Dear Friends,

As always, this year has flown by amazingly fast. The year has brought many positive outcomes for the School of Health & Environment at all levels ranging from outstanding students to research grants.

Our students continue to gain real-world experience here on campus and at company and community locations. We look forward to making even more connections with community agencies.

We have many special recognitions to celebrate. Our faculty, staff and alums are receiving awards (David Wegman honored) and being tapped by officials for top jobs (see the stories about Alice Bonner who was recruited by the Obama administration and Paul Morse by Governor Patrick). Our faculty and staff continue to tackle tough health issues like home nursing care (see the article about the incredible Safe Homes grant that will improve care for our families).

I wish you all a happy holiday season and look forward to 2011 - a year that promises to be equally rewarding.

All my best,

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

$1.8M Grant to Improve Home Care

The national demand for home health-care nurses and aides is expected to increase 50 percent by 2018 due to the aging population. And as more people live longer with chronic illnesses, the type of care needed in homes is becoming increasingly complex. These factors put more health-care workers, and patients, at risk for injuries and accidents in the home.

But help is on the way. UMass Lowell is embarking on a new study to promote health and safety in the home-care industry. The National Institute for Occupational Safety and Health (NIOSH) awarded the University a $1.8 million, four-year grant to research

The Safe Home Care project research team includes, from left, front, Pia Markkanen, Margaret Quinn and Susan Sama; back, School of Health and Environment Newsletter December 20, 2010

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issues facing Massachusetts home-care nurses and aides and develop education and training programs.

"Home health-care nurses and aides are dedicated professionals and proud of the work they do. If they come into a home with little space to work and they know that this patient needs assistance, they will not leave until they find a way," says Margaret Quinn, the study's principal investigator and a professor in UMass Lowell's Work Environment Department.

Read more of the ENews story.

Physical Therapy Students Gain Real World Experience Treating Athletes
For physical therapy students at UMass Lowell, the real world is no farther away than the campus's Costello Gym.

Raymond Goddu and Michael Caeran are gaining valuable hands-on experience in the University's gym, helping to heal UMass Lowell athletes, with the help of a Scott Waugh '90 Sports Therapy Fellowship Award.

In addition to tuition support of $6,000 per year, the scholarship provides students with an opportunity to work with UMass Lowell Head Athletic Trainer Artie Poitras, who was a mentor of alumnus and donor Waugh.

Read more of the ENews story.

Nursing Alum Tapped by Obama
Alice Bonner, who received her MS in Gerontological Nursing from UMass Lowell, has been offered a senior post in the Obama Administration with the Centers for Medicare and Medicare Services. She will lead the national Nursing Home Division of Survey and Certification starting in February. Since 2009, she has served as the Massachusetts Department of Health Care Quality Division Bureau Director.

"Our MS GNP program emphasizes policy throughout the curriculum and Alice is an outstanding example of where this background combined with her exceptional leadership, nurse educator skills, and outstanding role as a GNP clinician, have taken her," said Chair of Nursing Karen Devereaux Melillo.

Bonner was actively recruited by officials in the Administration who had learned of her work in Massachusetts and wanted to leverage that expertise to strengthen nursing homes throughout the country.

Francis Cabot Lowell Awards Presented to SHE Students, Wegman
UMass Lowell honored alumni, faculty, staff and members of the community at the annual Francis Cabot Lowell Awards and Honors Fellows Gala on Nov. 18. The awards and fellowships are given each year to alumni, faculty, staff and local residents who honor the values of both the university and the city of Lowell.
Student News

Eleven nursing students and Valerie King are leaving for Ghana, Africa on January 2 to provide medical care. Subscribe to the Nursing Students Without Borders blog feed to keep up to date on their 17-day mission trip:

Valerie King's blog
Student blog

Also read the recent article about Nursing Students Without Borders in the Chelmsford Patch, Local Nursing Students Make a Difference in Africa.

Djwan Scott, a Gerontological Nurse Practitioner MS student and coordinator of diversity support services for the Bring Diversity to Nursing project, has been selected as one of the Tufts Health Plan Nurse Scholars. Scott will receive a $7,500 award for this achievement that will help her complete her Master's degree.

