Graduate project facilitates formation of Delaware Anti-Hunger Coalition

To earn her UD graduate business degree, Kelly Whitmarsh had to design and complete an in-depth professional project. She chose to collaborate with the Food Bank of Delaware, and was instrumental in the formation of the Delaware Anti-Hunger Coalition.

“I really liked the curriculum of the master of science in Organizational Effectiveness, Development and Change (OEDC), and I felt both the program and the University were a good fit for my career and personal interests,” explains Whitmarsh. When it was time to choose a professional project, she thought about the Food Bank of Delaware. “I had attended a charity event for the Food Bank and was inspired by remarks made by Food Bank of Delaware CEO Patricia Beebe. I met with her, and we discussed several potential opportunities at the Food Bank.” At the time, Food Bank of Delaware was already discussing partnering strategies to better address hunger issues in Delaware, and was pursuing a Delaware Community Foundation grant to fund the formation of a hunger coalition. Whitmarsh was able to act as a professional organizational consultant assisting with this initiative.

Prof. John Sawyer is program director for the OEDC program in UD’s Lerner College of Business and Economics and was Whitmarsh’s project adviser. “Students in this program are required to conduct a professional project in a field setting, the purpose of which is to apply what the student has learned through his or her course work, managing the project from beginning to end, and learning the nuances of practicing their discipline in a real-life organizational setting.”

“In this instance, Kelly applied organizational stakeholder analysis procedures and action research to identify and involve diverse stakeholders in the coalition,” Sawyer explained. “This provided recommendations for stakeholder management and future stakeholder engagement. Kelly’s project is an excellent example of applying tested theoretical models to gain practical outcomes.”

“This project provided a great environment in which to apply organizational development models and principles from the program,” added Whitmarsh. “However, it was also a great opportunity to learn and apply some principles that existed in the literature and were not taught in the classroom. The real world aspect of the project reinforces the idea that not all lessons are learned inside the classroom. You need to think outside of the box and test some of the principles you learn to see how they translate to real life scenarios.”

(continued on page 2)
Renee Bowers is a buyer for Ten Thousand Villages, the largest fair trade retailer in the United States and one of the founders of the fair trade movement. She is currently completing UD’s graduate certificate in Socially Responsible and Sustainable Apparel Business. Working primarily in India and Indonesia, Bowers partners with artisans to develop and produce handcrafted items within the framework of fair trade. “As a fair trade buyer, I have the privilege of regularly witnessing the positive impact of my work in a very concrete way. Year after year, I can see how the orders I place with these artisans have benefited them and improved their lives. I don’t think that there are many jobs that provide an outcome this positive, and so personally satisfying,” says Bowers. “As a fair trade retailer, it’s our goal to help create long-term sustainable incomes for artisans in developing countries,” explains Bowers. “We do this by forming long-term relationships with artisans around the world, and selling their handicrafts through our network of stores with the Ten Thousand Villages name.”

In UD’s program, Bowers’ focus has been on labor practices. “We’re dealing with all sorts of issues that are relevant to fair trade. What is a fair wage? How do you really research whether your supplier is treating its workers fairly?”

“Obviously, the initial primary economic impact of a fairly traded income is that many of the artisans are able to improve their ability to simply feed, clothe and educate their families,” says Bowers. “But there are so many instances
where the impact goes far beyond that. One of our partner artisan groups in India is particularly inspiring because not only are they focused on earning a wage, but the members also focus on empowering each other economically and politically. Thirty of these women now hold local government offices in their villages and rural governments, which for southern India is an extraordinary example. This particular group, the Self Help Association for Rural Education and Employment (SHARE), is just one of more than 130 producer organizations that Ten Thousand Villages partners with in 38 countries around the world.

“Being in this program has provided a good opportunity to learn from others in the industry,” explains Bowers. “There are several graduate certificate students who are currently working, or have worked, in the apparel industry, so we often compare notes about the ways certain problems are approached at different companies. The professors have also done a great job of inviting guest speakers to participate in online discussions. This helps to give a solid real-world perspective to the theories that we discuss in class.”

UD’s program is offered completely online, and was jointly developed by professors from the University of Delaware, Cornell University and Colorado State University. Marsha Dickson, chairperson of UD’s Department of Fashion and Apparel Studies, serves as program director.

