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From the Interim Dean

When I first came to Massachusetts from upstate New York many years ago for freshmen orientation at the University of Massachusetts Amherst, I remember mentioning the "state" of Massachusetts. Immediately, my roommate corrected me and said, "this is the Commonwealth of Massachusetts." When I asked what that meant, she said, "it means that we are a community. We share our common wealth." If you look at the articles that have been in this newsletter all year long about the faculty, staff, alumni, and students here in the School of Health and Environment, you will find that we all share our common wealth of knowledge and expertise and our community is everywhere.



At UMass Lowell, the faculty, staff and students are a community united in the education and preparation of top notch health professionals to provide the best possible patient care and education. UMass Lowell alumni are managers who oversee the most efficient, effective, humane delivery of health services, public health professionals who work to protect us in our work, home and outside environments, and researchers who bring new ideas to life to solve complex health and environment issues both here, across the nation, and around the world.

Locally in the cities of Lowell and Lawrence and surrounding towns, we are partnering with their community leaders, care givers and youth workers on various projects related to health, bringing diversity to nursing, and improving health and environmental science education to grade school and high school students as well as to new immigrants. We are engaged in both outreach projects as well as research to solve the obesity epidemic and the related medical problems associated with it.

In the Commonwealth of Massachusetts, the Toxic Use Reduction Institute (TURI) is responsible for reducing pollution and drastically decreasing our exposure to toxic chemicals in the air, soil, and water, thus, making it much safer for all of us. Faculty and alumni research in cardiovascular disease, macular degeneration, ergonomics, gerontology, asthma, cancer, chemical and health policy, diversity in health care, chronobiology, safer work environments, the pathological and beneficial effects of nanoparticles, and numerous other projects place us at the forefront of some exciting discoveries and their applications. Our faculty and alumni are leaders in their local, state and national professional organizations, expert consultants to federal and state panels and committees across the country.

Internationally, through the work of our faculty, staff, alumni, and students, our common wealth of knowledge, and expertise extends to many countries including Ghana, Senegal, Niger, Peru, Brazil, Nicaragua, Mexico, Sweden, China, Thailand, and Vietnam as well as to international organizations such as the World Health Organization (WHO).

As we all share our common wealth, our community reaches beyond our local geography and literally makes the world a better place each and every day.

Best Wishes,

**Kay Doyle
Interim Dean
School of Health and Environment**

Where the Jobs are in a Slumping Economy

Did you know that the U.S. is producing about 5,000 medical laboratory technologists a year but needs 10,000-15,000?

One of the reasons for the shortage is low awareness of the profession. A recent industry survey stated that 76% of respondents reported that they heard about the career option only after leaving high school.



*AABB News, [Jobs in a tough economy, Clinical Laboratory Careers, Present and Future \(.pdf file\)](#).
Kay Doyle quoted.*

The [American Society for Clinical Pathology \(ASCP\)](#) and other groups are launching active recruitment campaigns. Massachusetts hospitals and independent medical reference laboratories are raising visibility of the profession by celebrating National Medical Laboratory Professionals Week, April 19-25, by sharing information and recognizing lab staff achievements.

"Many people are unaware of the important role that lab professionals play because they work behind the scenes," says SHE Interim Dean Kay Doyle who recently received the ASCP Member Excellence Education Award. "They are the critical link in helping doctors make accurate diagnoses, yet the profession is often overlooked as a career."

In addition to low awareness, the shortage is caused by the increasing number of aging baby boomers who need care, the closing of educational programs due to hospital mergers, and the retiring of clinical lab professionals. "Of course, no job is guaranteed but the bottom line is that multiple factors are increasing opportunities for people interested in pursuing the clinical lab path," says Doyle.

Medical technologists, also known as clinical laboratory scientists, perform laboratory tests using sophisticated, state-of-the-art instrumentation. The results account for 75 to 80 percent of the information that physicians' determinations for diagnosis, prognosis, and treatment monitoring are based.

They are responsible for dozens to hundreds of patient tests per day depending on the laboratory. "This is one of the reasons why it is so important to have properly educated personnel performing these essential tests," says Doyle. "The impact they have on patient health care is enormous."

In addition to hospitals, biomedical device and pharmaceutical companies as well as independent research laboratories are also recruiting medical technologists since these organizations develop medical products.

UMass Lowell offers a Clinical Laboratory Sciences BS degree with two options - [Medical Technology](#) and [Clinical Sciences](#). In 2006, the Clinical Laboratory and Nutritional Sciences Department launched the [Graduate Certificate in Public Health Laboratory Sciences](#), the first graduate Public Health Laboratory Sciences program in the US. It was in response to the country's risk for emerging infectious diseases, pandemics, and biological and chemical threats.

