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This issue of the SHE Newsletter provides many examples of the high quality education provided to students in the School of Health and Environment. We're excited to announce the official notification from NAACLS of accreditation for the Medical Technology program for another 7-year timeframe. The high quality of the report was praised by the lead site visitor as being "one of the best programs in the country."



Another show of external support is the agreement with NIOSH to conduct work on health and safety, especially of nano particles. This is an area of expertise within our school that will help global industries safely tap into the growing field of nanotech.

The quality of student learning is also evident in the student awards and internships you'll learn about inside this issue. A new term being used on campus is "experiential learning." The undergraduate programs in SHE are outstanding examples of providing students with real-world opportunities that prepare graduates for the job market.

Thank you to all of our alumni, faculty, staff and students for collaborating on important research and teaching within SHE. By working together, we are making a difference to people's lives within communities and workplaces.

All my best,

Dean Shortie McKinney
School of Health and Environment
University of Massachusetts Lowell

Medical Technology Program Accredited for Another 7 Years

The National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) granted accreditation to the Clinical Laboratory Sciences/Medical Technology Program until 2017.

Prof. Kay Doyle led the year-long effort along with Nancy Grandbois. Both were principal authors of the report. This is the fourth straight accreditation received with perfect scores for

both the Self Study Report and the Site Visit (1989, 1996, and 2003).



Nancy Grandbois, co-author of the report, Eugene Rogers, Chair of Clinical Labs and Nutritional Sciences; Kay Doyle, co-author and program director and Dean McKinney.

The long 1200-page report was required due to program growth. The project team needed to document the double number of clinical affiliates and adjunct clinical faculty for student clinical internships.

"These accreditations actually reflect the quality of the program from 1983 to the present," said Doyle. "All of the CLS faculty and staff as well as over 80 adjunct clinical faculty contributed documentation for this report. I thank everyone especially the staff who worked during Christmas break when the school was closed, giving up several days of vacation to get the report done on time."

Dr. Nancy Goodyear made significant contributions to the curriculum review for all of the courses and Dr. Mary Elizabeth Hooker did the data analysis and comparison of student retention and graduation rates and honors. Staff members Donna Rogers, Jacqueline Hodgdon, Beth Halaby, Barbara Burns, and Robin Gavin aided in the preparation of the report. In addition, Beth Halaby did the data analysis of the alumni and employer surveys. All of the Clinical Laboratory faculty and staff had to provide extensive documentation required for all the courses they teach as well as documentation of their own continuing education, service and scholarship.

"At the site visit exit interview on Friday, April 16, 2010, Professor James Vossler, the Site Visitor Team Leader, stated to the administration, faculty, staff, clinical faculty and students who attended that we were one of the very best programs in the country," said Doyle. "Given the fact that he has been a Site Visitor for more than half of the baccalaureate programs in America, this was a real testament to the excellence of our program."

New Partnership to Target Nanotech Safety

UMass Lowell nano researchers and federal health officials recently announced a new partnership agreement that will provide companies with practical research to guide the development of nanotechnology that is safe for workers.

Under the agreement, the National Science Foundation Center for High-rate Nanomanufacturing (CHN) - a collaboration of UMass Lowell, Northeastern University and the University of New Hampshire - will partner with the National Institute for Occupational Health and Safety



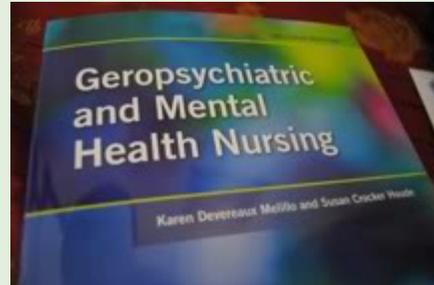
Chancellor Marty Meehan, center, announced an agreement with NIOSH at the Destination Nano conference at UMass Lowell. From left, School of Health and Environment Dean Shortie McKinney, Prof. Michael Ellenbecker, Chuck Geraci, Dr. Candace Tsai, Prof. Joey Mead and Provost Ahmed Abdelal.