“The online format has been hugely helpful,” adds Bowers. “I travel, and I also have a full time job, a long commute, and a family. While I still make the same time commitment that I would in a classroom, the online format lets me schedule this time around all of the other things I have to do. I’ve noticed that my fellow students will post thoughts or discussion items at all times of the day or night, which is a good indicator that we all take advantage of this flexibility and access opportunity! I think it is fair to say that many of us, particularly those of us that are currently working outside of academia, would not be able to be in the program if it weren’t for the online format.”

“The passion that these certificate students bring to the classes is amazing,” comments Marsha Dickson, director of the program. “Their analysis of what is working and not working in the industry, and their creativity in developing new solutions, assures me that our graduates will make an impact on workers around the world. In Renee’s case, while she is considering how the apparel industry could adopt fair trade practices to improve the situation for women in factories around the world, she is also exploring the best practices of leading brands such as Adidas and Nike, and how the fair trade community might learn from them as well.”

Earlier this year, Bowers was a contributing panelist in a UD podcast discussion on fair trade in the global apparel industry produced by the Fashion International Business Education Response (FIBER) project, which is led by the UD Department of Fashion and Apparel Studies. Bowers has been a senior research fellow with the American Institute of Indian Studies, and has lived and worked in Latin America, where she conducted workshops on the use of low-cost, locally available arts materials.

By Nora Richl Zelluk
From rocket ships and Civil War graffiti, to Shangri La and Dutch murals

UD graduate student Kirsten Travers has worked on an extremely wide array of art conservation projects, most falling under the description of “painted surfaces.” What does that mean in real terms?

Using “paint excavation” techniques to uncover poetry and art left behind by Civil War soldiers inside a historic house in Virginia. Stabilizing and restoring a Saturn V rocket on outdoor display at the Johnson Space Center in Texas. Restoring intricate ceiling art in Hawaii at Doris Duke’s famous “Shangri La” estate. Analyzing and restoring murals and other surfaces at historic sites in the Netherlands.

What all these objects and projects have in common, says Travers, is the cultural significance contained within the material objects. “I see them as ‘vessels of value,’” she explains. “That value may be aesthetic, scientific, cultural or historic – and while these ‘values’ are intangible, their ‘vessels’ are material, and therefore prone to damage and deterioration. As conservators, we preserve and protect these material forms so that the values they contain can live on for the enrichment of future generations.”

After graduating in 1997 with a degree in fine arts, Travers initially spent time as a decorative painter assisting conservators in New York and New Orleans. Later she worked as a technician conserving murals and historic decorative interiors, including the Essex County Courthouse in New Jersey and the Grand Opera House in Meridian, Mississippi. Since 2002, she participated in the conservation of outdoor sculpture, monuments, and industrial artifacts nationwide, notably the 367-foot Saturn V rockets in Alabama and Texas, where she served as technician team leader.

Travers’ most involved work has been exposing and researching Civil War soldier graffiti, which led to a 2007 American Institute for Conservation (AIC) presentation and later brought her to Delaware’s own Winterthur Museum, Garden and Library to participate in a fluorescence microscopy class taught by Richard Wolbers and Susan Buck, faculty members from UD’s Winterthur/University of Delaware Program in Art Conservation (WUDPAC) graduate program.

The Winterthur/UD program is one of only four graduate programs in the U.S. that educates and trains art conservation professionals. The curriculum includes a heavy science component, covering the history of art and artifact technology, physical and chemical properties of materials, mechanisms of deterioration, and the intricacies of preventive conservation.

“One great thing about this field is that I don’t have to choose a discipline,” comments Travers. “I climb scaffolding one day, then work under a microscope the next. I can immerse myself in historic paint-making treatises in a rare book collection, and then use those recipes to make traditional paints. Plus, I often must go to the object – because it can’t come to me – so my work has taken me around the world to places I would never have seen otherwise.”

Travers’ most recent internship projects were in Honolulu, Hawaii to assist with restoration of an Islamic interior from 18th-century Damascus, part of Doris Duke’s Shangri La estate; and in the Netherlands, restoring wall art in a rural 17th-century hermit’s chapel and in a town hall building in Maastricht.

“I wanted a program that would challenge me,” comments Travers. “The Winterthur/UD program is very intense, with a strong science component. We also have amazing resources, including the Winterthur museum and collection, the museum’s scientific research and analysis laboratory, state-of-the-art conservation studios and incredibly dedicated faculty and staff.”

