Welcome to Issue 11 of DMICE Tracks, the newsletter of the Department of Medical Informatics & Clinical Epidemiology. Everything continues to be quite “stimulating” for the department as we take advantage of opportunities under the American Recovery and Reinvestment Act (ARRA) of 2009, also known as the economic stimulus program.

Among the many programs in the stimulus package are those devoted to health information technology and comparative effectiveness research. These correspond to the areas of work and expertise of the department, namely medical informatics and clinical epidemiology respectively. While some of the major programs still remain to be announced, we have already had some programs funded by the package, both our training program and individual investigators.

We have received two ARRA funding awards for our biomedical informatics training grant from the National Library of Medicine. This program funds a steady state of ten pre-doctoral (Ph.D. students) and post-doctoral (usually also pursuing a second degree) fellows.

Informatics Educational Program Celebrates Several Milestones

The Biomedical Informatics Graduate Program reached a number of milestones at the June 2009 graduation. The program has now awarded more than 250 fellowships, degrees and certificates including 122 master’s degrees, 101 graduate certificates, and four Ph.D. degrees.

Formed three years ago when it was recognized that there was enough distinction in bioinformatics to warrant a separate track, the Bioinformatics and Computational Biology Track saw its first graduate this year. Under the leadership of Shannon McWeeney, Ph.D., a new curriculum was developed and implemented. The first graduate from the track was Cheryl Dingman, who received her Master of Biomedical Informatics (M.B.I.) degree in June. About two dozen individuals are in the pipeline for the M.B.I. degree, the Master of Science in Biomedical Informatics, or the Ph.D. degree.

Another milestone reached is the receipt of additional funding, in the form of administrative supplements to its National Institutes of Health (NIH)/National Library of Medicine (NLM) training grant to expand the funding. A $1.1 million award is providing eight one-time, two-year fellowship slots for four pre-doctoral (Ph.D.) students and four post-doctoral fellows. Another $180,000 award has expanded our summer internship program. The internship program provided funding for 13 undergraduate students to expose them to the field and possible pursuit of graduate study. It also provided funding for two community college faculty to expose them to the field and to better inform efforts underway in the state to bring health informatics programs to the community colleges.

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On June 4, 2009, OHSU awarded 40 advanced degrees in biomedical informatics, the most to be awarded since the program had its first graduates in 1998. This academic year 18 students received master’s degrees while 22 received graduate certificates.

Four students received the master of science degree (listed with their thesis topic):

**Michael Shapiro**, Portland, OR  
**Thesis:** “Can an Automated Tailored Health Messaging System be an Effective Tool for Health Coaching Elders?”

**Nathan Bahr**, Portland, OR  
**Thesis:** “Discovering Synergistic Features Between Candidate Researchers for Translational Research”

**Jayashree Kalpathy-Cramer**, Ph.D., West Linn, OR  
**Thesis:** “Classification and Retrieval of Endoscopic Images from the Clinical Outcomes Research Initiative Collection”

**David Muller**, Vancouver, WA  
**Thesis:** “Effectiveness of a Secure E-mail Reminder System for Colorectal Cancer Screening”

Fourteen students received a master of science in biomedical informatics degree (listed with their capstone project):

**Jennifer Abrahamson**, M.L.S.  
**Capstone Project:** “Personal Medication Management in Everyday Life: Preliminary Results regarding Elders’ Preferred Medication Reminder Modalities”

**Cheryl Dingman**, Redmond, WA  
**Capstone Project:** “Mapping Response to Alcohol in Conscious Mice Using fMRI: Identification of Brain Response Patterns”

**Heather Hill**, D.D.S., Lake Oswego, OR  
**Capstone Project:** “The Impact of a Clinical Information System on Users in the Dental School”

**Amy Kerfoot**, Portland, OR  
**Capstone Project:** “Using a Distributed Cognition Framework to Understand Medical Rounds: Implications for Technology Development”

**Denny Lee**, Newcastle, WA  
**Capstone Project:** “Protecting Patient Data Confidentiality Using Differential Privacy”