"This career offers many interesting possibilities, which is good news especially these days with the down economy and daily headlines of job cuts," says Doyle.

School of Health and Environment Awards Creativity Grants

The School of Health and Environment awarded three \$1,000 Creativity Grants to advance the mission of the school--to promote human health and development that enables people to live in safe and productive communities and environmentally sustainable economies.

Faculty received funds to support teaching, research, or service for the following projects:

1) Childhood Obesity: Can Infant Position and Activity Predict Rapid Weight Gain and Delayed Gross Motor Development?

Project Team: Asst. Prof. Aina Koren and Prof. Susan Reece of Nursing and Prof. Linda Kahn-D'Angelo of Physical Therapy.

The project team will analyze data collected in a previous SHE Seed Grant about infant positioning,

infant weight, family health behaviors and their possible associations with infant rapid infant weight gain. The project team will assess possible relationships between the time infants spent on their abdomens early in life (Tummy Time) to infant body mass index at 2 months, four months, and one year of age. Preliminary results from the first phase of this study were presented at the 2008 APHA in San Diego, and a paper has been submitted to the Journal of Pediatric Health Care for review.

2) Biomarkers of Stress, Injury, and Illness in College Athletics

Asst. Prof. of Physical Therapy Cynthia Ferrara

Asst. Prof. Ferrara is working with athletic teams at UMass Lowell to examine the relationships between biomarkers of stress, injury and minor illness, and performance. Substantial research exists relating increased levels of stress with a number of clinical conditions, including hypertension and cardiovascular disease, reduced control of blood glucose in individuals with diabetes, reduced immune system function, and increased risk of recurrent illness or injury. Yet, there is limited research examining physiological markers of stress, and the incidence of injury or minor illness in athletes. The ability to use physiological and psychological markers of stress to predict the risk of illness or injury in an athlete presents a novel and important use for this information, and can then be used to develop appropriate interventions to counteract the negative effects of stress. The results of this study can be applied to other situations, including the workplace or campus community to reduce stress and the risk of injury and illness.

3) Reaching Out for Care of the Elderly: Sophomore Nursing Student Preparation for the Department of Public Health Certification Examination for Nursing Assistants.

Project Team: Asst. Prof. Lisa Abdallah of Nursing and Patricia Walker, Coordinator of Diversity Support Services, Bring Diversity to Nursing Project, Department of Nursing.

This project team will design and implement a program to provide the required clinical training at The Mary Immaculate Nursing Home and Restorative Center in Lawrence, the current clinical site for the Nursing Fundamentals Course. The funds will support a Registered Nurse with at least 2 years experience to serve as the clinical instructor for eight students in order for them to be qualified to sit for the Massachusetts Department of Public Health's (DPH) Certification Examination as Nursing Assistants. This early health care experience will assist students to enter the health care area professionally prepared, with increased confidence in patient encounters and will strengthen their commitment to their chosen health care profession. Second, it will provide health care facilities, especially long term care, with qualified staff assisting with the shortage in the long term care workforce. Finally, it will expose nursing students early on to the care of the elderly patient and may enhance their decision to continue providing care to this population once they graduate.

Physical Therapy Service Learning Project Reaching out to Nicaragua's Villages

Doctoral physical therapy students Cheryl Nobrega (left), and Linda Morin (right) are working with Asst. Prof. Deirdra Murphy (middle) on their international service learning project.



They will provide educational materials for the local healthcare providers of children with disabilities in the impoverished Northeastern Nicaragua Villages of Negrowas, Mongallo, and Montie Cristo.

Cheryl and Linda have developed a training manual as part of an instructional course, which includes education of child motor development, therapeutic activities and therapeutic treatments. The training manual will be used to train each of the communities Brigadistas' (community health workers), the children's families and caregivers.

In June, Murphy will travel to Nicaragua to meet with each of the village Brigadistas' to assess the community, family and individual healthcare needs of the children with disabilities. She will also conduct an instructional course where each participant will receive the manual developed by Cheryl and Linda to provideh continued reference and support.

Ken Geiser Named Member of California's EPA Green Ribbon Science Panel

California's Department of Toxic Substances Control announced the selection of 27 members to the state's new Green Ribbon Science Panel, an advisory panel created for California's Green Chemistry program. Prof. Ken Geiser of Work Environment was named Co-Chair of the Panel that was established with the passage of two landmark Green Chemistry laws signed last year by California Governor Arnold Schwarzenegger (AB 1879 - Feuer and SB 509 - Simitian).