(NIOSH). The federal agency conducts research to prevent work-related injuries and illnesses, and to identify and address potential occupational health and safety concerns related to the nanotechnology industry.

[Read more in the ENews story.](#)

Caring for Aging Population Textbook to be Used Nationwide

Colleges throughout the country will be using a one-of-a-kind textbook that combines the study of aging with that of psychiatric mental health to teach nursing students and professionals the best ways to identify and care for the growing number of older adults with mental health issues.



Chair of the Nursing Department Karen Devereaux Melillo (left) and Assoc. Dean of the School of Health and Environment Susan Crocker Houde (right) co-authored and edited the second edition of "Geropsychiatric and Mental Health Nursing." Many UMass Lowell nursing faculty and graduates authored chapters on topics such as sleep disorders, family caregiving, problem behaviors and nursing interventions



in dementia care.

Karen Melillo answers questions about caring for the mental health of the aging population in the United States.

[Read more in the ENews story.](#)

Nursing Students Without Borders Heading to Africa, Raising Funds



The Nursing Students Without Borders group is traveling to Ghana, Africa, in January 2011 to provide nursing care and education to improve lives.

This is the group's third trip, during which they will provide health education on HIV, infection control, child development and quality nutrition. They will also deliver donated medical supplies to outreach clinics.

If you would like to make a donation to contribute to the purchase of medical supplies as well as help to defray the students' travel costs, please [give online](#).

Student News



Vivian Lasnier was the Dean's Award winner for the Department of Clinical Laboratory and Nutritional Sciences. Vivian also received a Chancellor's Medal for the School of Health and Environment. She is currently employed in the Clinical Laboratory of Anna Jaques Hospital in Newburyport, Mass. and is a graduate student in the Clinical Laboratory Sciences degree program.



Katie Tenaglia (left), a senior in the Community Health and Sustainability Department, is working as an intern with Nancy Goodyear of the Clinical Laboratory and Nutritional Sciences Department and Jason Marshall of the Toxics Use Reduction Institute Laboratory. She will be testing the performance of traditional disinfection products as well as less toxic products on both dirty and clean surfaces.

Amanda Murray and Alex Gyebi (right), students from the Department of Community Health and Sustainability (Alex graduated in May and is now a Work Environment graduate student) participated in the national Occupational Health Internship Program this summer. They presented their research during a videoconference in August 2010. The students described how they involved workers in formulating the project, summarized their findings and described the final health education product that they provided to their host union/community group. The students' final reports will be used by The New England Consortium to develop new curriculum that meets the needs of construction workers.



Exercise Physiology Students - in photo from left, Andrew Macduff, Lyra Clark, Diana Perreault and Brandon Lyons as the alternate - are participating in the College Bowl at the New England American College of Sports Medicine meeting in Providence, RI on Thursday November 11th. The competition is set up like the Jeopardy quiz show and tests the knowledge of student teams on physiology, anatomy, nutrition and pathology. Last year, UMass Lowell students won the New England contest, beating 15 universities and colleges. This year's team is looking for financial assistance from alumni and friends to help defray the cost of the trip.

Please contact [Cynthia Ferrara](#) if you can help the team.

Gabriela Kernan, doctoral student in Epidemiology in the Department of Work Environment presented the Distinguished Lecture in the Department of Thoracic Surgery at Brigham and Women's Hospital on September 17. The title of the talk was "Mesothelioma and employment in Massachusetts: Analysis of Cancer Registry data 1988-2003."

Jamie Tessler (doctoral student) and Cora Roelofs (research faculty) of the Department of Work Environment presented an interactive workshop titled "Preventing Back Injuries on the Farm and in the Garden" at the Northeast Organic Farming Association Summer Conference in August.