**Purvi Mehta**, Foster City, CA  
**Capstone Project:** “Cholesterol related Information on the World-Wide Web: Qualitative Study Highlighting the Information Seeking Behavior of South Asian Indian Males in America”

**Sandra Mendel**, Springboro, OH  
**Capstone Project:** “An Implementation Strategy for HER in Small Primary Care Offices: Incorporating Human factors Engineering”

**Vishnu Mohan**, Tigard, OR  
**Capstone Project:** “Change Driven by the Patient-Consumer: A Study of Organizational Behavior in the Context of Consumer Health Informatics”

**Nick Nepochatov**, Oregon City, OR  
**Capstone Project:** “Translational Research Web Application Framework”

**Carolyn Petersen**, Rochester, MN  
**Capstone Project:** “Secondary Uses of Personally Identifiable Genetic Information: Benefits, Problems, and Potential Solutions”

**Mary Stanfill**, Valparaiso, IN  
**Capstone Project:** “Systematic Review of Research Evaluating Automated Coding Systems”

**Ronald Stevenson**, Portland, OR  
**Capstone Project:** “How can Consumers of Internet Healthcare Information be Segmented? A Systematic Review”
OHSU Hosts Conference for 20 National Library of Medicine Fellowship Programs

On June 23-24, 2009, 311 National Library of Medicine (NLM) fellows and program directors ascended on the OHSU campus for their annual training program meeting. The meeting brought together people from 20 NLM-funded training programs from across the country as well as NLM staff, including director Donald A. B. Lindberg, M.D.

“It was exciting to bring together the future leaders of the field on our campus. The fantastic weather and great venue didn’t hurt,” said William Hersh, M.D., professor and chair and director of the OHSU training program.

The two-day meeting featured both oral presentations and poster sessions given by both pre- and post-doctoral fellows. Two OHSU pre-doctoral fellows gave oral presentations. Emily Campbell Ph.D., R.N., presented “Cognitive Model of Medical Record Coding: Implications for Understanding Inter-rater Reliability” while Hollis Wright discussed “Occupancy Classification of PWM-Inferred Transcription Factor Binding Sites.”

At the poster sessions OHSU pre-doctoral fellow Steve Bedrick exhibited a poster on “Building Language Support Tools into Information Retrieval Systems,” and Heather Hill, D.D.S., a post-doctoral trainee, had a poster on “The Impact of a Clinical Information System on Users in the Dental School: A Case Study.”

Conference attendees dined al fresco at the Portland Art Museum on June 23rd, followed by a tour of the museum’s exhibit Virtual Worlds: M.C. Escher and Paradox. The next morning DMICE faculty featured their own research as a poster session during the OHSU Showcase.

Thanks to Lynne Schwabe, Diane Doctor and Andrea Ilg, DMICE educational program staff, who organized the conference from the OHSU end.

“The real credit goes to our department staff, who put in effort above and beyond their regular duties to insure the entire event ran smoothly,” said Hersh. “Our colleagues from around the country were impressed at how well organized everything was.”

NLM supports training programs at 20 universities in the US.
By Felicity Fields

With no less than four advanced degrees, Joan Ash, M.L.S., M.S., M.B.A., Ph.D., is a core component of the biomedical informatics program at OHSU. Thirty-three years after arriving at OHSU as associate director of the library, Ash made a slight career shift in 1989 to join the new medical informatics group that was forming at the university. Now a professor, Ash also serves as vice chair of the department, teaches two classes each year, and serves as principal investigator for POET, a long-standing, National Library of Medicine-funded project devoted to examining physician order entry systems.

Ash began her career as a medical librarian. She had already received a master’s degree in library science, a requisite for her career field, but a second master’s degree was considered advantageous for future career development. Accordingly, she pursued a second master’s in health science (community health education) and later followed it up with a master of business administration degree. It was during her M.B.A. program that Ash found her second calling.

Ash conducted research at the medical libraries of Yale, the University of Connecticut, and OHSU, and published study results related to health, information science, and user needs.