The Panel will provide advice and act as a resource to the Department of Toxic Substances Control and the California Environmental Policy Council, which directs the Department to develop regulations that: (1) create analytical methods for safer chemical alternatives, and (2) identify and prioritize chemicals of concern. Panel members will serve staggered three-year terms and may be reappointed with no limitations.

Read the full [press release](#).

Physical Therapy Student Wins \$1,000 Grant

Graduate physical therapy student Amanda Royce-Tolland has won the 2009 [Carter Academic-Service Entrepreneur Award](#) for Campus-community Collaboration.



From left, Barbara Caynes, Executive Director, Massachusetts Campus Compact, Physical Therapy students Amanda Royce-Tolland and Lauren Mistretta, Elisa Garibaldi, Lowell Community Health Center, and Asst. Prof. Deirdra Murphy.

She will use the \$1,000 award to implement a healthy living training program in collaboration with community partners.

[Read the ENews Article](#)

Honoring David H. Wegman, Founding SHE Dean

Please join us on Friday, May 8th, 2:30 - 4pm, Alumni Library, North Campus, UMass Lowell, to honor David Wegman. This event was canceled in December due to the ice storm.

Please RSVP to [Sokny Long](#) before May 1st.



Student News

Graduate Student Nurse Practitioners and faculty who provided health screenings to residents at the Lowell Transitional Living Center are featured in a Lowell Sun video [UML Nursing Students Help Homeless](#). Students **Mary Ellen Cooper** and **Mery Bashir** were interviewed as well as **Assoc. Prof. of Nursing Betty Morgan**.



Bhakti Patel who is taking graduate classes in Health Management and Informatics and graduating this May with a Bachelor's degree in Exercise Physiology, was hired as a Clinical Data Repository paid summer intern by Partners HealthCare. She will assist with a security research project and

quality assurance testing of clinical systems. **"This is a very prestigious, well publicized and much sought after internship," says Assoc. Prof. of Community Health and Sustainability James A. Lee. "It is fantastic that one of our students was selected."**

MS Nursing Student **Renee Creeden** won first place for the Student Poster at the Eastern Nursing Research Society exhibition in Boston: **Bring Diversity to Nursing: Use of Zoomerang Survey to Assess Interest in Nursing as a Career Choice**

Research for the poster was conducted by: Renee Creeden, Prof. Karen Devereaux Melillo, Assoc. Prof. Jacqueline Dowling, Asst. Prof. Lisa Abdallah, Dr. Mary Findeisen, and Asst. Prof. Margaret Knight.

Politics of Health Class Attends Rally for Public Higher Education

Front row, left to right: Haley Catarius, Leana Gaudette, Kendra French. 2nd row: Shelley Glow, Andreea Apostol, Brittany Butler. Back row: Patrick Bonner, Holly DeSimone, Bridget Kent, and Alex Asiedu Gyebi.



Fourteen students from Assoc. Prof. Slatin's Politics of Health class participated in a political rally at Boston Common and then a march around the State House on April 8th. They visited with legislators to help them understand the importance of increasing funding for public higher education in Massachusetts.

The event was sponsored by PHENOM - the Public Higher Education Network of Massachusetts.

Although this was not a public health event, Slatin brought his class to help them understand the political process for gaining support for social services. "Not only is education strongly related to health, but affordable high quality higher education is near and dear to the students' hearts," says Slatin.

The students joined other students from many campuses of the Massachusetts public higher education system. They listened to speakers call upon the legislature and the Governor to increase resources for public higher education and lower the costs to students and their families. They had an opportunity to consider the calls for increases in state taxes, even during this troubled economic time.

Andreea Apostol, a Community Health junior, commented after the trip, "Going to this rally got me very excited about participating in other rallies in the future, because I now realize that we should have our voices heard when it comes to politics. Being out there may make a difference for public higher education and I am proud and excited to have been a part of that."

Read All About It!

[Lowell Speaks up against Big Tobacco Lowell Sun](#)

Assoc. Prof. Craig Slatin co-authored an op-ed article about supporting the House Bill 2773, An Act to Reduce Youth Consumption Of Tobacco Products by Equalizing the Cigarette Excise Tax.

[Eat for Your Eyes, Eating Well Magazine](#)

Assoc. Prof. Thomas Wilson comments on the benefits of eggs on eyesight health.

