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The University RESEARCH NEWSLETTER

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A Message from the Provost

Recognizing Student Research



This past April well over two hundred undergraduate and graduate students participated in the University's revamped research

and creative projects showcase entitled "Made in Millersville." The day-long scholarship festival featured a wide range of presentations and poster sessions that testify to the vibrant research culture that informs undergraduate and graduate education.

Two weeks later, the annual Honors and Awards Ceremony recognized hundreds more students who had distinguished themselves in scholarship, service, and community engagement. Many of the students who participated in the April scholarship showcase also were recipients of awards, scholarships and other certificates of merit.

The May 2014 Commencement ceremony provided a third venue to salute student

scholarship. Forty students completed research theses and graduated with departmental and/or university honors. Twenty-two undergraduates achieved the rare distinction of graduating *Summa Cum Laude*. Scores more graduated with Latin Honors. These accolades attest to the enduring importance of research as a core component in our new strategic plan for student and faculty development.

Publication of this issue of the *University Research Newsletter* is delayed slightly so we might include a sampling of the rich variety of student achievement recognized this spring. Readers will find information on current activities associated with several campus research centers. I hope you enjoy this issue, produced by students in our University Honors College.

Sincerely,

Vilas A. Prabhu, Ph.D.

Provost and Vice President for Academic Affairs

Vilas A. Preble

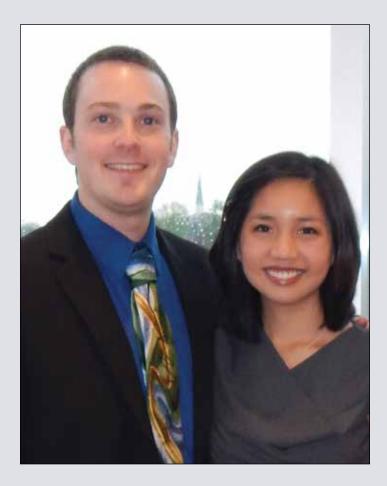
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Millersville University

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"A Book by Its Cover"



Sometimes, as the expression goes, you should not judge a book by its cover. May 2014 graduates **Ben Daum** and **Lisa Nguyen** have a new appreciation for this phrase. Both entered Millersville University together as freshman Chemistry majors and members of the University Honors College. By their own admission, that first year neither of them got along very well. But by sophomore year they realized the redeeming qualities in the other person, becoming lab partners for every Chemistry course they would take. Four years later, both graduated together with Latin Honors, University Honors, and Departmental Honors in Chemistry. Nguyen calculated that of the 53 credit hours of coursework they had taken together, nearly half of their undergraduate education was spent working alongside one another.

Both chose rigorous research tracks. During his sophomore year, Daum studied nanoparticles in the use of stained glass windows under the direction of Dr. Patricia Hill. In the summer of 2012, he studied biodegradable elastomeric scaffolding for drug delivery and tissue regeneration under Dr. Elda Hegmann through the Research Experience for Undergraduates (REU) program at Kent State University. Daum's thesis was completed under the direction of Dr. Edward Rajaseelan. In the fall of 2014, Daum will attend graduate school at Purdue University to pursue a Ph.D. in Inorganic Chemistry, with the hopes of one day working in industry or teaching and researching at the university level.

Nguyen's thesis focused on cadmium selenide quantum nanoparticles, work done under the supervision of Dr. Maria V. Schiza. She will attend Ohio State University in the fall of 2014, also working toward a Ph.D. in Inorganic Chemistry, with the desire of becoming a college professor.

When asked what Millersville has meant to them, Daum responded, "I'm thankful for the wonderful education I received, the amazing people I was lucky enough to meet, and the opportunities to move forward that I gained from my experiences here at Millersville." Nguyen concluded, "Millersville has given me the ability to think and solve problems critically. With these skills, I can overcome any obstacles that I will face in my future."

What began as a rivalry soon turned into a working relationship, and then a true friendship and collaborative partnership. Daum stated that Nguyen's support and encouragement helped him through college. Not surprisingly, she says the same about him. During their time at Millersville, they looked beyond the cover of the book, so to speak, opening up the opportunity for these incredible experiences and lasting friendships. Who knows, they might even find themselves teaching at the same university one day!