Two graduate Nursing students, Erin Sweet and Erica Lupi, presented the Supervised Tummy-Time Educational Package to pediatric health care providers at the Lowell Community Health Center. Ainat Koren of Nursing and Linda Kahn-D'Angelo of Physical Therapy accompanied the students. The team presented information on the importance and how-to's of tummy time for infants.

Senior Exercise Physiology students Lyra Clark, Diana Perreault, and Andrew Macduff and alternate team member Brandon Lyons competed at the 7th Annual New England American College of Sports Medicine College Bowl competition at the fall meeting in Providence, RI. The team placed 6th out of the 18 competing teams. The College Bowl is a jeopardy-style competition, where teams of undergraduate students answer questions on a variety of topics, including physiology, anatomy, nutrition, and pathology of different diseases.

Prof. Robert Nicolosi's graduating Ph.D. student Anton Edmund of biomedical engineering who works out of Genzyme was the lead author in an article in Toxicology in Vitro. The
study which reduces the toxicity of quantum dots using Nicolosi’s new nanemulsion technology, was just licensed to a company. QDs have been used for many years for medical imaging, but because they are Cadmium-base, they are very toxic. By encapsulating them into "Green" nanoparticles, toxicity may be reduced up to 400 fold.

Nutritional Sciences students gave presentations on the symptoms, clinical manifestations, and nutritional care for a variety of disease states. Students in the photo presented on cardiovascular disease.

Senior nursing students Jason Hebert, Amanda Cincotta and Erica Lavoie participated in a flu clinic in Westford as part of their Community Health and Health policy course. All 82 students in the Community Health and Health Policy class contributed 5 hours of community health related service amounting to 410 hours of service.

Students Network and Learn at Mass. Public Health Meeting

Twenty-four Community Health and Nutrition majors had the opportunity to network and learn at the recent annual meeting of the Massachusetts Public Health Association (MPHA).

The meeting, Complete Neighborhoods, Complete Commonwealth: Joining Forces for FRESH Action, celebrated the health and nutrition victories MPHA has achieved this past year that included legislation to improve school meals and establish a Massachusetts Food Policy Council.

Students heard Geoff Anderson, President of Smart Growth America, speak about the important relationship between public health and sustainable development. They also attended workshops on creating healthy communities.

"The students were happy to make so many connections for future career opportunities while many of the MPHA members expressed delight in having so many future public health professionals interested in learning about the association," said Prof. Craig Slatin.

Community Health Students Evaluate Drug Abuse Programs

Students in Lee Ackerson’s Introduction to Epidemiology class put their public health research skills to work in collaborative service learning projects with the Lowell Health Department.
One group of students analyzed data from emergency department visits to investigate the patterns of opiate use and overdoses in order to provide local health professionals with information about how to best use their resources.

The second group performed an evaluation of an educational workshop developed by the Lowell Health Department that is aimed at preventing opiate overdose deaths.

Maria Ruggiero, a health educator at the Lowell Health Department who graduated from UMass Lowell in 2007, worked with UMass Lowell students Kristen Light, Nicole Walsh, Michelle Palladino, Michelle Nakhoul, and Liz Sheils to plan an evaluation of a workshop to prevent opiate overdoses.

**SHE Peer Review Journal Celebrates 20 Years**

*New Solutions*, an environmental and occupational health policy journal, celebrated its 20-year anniversary with a conference in New York City.

The journal began as a partnership between Professor Charles Levenstein of the Department of Work Environment and the Oil, Chemical, and Atomic Workers International Union (OCAW).

Within its first five years, the journal established an international reputation for cutting edge analysis, presenting some of the only critical policy work on womens' work, the interface between the labor and environmental movements and quantitative risk assessment as a tool for environmental public health decision-making and workers' compensation.

The sixty-person audience at the conference included occupational and environmental health researchers, labor and environmental activists, environmental justice activists. Participants agreed that it was critical to create new systems of production and consumption that support sustainable and health promoting social and economic development, especially as we face the realities of dangerous climate changes.

**Work Environment Students Participate in Ergonomic Week**

United Technologies (UTC) Fire and Security in Pittsfield, Maine invited Work Environment students to join in their Ergonomic Week Kaizen Event to help develop solutions for a current ergonomic hazard.