Priyadarshini Sengupta Dasgupta and Xiaolu Jing are the 2010 recipients of the [American Society of Safety Engineers](#) Greater Boston Chapter academic scholarship awards. They are maintaining high GPA's as well as demonstrating leadership within their respective research projects. These research projects aim to provide risk-reducing solutions to the construction trades that lead to long term injury preventions. The Department of Work Environment has an active safety chapter that welcomes all students (including undergraduate). Prof. Maria Brunette is the advisor.



From left, GBC President Tom Rich, Scholarship winners Xiaolu Jing, Priyadarshini Sengupta Dasgupta, and Mike Sample, GBC Student Affairs Chair



A new Work Environment doctoral student is a physician from Indonesia, Dr. Lukman Hakim Tarigan (in photo, right). Dr. Tarigan, a faculty member at the University of Indonesia, received a Fulbright award to study epidemiology at UMass Lowell with Prof. Kriebel (in photo, left).

Welcome to New Faculty

Clinical Laboratory and Nutritional Sciences



Lecturer Javier Horta comes to UMass Lowell from Merrimack College, where he served as an Assistant Professor in the Chemistry Department since the fall of 2007, and before that as a Visiting Scientist under the Israel Family Foundation at Phillips Academy in Andover, MA, for one year. He is currently teaching Physiological Chemistry I Lecture and Laboratory courses. [Read more.](#)



Assistant Prof. of Nutritional Sciences Mindy Dopler Nelson's expertise includes nutritional sciences endocrinology and preventive medicine. Scholarly interests include the influence of genetic, endocrine, psychological, social, and dietary factors on the prevention, development, and treatment of obesity and its related diseases. [Read more.](#)

Nursing



Clinical Assistant Professor Sarah Belisle is a 2002 UMass Lowell nursing alum. Areas of clinical practice include, ICU, Telemetry, PACU, Pediatrics, Rapid Response. Research area of interest is childhood obesity. In addition to teaching, she is currently working in the emergency room at Anna Jaques Hospital in Newburyport, Mass.



Visiting Assistant Professor Lea Dodge has more than 16 years of nursing experience in positions such as a wound care nurse, infection control practitioner, quality control manager and employee health nurse. Lea has taught full-time at Lawrence Memorial/Regis College Nursing Program in both the classroom and clinical setting and most recently was an Associate Professor in Nursing at Bunker Hill Community College teaching both theory and clinical in pediatrics. At UMass Lowell, she will provide clinical instruction for juniors in the gerontological setting as well as teach a section of the Nursing Assessment Course and provide assistance in the open lab.



Clinical Assistant Prof. Deborah Van Etten's clinical experiences over the last 30 years include acute cardiac care, primary care in an outpatient setting, geriatric mental health consultation, psychotherapist and nurse educator. She is certified by the American Nurses Credentialing Center as a Gerontological Nurse Practitioner and Adult Psychiatric & Mental Health Clinical Nurse Specialist. [Read more.](#)



Visiting Assistant Professor Sandra Mote is a Clinical Nurse Specialist in Adult Psychiatric & Mental Health Nursing certified by the American Nurses Credentialing Center. She is licensed as an advanced practice RN by the state of New Hampshire and has been prescribing for the past 11 years. Her experience includes a total of 25 years in the field of psychiatric nursing in a variety of treatment settings. [Read more.](#)

Prof. Brunette Shares Research with University in Spain



Prof. Brunette talks with students about worker safety in front of the Temple of the Sagrada Família, a famous work by Antonio Gaudi in Barcelona. The temple is expected to be complete in 15 years.

The Universidad Autónoma de Barcelona (UAB) invited Professor Maria Brunette to give a talk about her research on the safety of the Latino workforce in the United States. She addressed faculty and graduate students in the University's School of Prevention and Integral Safety (EPSI: in Spanish - Escuela de Prevención y Salud Integral).

Brunette also participated at the oral defense of two dissertation proposals and will serve as a doctoral advisor for one of these graduate students whose research focuses on macroergonomics and construction safety.