“Forme, specializing in architectural painted surfaces was important. This is a relatively new field, and WUDPAC recognized the need for conservators in this area by establishing a painted surfaces concentration, the only program in North America to do so. Two leaders in this discipline are Richard Wolbers and Susan Buck, both WUDPAC graduates who now teach in this program. Having these internationally-renowned experts as my mentors has been an incredible experience, and one that I could not have had at any other program.”

Travers will complete UD’s three-year master of science in art conservation in 2011.

By Nora Riehl Zelluk

UD’s Winterthur/University of Delaware Program in Art Conservation (WUDPAC) graduate program.

Kirsten Travers uses microscopy to analyze the paint at Maastricht’s Stadhuis (town hall). Travers also helped stabilize and paint plaster surfaces at De Kluis (inset), a 17th-century hermit’s chapel located in the forest of Valkenburg.
Accelerated graduate teaching degree targets science and math needs

UD’s new Master of Arts in Teaching (MAT) degree is a new fast-tracked graduate program aimed at both professionals and recent graduates who want to pursue a teaching career.

Offered by the College of Education and Human Development (CEHD), the MAT program is unique in that it is designed to accommodate students with different career backgrounds. For recent college graduates who have a general subject degree in the areas of math or science, this program offers a graduate degree and teacher certification in just one year. The program is also open to people who’ve decided to leave their current career and become a teacher.

“I decided to apply to the Master of Arts in Teaching program because I had heard many great things about the School of Education (SOE),” said Benjamin Berg, one of the ten graduate students in the new program. “As a college graduate with a science degree switching to teaching, this program provided exactly what I was looking for.”

Reed Smith has worked for AstraZeneca for 22 years as a chemist in drug discovery. Now, he says he wants to promote an interest and passion for pursuing science as a career to students in the classroom. “I want to be prepared to do the best job I can,” he said. “I hope to bring the excitement I have for science to the high school students I work with.”

Smith enrolled in the program with another colleague from AstraZeneca, Russ Mauger. Mauger, 55, says instead of retiring after leaving the company this year, he’s looking forward to this career change.

“It’s a great opportunity for our candidates who come with a strong content background to be immersed for 12 months in education and school settings, preparing for a career in teaching,” said Brad Glass, program coordinator and assistant professor in SOE.

The program is a part of Delaware’s successful application for Race to the Top funds. “This is a great example of the value of UD partnering with the state, addressing one of the state’s most urgent needs and bringing strong students to the university,” said Nancy Brickhouse, professor in SOE and deputy dean of CEHD. The first cohort of students began the program in July 2010.

Jeffrey Gunther was the first graduate student accepted into the MAT program and says he was immediately drawn to it. A 2008 Cornell University graduate, Gunther majored in neurobiology and behavior and environmental engineering technology, but says he always had an interest in environmental education.

While serving as a science tutor in Portland, Ore., Gunther says he realized how important it was for students to have a strong foundation in basic science concepts before trying to take on larger environmental issues.

“I was seeing that most of the jobs that I wanted in environmental education looked for teaching certification,” Gunther said. “So at the same time I was looking at getting a teaching degree, I was beginning to appreciate the need for a better general science education.”

“Math and science are high-needs areas,” said Glass. “This program is giving the students the training they need to be successful teachers their first year, but also the tools that will allow them to continue to grow as educators throughout their career.”

By Cassandra Kramer

UD’s nationally ranked programs

The U.S. News and World Report 2011 edition of top graduate programs lists these nationally-ranked UD departments and colleges

- Department of Chemical Engineering: #10
- School of Education: #28
  (a jump of 7 places)
- College of Engineering: #45
  (tied with Iowa State University)
- Nursing: #72
- Physical Therapy: #4
- Public Affairs: #41
- City Management: #10
New Professional Science Master's programs in biotechnology, bioinformatics created to meet workforce needs

The University of Delaware has launched an innovative new graduate degree – the Professional Science Master’s (PSM) – in the fields of biotechnology and bioinformatics to help meet the future workforce needs of a growing bioscience industry.

The aim of the new PSM degree programs is to produce graduates with in-depth knowledge of science coupled with strong business skills for careers in the bioscience industry, from pharmaceutical development to biofuels research, where the need for such highly trained professionals is in demand.

“The University of Delaware is investing in the development of professional education programs that are excellent, unique, of high pay-off to the student, and of high impact to society,” University Provost Tom Apple said.