Master's students Clinton Smith, Lize Belice, Chuan Sun, and Smith Gadd were accompanied by Faculty Advisor Bryan Buchholz.

The students were asked to identify ergonomic hazards in the final assembly stage of the
company's new Signature II smoke and carbon monoxide alarm. After observing the task of concern, it became obvious that the hazard existed due to the highly repetitive process needing excess force and a twisting motion. In developing solutions, the ergonomic team from UTC and the students conducted a brainstorming workshop about re-designing tools and improving the process.

The students worked with a machinist in the on-site tool shop to develop tools to ease the burden of workers. At the end of the day, with solutions in hand, the UMass Lowell team presented their findings to senior management.

Site visits and hands-on activities are an integral part of applying what is learned in the classroom to real-world situations. The Department of Work Environment and the Work Environment Student Association (WESA) are very thankful for the opportunity provided by United Technologies.

Registration is Open for Heart Disease Prevention Conference
UMass Lowell's Center for the Promotion of Health in the New England Workplace (CPH-NEW) is sponsoring the annual educational conference of the Partnership for a Heart-Healthy, Stroke-Free Massachusetts.

The conference will be held in Devens, Mass. on January 28, 2011, 8am to 3:30pm. To register, visit the Partnership's web site.

Weighing the Evidence: Changing Policy, Systems, and the Environment for Preventing and Managing Heart Disease, Stroke and Diabetes

**Conference highlights include guest speakers:**
- Allison Kleinfelter, MA, achievABILITY, "Make the Move": Implementing the US Physical Activity Plan from the Local Trenches to National Policy Change
- David Zauche, Partnership for Prevention-ActionToQuit, Advancing Tobacco Cessation Policy
- Monica Kleinman, MD, AHA Emergency Cardiovascular Committee, New CPR Guidelines: What You Need to Know
- David McGillivray, Boston Marathon Race Director

Afternoon workshops will focus on policy, system and environment changes to support physical activity, smoking cessation, and stress reduction within communities, schools, worksites and healthcare systems. Associate Prof. Nicole Champagne of Community, Health, and Sustainability, and Co-Principal Investigator of the CPH-NEW Stress@Work project will co-lead the worksite workshop to discuss organization level strategies for controlling workplace stressors.

The Partnership is a statewide coalition dedicated to reducing heart disease and stroke in Massachusetts. UMass Lowell's CPH-NEW actively leads the Partnership's statewide focus to raise awareness among health professionals about the link between workplace stress and
Cover story by Rachel Massey, Sally Edwards and Monica Becker about risks in toys was featured on the cover of the Nov. 1 issue.

Presents That Hurt

Purchasing toys brings joy to those we love. Yet millions of recalls show that our well-intended gifts may be bringing hidden health risks as well.

The U.S. government recalled more than 17 million toys due to high levels of lead in 2007 and 12 million promotional drinking glasses in June 2010 because the painted coating contained cadmium, a toxic metal. While the numbers are alarming, these recalls represent only the tip of the iceberg.

Rachel Massey of the Toxics Use Reduction Institute, Sally Edwards of the Lowell Center for Sustainable Production, and Monica Becker, a fellow of the Lowell Center for Sustainable Production, co-authored the article "Toxic Chemicals in Toys and Children's Productions: Limitations of Current Responses and Recommendations for Government and Industry" in the Nov. 1 issue of Environmental Science & Technology.

They recommended actions for government and industry that include a consumers' "right to know" labeling system, banning or restricting the use of chemicals with well-documented toxicity and developing testing systems.

While these solutions may sound like good ideas for the future, what should parents do to protect their children today?

Read more of the ENews story for tips on how to purchase safe toys.

Rachel Massey was quoted in the LA Times article "Before you buy that train set do your homework."

Governor Selects Morse for Health & Safety Committee

Governor Deval Patrick appointed Paul Morse, Co-Principal Investigator and Project Director of The New England Consortium, to serve on the Massachusetts Employee Safety and Health Advisory Committee.

The Committee's mission is to evaluate injury and illness data, recommend training and implementation of safety and health measures, monitor the effectiveness of safety and health programs, and determine where additional resources are needed to protect the safety and health of the Commonwealth's employees.