Besides being Spain's only Doctorate Program in Prevention and Safety, EPSI works within a multidisciplinary and collaborative framework within an institution that is internationally renowned for its quality and innovation in research. Dr. Roser Martinez, EPSI graduate program coordinator, will be working closely with Dr. Brunette to establish a collaborative agreement for research and teaching. While at UAB, both prepared a Memorandum of Understanding that is being reviewed by the administration at both campuses.

The New England Consortium Awarded \$6.3M to Provide HazMat Training

UMass Lowell and The New England Consortium (TNEC) have been awarded a five-year \$6.3M grant from the National Institute of Environmental Health Sciences Worker Education Training Program. Professor Craig Slatin of the Department of Community Health and Sustainability will serve as Principal Investigator for the project, joined by Project Director Paul Morse.



For over 20 years, TNEC has received in excess of \$20 million from NIEHS to prepare workers to clean up hazardous sites in the New England region. Over each of the next five years, TNEC will provide hazardous waste and emergency responder training to over 1,400 workers in New England and New York.



Craig Slatin

TNEC conducts between 90-100 training sessions annually, including Hazard Disaster Preparedness with the goal of preventing occupational

Paul Morse

illnesses, injuries and fatalities. "We are delighted and happy to obtain continued grant award support from NIEHS as part of our cooperative agreement with NIEHS' Worker Education Training Program," Morse said.

Read more recent news from [The New England Consortium](#).

Assessing the Impact of Pesticide Exposures on Thai Infants



Prof. Susan Woskie of Work Environment (second from left) in Thailand with faculty and students from Mahidol Faculty of Public Health Occupational Health and Safety Department.

Prof. Susan Woskie of Work Environment traveled to Thailand this summer to conduct research with faculty and students from the Mahidol Faculty of Public Health Occupational Health and Safety Department.

The two-year \$252,390 National Institutes of Health funded pilot project "Neonatal Neurobehavioral Impacts of Iodine Insufficiency and Pesticide Exposures" aims to prevent environmental and nutritional causes of neurobehavioral deficits among Thai infants and young children.

iodine deficiency disorders, there are still many pregnant women who experience exposure to pesticides through maternal agricultural work and maternal intake of pesticide contaminated drinking water, and all of the provinces in Thailand have newborns born with iodine deficiency disorders.

Although Thailand has made great advances in decreasing pesticide poisoning and reducing

New Roles

Susan Houde began her position of Associate Dean in the School of Health and Environment in July. Previously she served as the Graduate Coordinator and Director of the MS and DNP program in the Department of Nursing. Her role as Associate Dean includes facilitating the development of research initiatives within the School, faculty development in relation to research, and assisting with the development of new academic programs within the School. She is enjoying her new role working with the Dean, faculty, and staff as Associate Dean.



Eugene Rogers is the new chair of the Department of Clinical Laboratory and Nutritional Sciences. He previously served for 15 years as Graduate Coordinator for the Department. During this time, the graduate program offerings expanded to include a BSMS program in Clinical Laboratory Sciences, Graduate Certificate Programs in Clinical Pathology (on campus and online), Public Health Laboratory Sciences and Nutritional Sciences and a new Professional Sciences MS program. As chair, he is also responsible for the BS programs in Clinical Laboratory Sciences (Medical Technology and Clinical Sciences Options) and Nutritional Sciences.

Faculty and Staff News

New Books

David Kriebel has just published a book with colleague and mentor Dr. Tom Smith of Harvard School of Public Health. The book **A Biologic Approach to Environmental Assessment and Epidemiology**, is now available from [Oxford University Press](#).

Melillo, K.D. & Houde, S.C. (Eds.) (2011). **Geropsychiatric and mental health nursing**. Sudbury, MA: Jones & Bartlett. Includes Nursing Faculty contributors Drs. Betty Morgan, Geoff Phillips McEnany, Ruth Remington, Professor Emerita May Futrell, and former graduates of UMass Lowell MS Nursing Program (Lisa Brown, Kathy Fabiszewski, Catherine Morency, Tracy Ramos).