BY LARA M. ADAMS

Centers Engage Community-based Research Initiatives



The Millersville University Polling and Research Office is responsible for two survey projects a semester, investigating such topics as the civic engagement of Millersville students, perception of life in Lancaster County, area 'satisfaction' surveys, job placement surveys of recent graduates, awareness of programs related to sustainability on campus, and a county-wide survey of opinions and behaviors related to human rights. The polling center is a fee-for-service organization that relies on revenue generated by projects to sustain its research. Dr. Adam Lawrence, Department of Government and Political Affairs, works alongside the director of CCERP, Dr. Victor DeSantis, to run the center and complete survey projects. Dr. Lawrence's areas of teaching and expertise include political parties, the politics of race and ethnicity, the American presidency, as well as successful research

methods. He regularly involves students from his classes for data collection, conducting, and other center-directed research tasks. The polling center has several new research projects coming up, including a multi-mode survey project for the Lancaster Osteopathic Health Foundation. Researchers will be tasked with assessing the behavioral and mental health needs of the children, families, and caregivers in and around Lancaster County.

The Center for Public Scholarship and Social Change works to connect MU students with the community through research projects that aid area residents and community organizations. The center is directed by Dr. Mary Glazier of the Sociology and Anthropology Department, who works alongside Dr. DeSantis, Lori Leaman, AmeriCorps assistant Jess Yorks, and graduate assistant Dana Beth Wile. The center has several

current projects of note, including the evaluation of "Scaling Walls a Note at a Time," a program that provides free music lessons for children who have parents with a history of incarceration. Another project has researchers evaluating the Lancaster Violent Crime Reduction Initiative by examining the impact of video cameras on the processing of criminal cases in the Lancaster courts. A third project involves identifying Columbia (PA) children eligible for but not enrolled in the Children's Health Insurance Program (CHIP). Columbia's Community Life Network has partnered in this initiative, with the goal of enrolling more members of the community in health insurance. Center staff have been working with the Lancaster Housing Opportunity Partnership on several community development projects, including a Panhandling Intervention Survey for the Lancaster City Alliance.

MILLERSVILLE STUDENTS Conducting Research



Emily Neideigh (Biology and UHC) is the recipient of a 2014 Clarence Schock Foundation Fellowship, as well as a Clarence

Schock Foundation Scholarship. A rising senior engaged in thesis research in Biology, Neideigh also will receive a PSECU Scholarship.



Laura Saltzman (Social Work and UHC) has received a prestigious Global Impact Scholarship to support thesis research on global

comparative social service supports as part of the "Semester at Sea" program. In addition, Saltzman was awarded a Merit Scholarship and the Alumni Support Scholarship. While studying abroad she will maintain a blog on the program's website and develop a global outreach marketing plan.

Daniel Gochnauer (Chemistry and Physics, UHC) is a May 2014 graduate who completed all requirements for a double major in Chemistry and Physics (including two honors theses), and the University Honors College. Working under the direction of Drs. Edward Rajaseelan and Tariq Gilani, Gochnauer received the 2014 Robert N. and Darlene I. Ford Scholarship.

Joseph W. Law (History) received the 2014 Guy Kurtz Bard Award for outstanding ability in Political Science and History. Law's 2014 senior honors thesis is entitled "Sir John Fortescue: A Political Philosopher in Late Medieval England."

Jennifer Bennis (Psychology, UHC) is a May 2014 graduate who completed her honors thesis in Psychology under the direction of Dr. Frederick Foster-Clark. Bennis received the Susan P. Luek University Honors College Award and the Susan P. Luek Award for Graduate Study in Psychology.

Brian Luckenbill (Physics, UHC) is a May 2014 graduate and recipient of a Hoffman Family Endowment Award. President of the Society of Physics Students, Luckenbill completed his thesis research under the direction of Dr. Sean Hendricks.

Casey Jo Swank (History, UHC) received the 2014 Class of 1898 Award for academic achievement and excellence in scholarship. A rising senior, Swank is engaged in honors thesis research in the field of eugenics and American social reform.

Virginia Handley (Sociology) is a May 2014 graduate who received the Senior Award for Excellence in the Department of Sociology/Anthropology.

Heather A. Smith and **Renee E. Duff** are co-recipients of the 2014 Henry Franklin Bitner Prizes for Excellence in Biological and Physical Sciences.