Professor Emeritus David Wegman, former Dean of the UMass Lowell School of Health and Environment, also serves on the committee.
EPA Leader Visits Campus

New England EPA Administrator Curt Spaulding (right) told chilling stories of environmental disasters to students in Assoc. Prof. Nicole Champagne’s community health class recently. His campus visit was part of the celebration of the agency’s 40-year anniversary.

"You are all too young to remember the visible smog and contaminated water," said Spaulding. "The EPA began in response to severe water pollution throughout the United States. One defining moment of the environmental movement was when the Cayahoga River in Ohio became so polluted that it actually caught fire."

Read more of the ENews story.

Faculty and Staff News

Accolades

Claire Chamberlain, a faculty member at UMass Lowell for four decades, was inducted into the UMass Lowell Athletic Hall of Fame in November. She was a driving force for women’s athletics both at the University and the Northeast Region. Claire was a professor in Exercise Physiology until her retirement in 2008. She is pictured to the right of Prof. Karen Devereaux Melillo; left, Bob Melillo, past member of the Hall of Fame Committee and current College of Management Advisory Board Committee Member; and, right, Dick Kenney, UMass Lowell’s NCAA Compliance Officer. Learn more about Claire’s amazing accomplishments.

International Work

Rachel Massey, front row, right, of the Toxics Use Reduction Institute and Prof. Ken Geiser of Work Environment and the Lowell Center for Sustainable Production, front row, left, attended an international meeting convened by the United Nations Environment Programme (UNEP) in Geneva, Switzerland in November. The meeting kicked off the second phase of UNEP’s Global Chemicals Outlook project, which is looking at trends in chemical use worldwide and assessing health and environmental consequences of chemical use and exposure. Massey was asked by UNEP to coordinate the international team.
Prof. Craig Slatin, Chair of the Department of Community Health and Sustainability, and Charles Levenstein, Professor Emeritus, Department of Work Environment, were invited to make keynote addresses at the Health and Human Rights International Symposium. The conference was hosted by the Seoul National University's School of Public Health, celebrating its 50th Anniversary. Dr. Domyung Paek, Dean of the School of Public Health organized the conference to broaden the scope of health and human rights in Korea. Prof. Slatin spoke about Environmental and Occupational Health and Human Rights and Levenstein addressed Trade Secrets and Workers' Right To Know and Act for Occupational and Environmental Justice and Health.

Prof. Ken Geiser was the keynote speaker at the conference "Hidden Pollutants: New Paradigm: International Roundtable on Hazardous Chemicals" in Beijing. More than 100 participants attended from the Chinese Ministry of the Environment, various provinces, non-governmental advocates, public health professionals and faculty from the Universities. The purpose was to consider new directions for Chinese chemicals policy with particular attention to chemicals as water pollution. Ken also conducted a workshop on experiences from the Toxics Use Reduction Act program.

UMass Lowell lecturer Mitchell Weisberg was a keynote speaker at the Conference on the Future of the Regional Press ("O Futuro da Imprensa Regional") in Puerto Delgada, Azores, Portugal. His presentation "The Role of Print Media in the Digital Future" included insights, forecasts, and recommendations for print media in the digital future based on his research and teaching. He addressed the social benefits and impacts of digital technology. One opportunity he presented was for Azores Newspapers to use technology to bridge the local news gap for the large Azores population living in the Boston area. Weisberg is a lecturer in Healthcare Informatics and teaches a class on Computer Technology in Health Care in the Department of Community Health & Sustainability.

Publications

Photovoice in the Workplace: A Participatory Method to Give Voice to Workers to Identify Health and Safety Hazards and Promote Workplace Change - A Study of University Custodians, by Marian Flum (Work Environment), Carlos Eduardo Siqueira (Community Health), Anthony DeCaro, and Scott Redway, was recently published in the American Journal of Industrial Medicine. Photovoice, a photographic participatory action research methodology, was used in a workplace setting to assess hazards that were creating extremely high injury and incidents rates for university custodians and to promote the conditions to eliminate or reduce those hazards.