According to the Talent Gap Analysis Report: Preparing Our Workforce for the Evolving Life Science Industry published by the Delaware Valley Innovation Network in 2008 and updated in December 2009, in spite of the current economic downturn, the outlook for the region’s life science industry “remains bright,” with an anticipated job growth of 6.6 percent, or 4,200 high-tech jobs, over the next five years.

The University’s new PSM degrees will give students the rigorous science and math of a traditional graduate science degree at UD, a major research institution, but also provide courses in business and project management, communications, policy and law, and team-building, which are essential for successful careers in industry, according to John Sawyer, associate provost for professional education.

Sawyer, who is also a professor of business administration in UD’s Alfred Lerner College of Business and Economics, worked with Melinda Duncan, (continued on page 7)

UD partners with industry leaders to launch PSMs

“The University’s new Professional Science Master’s degree programs directly respond to the national need for a stronger scientific workforce to enhance the nation’s competitiveness,” notes University of Delaware Provost Tom Apple. “Our PSM programs in biotechnology and bioinformatics have been developed in partnership with bioscience companies in the region and will serve as a pipeline to industry, providing graduates who can translate scientific discoveries into real-world applications.”

Strategic Diagnostics Inc. (SDIX) is one Delaware biotechnology company which has partnered with the University of Delaware in developing the first UD PSMs. “We are pleased to be collaborating with the University of Delaware in the development and launch of the PSM programs in biotechnology and bioinformatics,” commented Deborah Day Barbara, vice president of business development for SDIX. “These emerging programs will serve as a vital and necessary talent resource to the regional biotechnology community.”

UD’s PSM Advisory Board has been active in providing feedback on industry needs in their respective fields. Representatives from the following organizations have been instrumental in the PSM development process: A. I. duPont Hospital for Children, Adesis, ANP Technologies Inc., AstraZeneca, Christiana Care Health System, Delaware BioScience Association, the DuPont Company, Fraunhofer Center for Molecular Biotechnology, Incyte Corporation, Noramco Inc., QPS Holdings, SDIX, Siemens Healthcare Diagnostics, ThermoFisher Scientific, and W. L. Gore & Associates.

UD internship and advisory board partner SDIX was recently featured in the news when they provided their Microtox® Water Quality System and technical assistance to the Ocean Research & Conservation Association, Inc. (ORCA) to aid the Gulf Oil Spill response effort.
UD alumna uses Fulbright to further innovation in education

“Innovation” is a watchword in education today as many schools and educators strive to implement the newest technological resources and strategies to improve their students’ learning.

But through research and experience, Jennifer Groff, a 2005 UD School of Education alumna, realized many school systems don’t know how to effectively integrate emerging technology into a lesson, and sometimes struggle simply to keep up.

When she was pursuing a master’s degree in educational technology at the University of Delaware, Groff designed a tool called the i5, which was based on her graduate thesis about barriers to technology in education. The i5 is an inventory to help identify potential barriers to a technology-based project in the classroom, so that educators can try to mitigate them in advance for a more effective project outcome.

After receiving a Fulbright scholarship in 2009, Groff continued her research at Futurelab in Bristol, England where she expanded her work on i5. Groff researched different approaches to education in England, Wales and Scotland and has been comparing them to the education system in the United States. “Both countries describe ‘innovation’ as a critical component to their respective education systems, but it is remarkable to see the vast difference in the approaches and outcomes,” she observed.

Ultimately, Groff says she’s hoping her work produces tools and resources that help schools structure innovative practices and knowledge management processes into their work, and in the future, she wants to be directly involved in supporting schools as they seek to do that.

Article by Cassandra Kramer

Financing your degree

- Matriculated graduate students enrolled in at least 5 credits are eligible for all applicable federal financial aid programs
- Private student loans and career loans can be a good option
- File the FAFSA (Free Application for Federal Student Aid), no matter how many credits you plan to enroll in
- After filing the FAFSA, make an appointment with UD’s Office of Student Financial Services to discuss your options

UD Student Financial Services:
http://www.udel.edu/finaid/

Free Application for Federal Student Aid (FAFSA):
http://www.fafsa.ed.gov/

Federal Student Loans: https://studentloans.gov/

Visit www.udel.edu/professional/news/ to watch an iChat interview with Jennifer Groff about her research in Bristol, England.