[Dream Jobs Turn Into Nightmares, Somerville Journal](#)

Asst. Prof. Eduardo Siqueira is quoted in story about occupational hazards for Brazilian workers. The article discusses the University's research report [Collaboration for a Better Work Environment for Brazilians in Massachusetts.](#)

[Hospital Cleaning Products Could Put Health of Staff at Risk, Nursing Times](#)

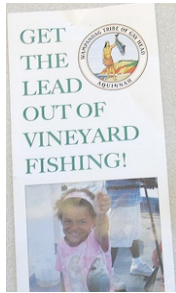
Several online publications including the Nursing Times and [Harvard Crimson](#) picked up stories about the cleaning products research that was published in the [Environmental Health journal](#) co-authored by a Work Environment doctoral student Anila Bello (now a post-doc student at Harvard School of Public Health), Professors Margaret Quinn and Don Milton of Work Environment, and Melissa Perry at the Harvard School of Public Health.

TURI Community Grants also Available to Faculty

Please spread the word to any non-profit community, environmental or municipal organization in Massachusetts that the Toxics Use Reduction Institute (TURI) is requesting proposals for projects that reduce the use of toxic chemicals in living or work spaces. The proposal deadline is June 30, 2009.

Up to \$1,000 grants are available for smaller toxics use reduction projects including for faculty members who could use the funding for service learning projects that encourage students to educate communities about toxic chemicals and safer alternatives.

Up to \$15,000 is available for fully developed work plans and partnerships.



Sample project ideas include increasing the use of green cleaning products and pest control substances, encouraging organic lawn care methods on private or town properties, reducing lead sinkers used in recreational fishing, and raising awareness of toxic materials used in hair and nail salons.

TURI is holding a pre-grant workshop on May 28, 2009, 2-4PM at UMass Lowell, to help with project ideas and the application.

To sign up for the workshop or to learn more, contact [Joy Onasch](#), TURI Community Program Manager, 978-934-4343.

Visit the [TURI community web site](#) to peruse past projects and download a grant application package.

SHE Students Earn Student-Athlete Awards

Congratulations to all SHE students who were honored on National Student-Athlete Day on April 3rd. The annual ceremony honors UMass Lowell students who earn the top grade point averages on each team for the fall 2008 semester. Jenna Banks and Mike Clem were also recognized for earning the top grade point averages as freshmen in 2007.

- Jenna Banks, a nursing major who received a 3.9 grade point average in the fall, is a member of the women's cross country team which captured both the Northeast-10 Conference and NCAA East Region championships last fall.
- An exercise physiology major, Mike Clem earned 4.0 last fall and helped the men's soccer team to a 13-4-4 record which included a share of the NE-10 regular season championship, the No. 1 seed in the NE-10 Tournament and a bid into the NCAA Tournament quarterfinal.
- Earning repeat honors was exercise physiology sophomore Hannah May of the softball team.
- Sophomore Brianne Bozzella earned a perfect 4.0 average while helping the women's soccer team to an 8-5-5 clip (6-3-5 NE-10) which included an appearance in the NE-10 Tournament semifinal.
- Earning a 3.9 for the fall, sophomore Lizzy Ales helped lead the field hockey team (20-5, 17-1 NE-10) to its third NE-10 regular season title and NCAA title game appearance in four years.

Handelman and Lee Receive \$200K Grant to Fight Diabetes in Young People

UMass Lowell Profs. Garry Handelman, left, and A. James Lee, right, are teaming up with UMass Medical School Prof. Lori Pbert to fight diabetes risk factors in children.



The researchers will collaborate with the Lowell Community Health Center and the Boys and Girls Club of Greater Lowell to develop nutrition and physical activity programs for 9-13 year olds. The goal - to prevent young adults from developing Type II diabetes, a disease that typically occurs in 50- to 60-year-olds but has shown a spike in younger individuals.

[Read the full ENews Article](#)

Faculty and Staff News

Publications

Ackerson LK, Viswanath K. [Communication inequalities, social determinants, and intermittent smoking in the 2003 Health Information National Trends Survey](#). Preventing Chronic Disease 2009;6(2).

The study uses a nationally-representative database to investigate the association of social characteristics and health media use with intermittent smoking. One of the main findings is that attention to health media sources increased the likelihood that a person would be an intermittent smoker instead of a former or a daily smoker.

Presentations

Ken Geiser delivered the Geller lecture [Considering New Directions for U.S. Chemicals Policy at Clark University](#) at Clark University in Worcester on April 14th. The Geller Endowed Lecture Series addresses current topics related to areas of energy, environment and sustainability.