Procedure Trays: A call to action for sharps safety (C Galligan, S Chalupka, A Laramie and L Davis. Nursing 2009; 39(1):13-15) was republished in OR Nurse 2010 under the
This extends visibility of the problem of pre-packaged medical trays containing needles, scalpels and other sharps that lack protective safety features. Although federal and state laws mandate the use of sharps with integral safety features in hospitals, the Sustainable Hospitals Program investigation showed that sharps products without safety features are commonly included in prepackaged procedure trays. When hospitals ask for a tray with safety sharps, it becomes a "custom tray" and the cost increases considerably. Hospitals are then faced with competing demands of controlling costs and complying with the OSHA Bloodborne Pathogen standard.


Continuity of Rehabilitation Services in Post-Acute Care from the Ambulatory Outpatients' Perspective (.pdf). Working with his collaborators at the University of Murcia in Spain, Sean Collins has reported on the importance of continuity of care in post acute rehabilitation from the patient's perspective.

Book

Psychiatric and Mental Health Essentials in Primary Care by Lee Ann Hoff, and Betty D. Morgan, et al. (2010). Addresses key mental health concepts and strategies for time-pressured practitioners in various healthcare settings serving diverse populations. It offers theoretically sound and succinct guidelines for compassionate, efficient, and effective service to people in emotional and physical pain and distress, capturing the essentials of mental healthcare delivered by primary care providers.

Presentations

Mindy Dopler Nelson of Nutritional Sciences presented at the 60th Annual Conference for the American Society of Bariatric Physicians in New Orleans on Using Genetics to Determine the Best Weight Loss Diet.

Catherine Galligan of the Sustainable Hospitals Program presented to Massachusetts hospitals about What do you do when a [sharps medical] device fails: The benefits of voluntary reporting. This was part of the Mass. Department of Public Health's Occupational Health Surveillance Program's annual meetings, Sharps Injury Surveillance: What's Happening in Massachusetts Hospitals, held at three venues across the state. These meetings provide a summary of annual sharps injuries and sharps injury trends in Massachusetts hospitals.


C. M. Ferrara, D.M. Murphy. Creating partnerships to increase physical activity. Presented as a mini-symposium for the New England American College of Sports Medicine Annual meeting, Providence, RI.

Abdallah, L., Rising to the challenge: Promoting quality gerontological nursing care across all settings. Invited Keynote Speaker. Boston Area Chapter of the National Gerontological Nurses Association Meeting. O'Keefe Auditorium, Massachusetts General Hospital, Boston, MA.

Knight M., & Faberman J., Interdisciplinary research collaboration: From the committee to the community. Priscilla Aikenhead Lecture. McLean Hospital Grand Rounds, Belmont MA.

McDonough, A., College Students Perceptions and Beliefs About Sudden Cardiac Arrest. 2nd International Congress of Cardiology, Shanghai, China.
McDonough, A., presented the poster The Symptom Experience of Pulmonary Arterial Hypertension Patients; A Qualitative Study at the Council on Advancement of Nursing Science's 2010 State of the Science Congress on Nursing Research in Washington, DC.

Funding

The Lowell Center for Sustainable Production received a $140,000 endowment to support an international component of the Lowell Center Fellows Program. This funding came from a bequest to the Coolidge Center for Environmental Leadership where Cathy Crumbley used to work. It specialized in education and training programs for international graduate students and visiting fellows in the Boston area. Since the Coolidge Center no longer exists, she proposed that the bequest be redirected to the Lowell Center to support the international component of its fellows program.

Susan Crocker Houde, Angela Nannini and Karen Devereaux Melillo received $734,140 from HRSA's AEN Grant Program for the 3-year project, DNP's Caring for the Underserved after Massachusetts Health Care Reform. The goals are to recruit and retain culturally diverse DNP students; to prepare a DNP workforce to provide culturally competent evidenced-based care focusing on health promotion and chronic disease prevention and management to underserved populations across the life span; and to enhance skills of DNPs to assume leadership, advocacy and nurse educator roles in a post health care reform environment.

Dowling, J.S., Melillo, K.D., Abdallah, L., & Knight, M, received $298,990 for On the Move for Nursing’s Future: Bring Diversity to Nursing Mobile Simulation Laboratory. HRSA ARRA - Equipment to Enhance Training for Health Professionals.