is currently the athletic trainer for the Blue Hens baseball team. Oates led one of the conference's interactive mini-clinics, demonstrating the

Balance Error Scoring System (BESS), an assessment protocol used by athletic trainers to determine whether an athlete has suffered a concussion.

"Giving a presentation at an event like this was a good learning experience. Since I'm more involved in training college athletes, it was a great environment to lead a discussion with physical therapists and other types of professionals about applying the BESS tool in different situations, with different types of patients," said Oates. "As a graduate student, it was a great opportunity to make a presentation in my area, and relate to many different types of professionals and practitioners, and hear about how they approach their practice and rehab challenges."

The Medical Aspects of Sports Seminar is sponsored by the UD Intercollegiate Athletics Program in cooperation with the Division of Professional and Continuing Studies, and recognized by the National Athletic Trainers' Association.

By Nora Riehl Zelluk

Professional education

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such as basic accounting, budgeting and financial management to prepare the graduate to effectively build and work within viable project plans. These additional professional skills are not always included within the typical master's degree curriculum in the sciences.

Professional education is specifically designed to prepare graduates for their chosen profession with a combination of an academically rigorous core discipline, supplemented with the professional and business skills that will enable them to become true leaders in their fields. The fully integrated professional program is not just less research, or a non-thesis option: it is something else. That "something else" is comprised of industry-specific and business-related curriculum elements, and a professional or industry experience component, all specifically designed to meet the unique needs of the employer and/or profession.

The National Governors Association 2011 report "Raising Expectations for Universities and Colleges in a Global Economy," calls for

clear expectations for higher education's role in economic development. Among those expectations is an emphasis on rigorous use of labor market and other data to define educational priorities, increased input from employers in higher education, public accountability for impacting students' employability, addressing workforce gaps and meeting employer needs.

In summary, professional education addresses global economic development by including: 1) a core set of knowledge that is accurate, precise and cutting edge; 2) some form of experiential education designed to prepare graduates to practice their discipline; 3) clear and relevant input from the professional and/or employer community in the design and delivery of the program; and 4) breadth of skill as well as knowledge development activities specifically designed to meet professional and/or employer requirements.

At the University of Delaware, there is a strong base of existing highly-regarded professional graduate programs. With the University's vast expertise and research capabilities, we have the potential to build further upon this base. As the Path to Prominence™ states, "We can achieve our

Please help us prepare for future issues

What questions do you have about professional education? Do you know of students who have held unique internships or conducted impactful or groundbreaking projects? Is there a company or other partner with an interesting or compelling story? Please send your ideas for feature articles, or other comments on the newsletter to John Sawyer, Associate Provost, Office of Graduate and Professional Education at sawyerj@UDel.Edu.

greatest impact by educating and training the professionals and leaders who serve society in essential roles, and by closer integration of public service with research and education."

*John E. Sawyer, Ph.D.
Associate Provost for Professional Education,
Office of Graduate and Professional Education*

UD task force formed for graduate student financial aid

Investing in a graduate education at UD is smart money, returning significant increases in earning potential. U.S. Department of Labor statistics indicate that workers with a graduate degree earn on average 40% more than those with a bachelor's degree only. While graduate education provides great return on the investment, students need assistance to fund the investment in their own future.

A task force has been formed at UD to develop improved support for graduate students seeking federal financial aid. Increasingly, graduate students need to fund a greater portion of their own education. Some graduate programs do not fund, or minimally fund students. Many companies that fully funded employees' tuition in the past are now scaling back on educational benefits.

UD graduate students obtain a disproportionately small amount of federal financial aid. Analysis shows that at UD only 15.2% of master's-level students receive loans compared to 43.6% nationally. UD master's students average \$3,463 in federal aid, while the national average is \$15,644.

The UD Financial Aid Task Force was formed as a joint effort of John Sawyer, Associate Provost in the Office of Graduate and Professional Education and Melissa Stone, Director of Student Financial Services. The task force is comprised of graduate program directors, Student Financial Services professional staff and representative graduate students.

The task force will be exploring better ways of serving graduate student needs, including enhanced information for seeking federal financial aid, timing and coordination of financial aid offers, and enhanced communications with graduate students and graduate program directors. The task force will seek federal approval to grant financial aid to students in graduate certificate programs, and will develop strategies to obtain federal work study grants for full-time graduate students.

If you have suggestions or input for UD's Financial Aid Task Force, please write to GradTaskForce@udel.edu.





University of Delaware



GRADUATE FAIR

In November 2010, the first University of Delaware Graduate Fair drew more than 400 prospective graduate students to the Trabant Center. The event featured more than 50 UD graduate programs, and included breakout sessions on the application process, graduate student life, career development, and school/work/personal life balance. The fair also highlighted student services such as UD’s Career Services Center, Student Financial Services, UD libraries, and Student Health Services.

One prospective student commented, “After attending the grad fair, the University is at the top of my list.” Another said, “This graduate fair exceeded my expectations. I thought the whole thing was very well planned and offered a lot of valuable information. Before the fair, I was interested in the program offered at UD, but after being at the fair, I am ready to submit my application. Thank you.”

Graduate program directors who participated also gave very positive feedback about the experience. “I think

the event was very successful at increasing overall awareness of UD graduate programs throughout Delaware,” said a program director.

Watch your email for information about the 2011 UD Graduate Fair!



Photos by Evan Krape