Murphy DA, Ferrara CM. **Promoting Health on a College Campus: The Physical Therapist's Role**. Combined Sections Meeting of the American Physical Therapy Association. Las Vegas, Nevada, February 9-12, 2009

Murphy, DA, Duffy, J, Champagne, N. **International and Interdisciplinary Service-Learning: Civic Engagement for a Global Society**. New England Regional Campus Compact Spring 2009 Conference. Amherst, MA. March 30th-31st, 2009.

Shellie Simons and Barbara Mawn will present a paper entitled **Bullying among Massachusetts Nurses: Voices from within** at a conference Ending Horizontal Violence: Creating a culture of cohesion among nurses. Providence, RI, April 2009.

Melillo, K.D., Provided Board of Directors' Education Program to D'Youville Senior Care on **Preventing Medication Errors**, March 6, 2009

Dr. G. Rumay Alexander, Director, Office of Multicultural Affairs Clinical Associate Professor, University of North Carolina Chapel Hill, School of Nursing, spoke at the Faculty Cultural Competency Workshop in March. The talk was sponsored by the Bring Diversity to Nursing (BDN) Project funded by the Massachusetts Department of Public Health, **Reducing Racial and Ethnic Health Disparities: Workforce Development Grant**.

Shellie Simons and Barbara Mawn presented a paper entitled **Bullying among Massachusetts Nurses: Voices from within** at a conference Ending Horizontal Violence: Creating a culture of cohesion among nurses. Providence, RI.

Prof. Mary Elizabeth Hooker served as a judge for the 33rd Region IV Science Fair at Somerville High School on March 21 in the categories of Biology - Ecology - Evolution.

Assoc. Prof. Tom Wilson gave a presentation at the Greater Lowell Community Team Work Education Day entitled **Women, Diet and Heart Disease** as part of the "Aging Gracefully" Seminar on March 18 at Middlesex Community College.

Beth Halaby, professional staff in the Department of Clinical Laboratory and Nutritional Sciences, visited with freshman students of Greater Lowell Technical School to discuss what a Medical Technologist does in different parts of the laboratory.

Awards

The American Society for Clinical Pathology (ASCP) awarded Prof. Kay Doyle the Excellence in Education Award at the Society's Leadership Exchange Meeting in Philadelphia. As past chair of the Department of Clinical Laboratory and Nutritional Sciences and the director of the Medical Technology program at the University of Massachusetts Lowell, Doyle was selected for her continued dedication to the laboratory science education. Read the [press release](#).



From left, Kay Doyle, Lynn Chakkpahak, Chairperson of the ASCP Laboratory Professionals Council, and Pat Knebel,

winner of the ASCP National Leadership in Management Award.

Grant Funding

Ainat Koren and Susan Reece of Nursing and Linda Kahn-D'Angelo of Physical Therapy were awarded a Public Service Endowment Grant to develop the **Supervised Tummy Time Educational Package (STTEP)**. The educational program will be used to inform pediatric health care professionals and parents about the importance of placing newborn infants on his or her stomach several times a day while supervised.

Asst. Prof. of Physical Therapy Deirdra Murphy and Asst. Prof. of Psychology Ashleigh Hillier were awarded a Public Service Endowment Grant for the project **Fit and Fun: A physical activity and relaxation program for community dwelling underserved youth on the autism spectrum**. The physical activity program is expected to help people in the Lowell area with autism spectrum disorders improve sensory integration, coordination, muscle tone, and social skills development.

Duffy, J., Gray, V., Murphy D., Duffy, D., Kijewski, V., Lewis, D., Montrie, C. Shudlman, M. Purchia, R. Exploration in Teaching and Learning \$5,000 Grant for **Village Empowerment Course Proposal**.

Ferrara, C. Murphy D., Day, D., Lewis, E., Collins S. Exploration in Teaching and Learning \$2,500 Grant, **Strategies for Success in the Freshman Year: Improving Academic Performance and Student Retention in the Exercise Physiology Program**.

Appointments

Prof. Kay Doyle was elected to a third term to the **American Society for Clinical Pathology (ASCP) Board of Registry Board of Governors**. ASCP is the oldest, largest, and most respected professional organization for Laboratory Medicine in the world. The Board of Governors also has representatives from the American Association for Blood Banks, the American Association for Pathologists' Assistants, the American Society for Hematology, the American Association for Clinical Chemistry, the American Society of Cytopathology, the Clinical Laboratory Managers Association and the National Society for Histotechnology.

David Wegman of Work Environment is chair of a new National Academy of Sciences Committee--Human-Systems Integration--for the project [The Role of Human Factors in Home Healthcare](#). The Committee will examine the impact of human factors' issues relevant to the safety and quality of home healthcare.