“It was really informatics, but we weren’t using the term back then,” Ash said of her research. Her M.B.A. program at Portland State University ignited a fascination with the concept of organizational behavior and convinced her to pursue a Ph.D. in Systems Science: Business Administration at PSU.

In the 1990’s Ash worked in DMICE (then called Medical Informatics and Outcomes Research) as a fellow while finishing her Ph.D. She received NLM funding for a fellowship in applied medical informatics, which allowed her to continue her research into organizational behavior. When she graduated from the fellowship she was invited to join the NLM faculty.

Now a professor, Ash conducts research centralized around a concept called computerized physician order entry (CPOE), which combines her interest in end user needs in health information with a behavioral or organizational viewpoint. During a national survey conducted with associate professor Paul Gorman, M.D., and professor and chair William Hersh, M.D., in the late 1990s, she discovered that the majority of hospitals surveyed did not have CPOE. Intrigued, she applied for and received funding from NLM to conduct a qualitative study of success factors to find out why more hospitals did not have CPOE.

At the beginning of the study, Ash’s research team called themselves the physician order entry team, which was quickly shortened to POET. During their first study, POET uncovered many unintended consequences of CPOE. In fact, there were so many unintended consequences that POET quickly found a second area of exploration: clinical decision support (CDS).

Their next project focused on barriers and facilitators to CDS. Today, POET is a multidisciplinary team of clinicians, information scientists, and ethnographers. They have studied CDS in community hospitals and ambulatory settings for the past two years and have just been awarded NLM stimulus funding for the next two years to build on that work.

Although POET demands much of Ash’s time and energy, she continues to share her fascination with organizational behavior with medical informatics students. Every year, she teaches Organizational Behavior and Management in Informatics, covering motivation, emotions, group and team behavior, communication, leadership, power and politics in organizations, conflict and negotiation, organizational structure, human resources, and organizational change as they relate specifically to informatics, especially to implementation of clinical systems. Ash’s other class is Qualitative Methods in Informatics, which covers study design and ethnographic techniques.

Ash is also an active member in the medical informatics community

“Informatics now encompasses many subdivisions, including nursing informatics, consumer health informatics, public health informatics, and bioinformatics as well as medical informatics. Informaticians now hail from multidisciplinary backgrounds and bring a wealth of diverse knowledge and skills to the field, making it dynamic and intellectually stimulating.”

– Joan Ash

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College Students Work as DMICE Summer Interns

This year, the DMICE summer internship program brought 13 college students to the department to work with faculty on research projects. Eight of the interns were funded by an American Recovery and Reinvestment Act (ARRA) supplement to the department’s National Library of Medicine informatics fellowship.

“The internship program is a boon for both the faculty and the students,” said assistant professor David Dorr, M.D., M.S., who served as the faculty lead for the program. “The students learn about biomedical informatics, gain valuable work experience, and have a summer job in the difficult economy, thanks to the NLM funding. The faculty get the opportunity to advance their area of biomedical informatics through the collaboration with the interns.”

Working with Dr. Dorr were Stuart Morrice from Tualatin, who graduated from the University of Oregon Clark Honors College; Molly King from Sacramento, CA, who just graduated from Reed College; and Cirila Estela Vasquez Guzman from Portland, who attends Walla Walla College. They worked with Dorr on his Care Management Plus project.

Brian Bakke, who worked this summer with professor and chair William Hersh, M.D., is a sophomore at Portland State (PSU) studying computer science. “I’m interested in ways that technology can make health care more accessible for patients and simpler to understand,” Bakke said. He is in the “3+2” joint biomedical informatics program between PSU and OHSU that allows students to receive both a B.A. in Computer Science and an M.B.I. in Biomedical Informatics during a coordinated, five-year course of study. “I think informatics is poised to make significant contributions to improving the American health care system in the coming years and I hope to be a part of that.”