New Publications

E Lewis. (2010). Emotional intelligence as a predictor for clinical performance in professional physical therapy students. *The Internet Journal of Allied Health Sciences and Practice*, 8(4). Research on the results of a study assessing the efficiency of the level of emotional intelligence as a predictor for clinical performance are detailed in this article. While the results showed that emotional intelligence was not a predictor for clinical proficiency under the scope of this project, they prompted further investigation in this area in the form of a longitudinal study.

Lewis E, Fors L, and W Tharion. (2010). Intertester and intratester reliability of finger goniometry. *American Journal of Occupational Therapy*, 64(4), 1-7. doi:10.5014/ajot.2010.09028. This manuscript details research on the efficiency, failings, and reliability of the use of the finger goniometer, which measures range of motion. This is a frequently used instrument. These results will improve the use of this tool in the clinical setting.

ES Lewis. Finger circumference measurements: Inter-tester and intra-tester reliability. (2010). *Hand Therapy (formerly known as the British Journal of Hand Therapy)*.15:69-72. doi:10.1258/ht.2010.010017. This article presents my research on the clinical use of finger circumference measurements, which can be used to analyze edema. Edema, common with each injury, causes permanent joint stiffness unless treated. These results show the variance of measurements between testers and provides suggestions for improving clinical results.

Shepherd, S and Woskie, S. [A Case Study to Identify Barriers and Incentives to Implementing an Engineering Control for Concrete Grinding Dust](#). *Journal of Construction Engineering and Management* [2010], published online April 27, 2010.

Woskie, S.R. [Workpractices for nanomaterial manufacturers in Wires Nanomedicine & Nanobiotechnology](#) Published Online: Jun 30 2010.

A new Lowell Center for Sustainable Production publication - **Green Toys Inc. - Striving to Make Sustainable Products** - is a case study written by Sally Edwards about a company that makes children's products from recycled high density polyethylene and applies the Lowell Center Framework for Sustainable Products to demonstrate the use and value of this tool for companies interested in improving the sustainability of their products. [Visit the Lowell](#)

[Center's web site to download](#) this report and more.

Also from the Lowell Center, Polly Hoppin and Molly Jacobs of the Environmental Health Program, in conjunction with the Asthma Regional Council, have recently published three documents to support health care payers, policy makers and employers as they incorporate home visits for asthma into health care financing and delivery. The publications are:

- 1) Hoppin P, Stillman L, Jacobs M. Asthma: [A Business Case for Employers and Health Care Purchasers](#). Lowell Center for Sustainable Production and Asthma Regional Council of New England. February, 2010.
- 2) Hoppin, P, Stillman L, Jacobs M. [Insurance Coverage for Asthma: A Value and Quality Checklist for Purchasers of Healthcare \(.pdf\)](#). Asthma Regional Council of New England, May, 2010.
- 3) Hoppin P, Stillman L, Jacobs M. [Investing in Best Practices for Asthma: A Business Case-2010 Update \(.pdf\)](#) Asthma Regional Council of New England, June, 2010.

Newly published articles by researchers from the **Center for the Promotion of Health in the New England Workplace (CPH-NEW)** include:

- 1) Cherniack M, Morse T, Henning R, Seidner A, **Punnett L**. [Health promotion site selection blues: Barriers to participation and implementation](#). *Journal of Occupational & Environmental Medicine* 2010; 52(6):626-34. Describes some of the internal factors that may reduce (or support) companies' enthusiasm for participating in research studies of - or implementing - an integrated approach to occupational health and worksite health promotion.
- 2) Faghri PD, Kotejoshyer R, Cherniack M, Reeves D, **Punnett L**. [Assessment of a worksite health promotion readiness checklist](#). *Journal of Occupational & Environmental Medicine* 2010; 52(9):893-9. Nursing home administrators and other managerial staff (Directors of Nursing, Wellness Coordinators, Social Services Administrators, etc.) interviewed from the same centers did not always agree on which workplace health promotion activities were underway in their centers.
- 3) **Miranda H, Punnett L, Gore R, Boyer J**. [Violence at workplace increases the risk of musculoskeletal pain among nursing home workers](#). *Occupational & Environmental Medicine* (published Online First, 27 September 2010).