Benjamin P. Shoff (Sociology, UHC) received several academic awards, including the Wickersham Memorial

Scholarship for excellence in scholarship and character, and the Paul Beideman Scholarship.



Eric G. Pettis
(Government and
Political Affairs,
UHC) Pettis has
been selected to
receive the A.G.
Breidenstine Award

for the Best Undergraduate Research
Thesis. A May 2014 graduate who
completed his honors thesis research
under the direction of Dr. Adam
Lawrence. Pettis' research focused on
issues of Pennsylvania tax reform and
grew out of his experience in the PASSHE
Harrisburg Internship Semester.





Charissa Mohn (Earth Sciences, UHC) is a rising senior and recipient of the Class of 1947 Scholarship to support independent research leading to an honors thesis in Earth Sciences and the University Honors College. In May 2014 Mohn and fellow scientist and UHC student Joseph Receveur participated in the PASSHE Summer Travel and Study Abroad Program in the Canadian Maritime Provinces.

A Trio of Award-Winning Climatologists



The May 2014 Commencement Ceremony included three budding climatologists who conducted original field research under the direction of Dr. Richard Clark. Each student earned departmental honors and completed the rigorous curriculum required to graduate from the University Honors College. Each also produced an honors thesis praised for the quality of research and the depth of analysis. Michelle Marie Serino (left), Ricardo K. Uribe (middle), and Felicia Rose Guarriello (right) worked closely with Clark on field research projects funded by the National Science Foundation. Testing weather conditions in the heat-soaked American West and blizzard-bound Upstate New York, Clark's students received practical, real-time research experience in the most taxing of conditions.



COMMENTARY: Research and Strategic Vision



Dennis B. Downey is a Professor of History and Director of the University Honors College. He edits *The University Research Newsletter*.

Years ago Vice President Jerry Eckert remarked of Millersville University, "The best in us will endure." His observation, drawn from a keen understanding of the University's history and traditions, was in reference to the central roles scholarship and research have played in the evolution of a once isolated normal school to a regional comprehensive university. As Millersville University engages a new strategic vision and plan under the guidance of a new president, John Anderson, we are well served to remember that research matters, and in its diverse forms has always mattered at Millersville University.

My own sense, drawn from over three decades of university teaching and scholarship, four of which were spent thinking about and writing the history of this place and its people, is that research matters more than ever before. It is a hallmark of a university of national distinction, which is one of the challenges President Anderson has put forward. I say this for several reasons.

The University is involved in an ever more strenuous competition for students, and for the best students. Consultants make the case that universities are first judged by the quality of their academic programs, and how well they fit student needs and interests. The ability to engage in research, to conduct authentic and meaningful research in collaboration with highly skilled faculty, is one of the distinguishing features of a great university. Put simply, the role of research and faculty/student

collaborative scholarship must be at the forefront of any new strategic vision.

Research, and the tangible rewards of growing expertise in one's discipline, is central to success in the classroom and in the community. Teaching excellence rests on the broad shoulders of sound scholarship and intellectual engagement; each complements the other. As Charles Van Hise noted a century ago, one should not underestimate "the beneficent influence of the university" in addressing the social, cultural and economic issues of the day. What Van Hise said of Wisconsin is true for Pennsylvania: public universities have a responsibility to muster their talents, knowledge and collective expertise to improve community life for all citizens regardless of station, status or ability. This is a core function of higher education.

I would suggest that the concrete rewards of scholarship bring intrinsic creative pleasures of their own. Whether it be in the studio, laboratory, archives, the field or community, a sense of fulfillment accompanies the scholarly life that is unmatched by other university pursuits. Furthermore, faculty add immeasurably to educational quality when they are able to direct students in the often arduous but ultimately pleasurable aspects of original research and creative expression.

As Millersville University completes the details of a new strategic plan, let's seize the opportunity to put in a word for the vital role of research in becoming a university of national distinction. In an era of great challenges and uncertainties, it may be one of the ways to assure that the best in us does endure.