Associate professor Shannon McWeeney, Ph.D., M.S.E., worked with Peter Ryabinin, a Portland native currently studying mathematics at the University of British Columbia. Like many of his fellow summer interns at DMICE, Ryabinin was interested in getting some work experience and finding out more about the field of biomedical informatics. “I enjoy applying mathematical ideas to the real world,” he said. “I think informatics is a way to do that and I want to see if it’s the right fit for me.”

Associate professor Paul Gorman, M.D., had three interns working with him this summer: Pam Lam from Portland, who attends Portland State University; Melissa Allen from Portland, who attends Cornell University; and Elizabeth Nguyen from Venice, CA, a Reed College student. Melissa spent her second summer as an intern with Gorman.

Nguyen studied critical discourse in intensive care: analysis of discourse using Bloom’s taxonomy and the impact of cognitive artifacts. Allen looked at clinicians’ cognitive performance in various tasks of medication management.

Alex Mountis, a student at Northwestern University from Lancaster, PA, and Michael Chan from Roseburg, OR, who recently graduated from Oregon State University, both worked with associate professor Holly Jimison, Ph.D.

This summer, associate professor Karen Eden, Ph.D., had two interns: Alia Broman, an intern from Fort Collins, CO attending Portland State University, and Elizabeth Meyer, from Portland, attending Scripps College in Claremont, CA. Associate professor Judy Logan, M.D., M.S., had Sean O’Hallaren as an intern.

The ARRA grant also funded summer research work in DMICE for two community college instructors. Michael Talbert, who teaches at Portland Community College, worked with assistant professor Tom Yackel, M.D., M.S.

John Blackwood did research with Judy Logan, M.D., M.S. Blackwood is a faculty member at Umpqua Community College in Roseburg, where he teaches in the computer information systems program.

“Informatics, at the associate degree level, is a relatively new employment opportunity,” Blackwood said.

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Six Begin New AHRQ Health Services Research Fellowship Program

Six fellows form the inaugural group for OHSU’s T32 training program in health services research, funded by the Agency for Healthcare Research and Quality. Professor and vice chair Cynthia D. Morris, Ph.D., M.P.H., serves as the program director.

Postdoctoral Fellows

Jonathan Ilgen, M.D., an emergency medicine fellow, is mentored by Judy Bowen, M.D. His project is titled, “Assessing the clinical diagnostic reasoning skills of emergency medicine and internal medicine residents.”

“Cancer screening in two multicultural populations in Oregon,” is the fellowship project for Amy Kobus, Ph.D. Her primary mentor is Patricia Carney, Ph.D.

Lisa Lyman, Ph.D., will research “The relationship between maternal depression symptoms and immunization receipt by very young children.” Her primary mentor is L.J. Fagnan, M.D.

Jessica Weinstein, M.D., a nephrology fellow, is primarily mentored by Micah L. Thorp, D.O., M.P.H., from Kaiser Permanente Northwest. Her project is “A retrospective analysis of hypertension management in patients over age 75 with chronic kidney disease: Is systolic blood pressure of less than 130 mmHg associated with benefit or risk?”

Pre-doctoral Fellows

Brigit Adams, an M.D./M.P.H. student, will look at “Citizenship status and disenrollment from the Oregon Health Plan.” Her primary mentor is Jennifer DeVoe, M.D., M.P.H.

Moira Ray, an M.D./M.P.H. student, was primarily mentored by Todd Korthuis, M.D., M.P.H. Her project is, “Gender and communication style: associations and patient satisfaction in the HIV outpatient setting.”

Dorr Presents at White House Roundtable on Health Care Reform

Assistant professor David Dorr, M.D., M.S., participated in a White House roundtable on health care reform on August 10, 2009. Led by President Obama’s health reform “czar” Nancy-Ann DeParle, the group was called together to report on the potential of medical homes to enhance primary care delivery.

Dorr presented information to the group about the Care Management Plus (CMP) model, a project funded by the John A. Hartford Foundation. The CMP model embeds a care manager/coordinator with a redesigned health information technology/electronic medical records infrastructure to support care coordination. Led by Dorr, the CMP model was piloted over a six-year period at Intermountain Healthcare in Utah with 4,700 patients and 72 doctors at seven primary care clinics. The focus was a patient population of at-risk older adults with complex chronic illnesses.