Finkelstein FO, Juergenson P, Wang S, Santacroce S, Levine M, Kotanko P, Levin NW, **Handelman GJ**. Hemoglobin and plasma vitamin C levels in patients on peritoneal dialysis, *Peritoneal Dialysis International*, June, 2010.

Koren, A., Reece, S. M., & Kahn-D'Angelo, L. (2010). Parental information and behaviors and provider practices related to tummy time and back to sleep. *Journal of Pediatric Health Care*, 24(4), 222-230.

Knight M., Abdallah L., Findeisen M., Melillo K.D., & Dowling J. (In press). Making healthy connections: Introducing nursing as a career choice to middle school students. *Nursing Forum*.

Knight M., & Coakley C. (2010). Fall risk in patients with acute psychosis. *Journal of Nursing Care Quality*, 25(3), 208-215.

Koren, A., & Mawn, B. (2010). The ecological context of unintended pregnancy among

married women in the U.S. *Journal of Family Planning and Reproductive Health Care*, 36(3), 150-158.

Simons, S., Mawn, B. (2010). Bullying in the workplace - a qualitative study of newly licensed registered nurses. *American Association of Occupational Health Nurses*, 58(7), 305-311.

Fogg, C., & Mawn, B. (2010). HIV screening: beliefs and intentions of the homeless. *Journal of the Association of Nurses in AIDS Care*, 21, (5), 395-407.

Fogg, C., & Mawn, B. (In press), Development of the Fogg Intent-to Screen for HIV Questionnaire. *Research in Nursing and Health*.

Mawn, B., Siqueira, E., Koren, A., Melillo, K.D., Pearce, C., Hoff, L., Slatin, C. and the PHASE-In Healthcare Research Team. (2010). Health disparities among health care workers. *Qualitative Health Research*, 20(1), 68-80.

In the News

["Why are People Willing to Fork Out a Fortune for Shoes that Cost Little to Make?"](#) AlterNet, the reporter interviewed Pia Markkanen of Work Environment who authored the book "Shoes, Glues and Homework."

Presentations

Eugene Rogers, Dhimiter Bello and ShuFeng Hsieh presented research posters entitled: "Biological Oxidative Damage of Engineered Nanomaterials: Relationship with Physicochemical Properties" at the American Chemical Society's 240th National Meeting, Boston, MA; and "Variability in chemical composition and biological oxidative damage of carbon nanotubes: Implications for human epidemiology at the NIOSH Nanotechnology Conference, Keystone, Co.

Prof. Laura Punnett has given two talks in Sweden about the Center for the Promotion of Health in the New England Workplace (CPH-NEW): "A Conceptual Framework for Combining Occupational Ergonomics with Workplace Health Promotion" at the Royal Institute of Technology, Flemingsberg and at the Centre for Musculoskeletal Research, University of Gävle.

Cora Roelofs (research faculty) received a research grant from the Center for Construction Research and Training to investigate the implementation and impact of a health and safety training requirement for construction workers on publically funded projects in Massachusetts.

Professor Mary Elizabeth Hooker represented The American Society for Clinical Pathology (ASCP) by attending the national meeting of the American School Counselor Association (ASCA), held in Boston. Mary spoke about the career of Clinical Laboratory Medicine and the varied career paths, within this field, that are open to those entering the field at the baccalaureate level up to and including those entering as Pathologists with Medical School and Residency training in Pathology.

Professor Garry Handelman gave a series of lectures on nutrition at Tumaini University School of Medicine, Moshi, Tanzania.