Photo courtesy of the Harvard Graduate School of Education.
Poultry disease response program draws upon UD’s expertise

With the poultry industry acting as one of the keystones of the Delaware economy, the threat of the outbreak of poultry disease is a serious concern in the state. To address the issue, the Avian Biosciences Center in UD’s College of Agriculture and Natural Resources joined forces with UD’s Professional and Continuing Studies to develop a certificate that would offer the special expertise residing at the University to the poultry industry in Delaware and beyond.

“The Emergency Poultry Disease Response certificate grew out of international avian influenza training efforts in Romania and Bulgaria that the University was involved in,” says Dr. Eric Benson, one of the instructors for the certificate and associate professor in the Bioresources Engineering and Animal and Food Sciences Departments. “We felt that the same information was essential for Delmarva and other parts of the country and developed the training program to maximize the benefit for the industry.”

The certificate was first offered in the fall of 2009, partially funded by a grant through the USDA-sponsored Avian Influenza Coordinated Agricultural Project (AICAP). It drew ten participants from across the country. A second offering in 2010 drew 22 participants from six continents.

“The main goal of the Emergency Poultry Disease Response certificate program is to prepare participants for emergency response to poultry disease outbreaks and natural disasters,” comments Robert Alphin, certificate instructor and instructor in the Department of Animal and Food Sciences. “As part of this training, we explain how the ‘Delaware Model,’ which emphasizes strong cooperation of the University of Delaware, government, and industry, has been very successful in dealing with poultry emergencies.”

Alphin notes that one of the goals of the certificate is for participants to transfer their newly-learned skills to others in their organizations. “Many of our first year participants have already run training programs in their organizations making use of the knowledge they gained from the course and using course materials from our course website.”

Benson adds that certificate participants already had an opportunity to implement ideas from the certificate. “During the February snow storms,” he says, “graduates from last year’s course were able to use many of the skills they learned to prepare for disease outbreaks to help respond to structurally collapsed poultry houses.”

The Emergency Poultry Disease Response Certificate stresses preparedness planning, biosecurity and assessment tools, and rapid response techniques and technology – the three critical aspects of successfully managing an outbreak of potentially catastrophic poultry disease. In addition, participants earn continuing education units for license renewal purposes and have a chance to engage with fellow poultry veterinarians and agricultural professionals from around the U.S. and the world.

The certificate is a four day intensive experience held in Newark. Instructors use a mixture of seminar, discussions and hands-on technology demonstrations to convey the course material. Other instructors include Jack Gelb Jr., professor and chair of the Department of Animal and Food Sciences, Daniel Bautista, director of the Lasher Laboratory, Brian S. Ladman, associate scientist in the Department of Animal and Food Sciences, and Krista L. Murray, biosafety officer, Occupational Health & Safety. George Irvine, program manager in Professional and Continuing Studies, coordinates the program.

Alphin sums up, “This certificate program provides one more way for us in the College of Agriculture and Natural Resources and the Avian Biosciences Center at the University of Delaware to use the knowledge gained from our multiple research efforts and to transfer this knowledge to those who need it in the community.”

By Tara White Kee

UD Career Services Center serves alumni and graduate students

All matriculated graduate students are eligible for the following UD career resources and services (includes all students admitted to a graduate degree program or graduate credit certificate, regardless of the number of enrolled credits):

- **Individual appointments with career advisers**
  Schedule appointments with career consultants by using the self-scheduler on the Career Services web page. Choose the counselor who advises in your field of interest.

- **Career fairs & other events**
  All 2010-11 career fairs and other career events such as information sessions, workshops, and panel discussions are open to all matriculated students. Visit the Career Events Calendar at www.udel.edu/csc/.

View logistical information about the fairs, as well as information about participating companies. The Job Jamboree, Engineering, Science and Technical Fair, and the Spring Career Fair may be of particular interest to graduate students.

- **Blue Hen Jobs**
  Blue Hen Jobs is a one-stop shop for internship and job search resources, alumni mentors, resume posting, and the Campus Interview Program. Matriculated graduate students should click on “Students” in the Blue Hen Jobs box that appears on the Career Services home page for an introduction to the Blue Hen Jobs system.

For more information
UD Career Services Center: www.udel.edu/csc/
UD career resources for graduate students: www.udel.edu/csc/gradservices.html
Email: udcareers@udel.edu