The pilot demonstrated the role of CMP in increasing satisfaction and productivity of primary care staff, improving mortality rates, and reducing unnecessary hospital admissions, especially re-hospitalizations. Currently, the model is being disseminated to 75 clinical teams across the country from OHSU. In addition to Dr. Dorr’s presentation, the White House staff heard from representatives from state Medicaid plans, other health plans, integrated delivery systems and physician societies.

Faculty/Staff Update

Awards and achievements

Congratulations to three DMICE faculty who received promotions July 1, 2009:

Joan S. Ash, Ph.D.: from associate professor to professor
Susan Norris, M.D., M.P.H., M.Sc.: from assistant professor to associate professor
Karen B. Eden, Ph.D.: from assistant professor to associate professor

Associate professor Roger Chou, M.D., received an award as an Outstanding Physician-Investigator at the Society of General Internal Medicine Northwest Region meeting, held in Portland in April 2009.

Chou and his research group provided evidence to support the first published guideline for treating chronic non-cancer pain with opioid medications. A national panel of pain management experts representing the American Pain Society (APS) and the American Academy of Pain Medicine (AAPM) has published the first comprehensive, evidence-based clinical practice guideline to assist clinicians in prescribing potent opioid pain medications for patients with chronic non-cancer pain.

Grants received

Both Judy Logan, M.D., M.S., associate professor, and Joan Ash, Ph.D., professor, have received grants from the National Library of Medicine, funded by the American Recovery and Reinvestment Act of 2009. Logan’s project is titled “Exploiting the User Interface for Data Integration in Effectiveness Research” while Ash is looking at “Clinical Decision Support in Community Hospitals: Barriers and Facilitators.”

Professor and chair William Hersh, M.D., received a grant from the Fogarty International Center at the Fogarty International Center at
Anna Marie Hostgaard, D.D.S., M.P.H. (left), a Danish dentist, worked with professor Joan Ash, Ph.D., during a three-month visit to DMICE.

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DMICE Prepares to Launch Informatics Alumni Group

This summer several past biomedical informatics students, working with department faculty and staff, began organizing a DMICE Alumni Group, responding to interest from the program’s growing number of alumni. When established, the group will coordinate quarterly meetings, teleconferences, and other events of interest to DMICE graduates.

The alumni planning group took initial steps earlier this year when working group leaders identified graduates’ interests using an online survey. Forty-two alumni provided input about their goals and participation objectives. Survey respondents’ primary interests included career development and enhancement, growth and development of the field of informatics, and opportunities to exchange ideas with other alumni and DMICE faculty.

During the summer, group organizers formed working groups for career development, informatics trends, hot topics in informatics, and OHSU events. The working groups will plan activities and presentations for quarterly teleconference meetings during the coming year. The inaugural meeting is tentatively planned for late Fall 2009.

The group’s first activity, updating of the DMICE alumni database, is already underway. More than 160 of our 243 graduates have provided updated information. As the department’s list of graduates grows, the alumni database will become a valuable resource for graduate and student career planning.

Organizers are seeking DMICE graduates with an interest in joining a working group or planning specific events for the group. The Alumni Petersen, M.B.I. Michael (teejaymichael@gmail.com) and Petersen (cgpetersen@cyberword.org) can provide more information about working group activities and opportunities for participation.

Danish Dentist Spends Spring Studying Informatics at DMICE

Anna Marie Hostgaard, D.D.S., M.P.H., from the University of Aalborg in Denmark, spent three months at OHSU as part of her work as a doctoral student. Hostgaard worked for part of the time with the Provider Order Entry Team (POET), led by DMICE professor Joan Ash, Ph.D.

“I have gained a valuable insight into best practices and challenges in part of the American health care information system,” Hostgaard said, “which have made me realize that many of the successes and problems when developing and implementing new health informatics technologies are the same in America and Denmark.”

During her April-July stay, Hostgaard also gave several presentations on participatory methods.