Creating Connections

New Multidisciplinary Studies Major Thrives with Research Component

Millersville University's new
Multidisciplinary Studies (MDST) major
is thriving since its launch in the fall
2013. The first students to complete
the major graduated in May 2014, with
another dozen students now pursuing
program requirements. The major allows
qualified students to work under close

faculty supervision to create innovative concentrations that combine two or more disciplines. Faculty advisement and oversight are essential to the program's success. Every student must complete a research seminar or appropriate field internship that provides practical, hands-on experience in one of the core disciplines.

Most students are electing internships that will allow them to apply classroom learning to real world work environments. The MDST major has also allowed new faculty cohorts to engage in collaborative teaching and research in such innovative areas as Disability Studies, Emergency Management, and Digital Journalism, to name a few.

Sustainability and Civic Responsibility



Dr. Nadine Garner, director of the Center for Sustainability, partnered with Dr. Adam Lawrence, director of the

Walker Center for Civic Responsibility and Leadership (both centers are part of CCERP, the Civic and Community Engagement and Research Project), to create and distribute the 2014 Sustainability Survey during the spring semester. The survey consisted of

questions regarding students' perceptions and awareness of basic concepts about sustainability, their awareness of sustainability efforts on campus, and their own sustainable practices. Over 700 students completed the survey, which was delivered to their email addresses. The data from the research is being analyzed this summer, and the findings will be released this fall. The findings will help the Center for Sustainability better understand how to serve students in the education of and the engagement in sustainable practices.





Dr. Sepi Yalda



Ph.D. is Professor of Meteorology and

Sepideh Yalda,

Director, Center for Disaster Research and Education (CDRE). Yalda

serves as Coordinator, Master of Science in Emergency Management (EHEM).

What led to your involvement with the Center for Disaster Research and Education (CDRE)?

Dr. Hank Fischer, a founding member of CDRE, asked me to join the faculty cohorts, and in 2007 I began teaching courses and serving on the graduate program advisory board.

What are your and Dr. Duane Hagelgans' respective roles?

I serve as the CDRE director and coordinator of the graduate and undergraduate programs. Dr. Hagelgans is an assistant professor of Emergency Management, teaching courses for the MSEM program and the EHEM minor. Since these programs are multidisciplinary, Dr. Hagelgans is officially a member of the Earth Sciences Department but only teaches courses for the MSEM and EHEM.

What is the role of research in Center activities?

Research is at the core of the Center's activities. The CDRE has a history of being involved in research projects ranging from a focus on disaster research to

community-based research projects. We have also been involved in a number of contracts to provide support and research for various national organizations and institutions. Faculty and students are also involved in research and educational initiatives with our international partners through ongoing collaborative efforts.

How would you assess the community impact of Center activities and research?

One of the missions of CDRE is to disseminate research findings to the general public, and to develop disaster resilient communities. CDRE's activities include training and educational opportunities that are open to the community, providing consulting expertise, and community-based research projects that directly benefit communities involved in terms of education and resources.

What kinds of workshops and other scholarly activities does the CDRE sponsor?

CDRE offers a Community Emergency Response Team (CERT) training every semester. This is FEMA-based training and CDRE offers a course that is open to everyone at the University and the greater community. We also offer a 16-hour Business Continuity course every semester. Each year, we co-sponsor the South Central Business Continuity Conference with the Business, Industry, and Infrastructure Subcommittee of the South Central Pennsylvania Task Force. CDRE hosts a virtual seminar series with

speakers from across the country on topics related to emergency management. The Center co-sponsors other workshops, conferences, and one-time training opportunities throughout the year. For example, we are sponsoring a symposium in the fall in anticipation of the 10th Anniversary of Hurricane Katrina. The Global Katrina Effect: An International Research Symposium will take place at Millersville University on October 1–3, 2014.

How does the CDRE fit in Millersville's mission?

CDRE provides formal educational programs (MDST, MSEM, and EHEM) that meet the needs of both graduate and undergraduate students. These programs prepare students for a diverse workforce, and engage leaders through community-based activities and initiatives. CDRE educational and training programs offer a diverse learning environment to a broad range of students at different levels of education and professional development.

How does the new multidisciplinary major in Emergency Management fit into CDRE's strategic plan?

The new major provides a multidisciplinary education for undergraduate students interested in the field of environmental hazards and emergency management. This is a good opportunity for students who are interested in obtaining an undergraduate degree in this field and pursuing further training and education through the MSEM program.