Hostgaard has been a practicing dentist for almost 30 years, after obtaining her D.D.S. in 1981 from the University of Aarhus. She received an M.P.H. in 2000 from the same institution and plans to finish her doctorate this fall.

Her dissertation looks at the electronic health record (EHR) planning process in the region of North Jutland using a process analysis, focusing on physicians as “social carriers” of EHR.
The Department of Medical Informatics & Clinical Epidemiology played host to the National Library of Medicine Fellowship Conference June 23-24, 2009, which included pre- and post-doctoral trainees, program directors, NLM staff, and DMICE faculty and students. At the meeting, held on the OHSU campus, four DMICE fellows gave presentations or had posters of their research work on display while DMICE faculty also had a poster session featuring their research work. The conference dinner was held at the Portland Art Museum.
Student/Alumni News

Jobs/career changes/promotions

Congratulations to Emily Campbell, R.N., (Ph.D., '09), who received her doctoral degree from DMICE this summer and is now adjunct assistant professor of anesthesiology at OHSU. Campbell gave her dissertation defense on July 30, 2009: A Cognitive Model of Medical Record Coding: Implications for Understanding Inter-rater Agreement.

Jason Atkins, R.N., (M.B.I. ’08), recently accepted a position as the Chief Health Informatics Officer for the New England Veteran’s Administration Integrated Service Network in Bedford, MA. This position oversees the clinical informatics program for the six New England states, consisting of eight hospitals and 35 community-based outpatient centers, and works closely with the National VHA Clinical Health Informatics Office.

Certificate student, Mark Binstock, M.D., M.P.H., was selected to serve on the Advanced Clinical Decision Support Work Group for the Certification Commission for Healthcare Information Technology, a private nonprofit organization with the mission of accelerating the adoption of robust, interoperable health IT by creating a credible, efficient certification process.

Michael Krall, M.D., (M.S. ’02), was also selected as a member of the CCHIT Advanced Decision Support Work Group. Krall is a family physician with Northwest Permanente and Physician Lead for National Decision Support and Ambulatory Patient Safety. Krall was also invited by Dr. Charles Friedman, Deputy National Coordinator Office for Health IT, to participate in a 1.5 day workshop focused on clinical decision support (CDS) within the context of Meaningful Use in Washington D.C. this summer.

NLM fellow (1999-2001), Michael Riben, M.D., has been selected as a member of the CCHIT Interoperability Workgroup.

Purvi Mehta, M.D., M.H.S., R.H.I.A., (M.B.I. ’09), is working as Informatics Team Lead for a consumer health search engine called Healthline.com in San Francisco.

Susan S. Woods, M.D., M.P.H., has taken a full-time position at the Portland VA Medical Center, where she will be a staff physician, an investigator in Health Services Research & Development, and will serve in a national leadership role on clinical integration of the VA’s personal health record. Woods will have OHSU faculty appointments in both the Department of Medicine and DMICE.

Aiman Alrawabdeh, (Certificate ’08), is currently working with the Jordanian team (E-Health Solutions) as a Healthcare Information Systems Manager and Project Manager for a pilot project to implement “Open Source Vista” EMR in Jordan. The pilot is an 18-month project that was recently initiated in Jordan in collaboration with Perot Systems to implement the VOE WorldVista version of the original VA-VistA EMR in a 450-bed hospital, a comprehensive outpatient clinic, and the cancer center.

Presentations and posters

NLM predoctoral fellow Joshua Richardson, (M.L.I.S. ’07), won second place at the OHSU Student Research Forum in May 2009 for his oral presentation in the qualitative research category.


M.B.I. student Laura Fochtmann, M.D., a professor of psychiatry and behavioral science at Stony Brook University, gave a presentation entitled “Promise and Perils of EHR Adoption in Private Practice Psychiatry” at the May 2009 meeting of the American Psychiatric Association (APA) in San Francisco. Dr. Fochtmann has also been appointed to a second term as the Chair of APA’s Committee on Electronic Health Records.

Publications


M.B.I. student Prashila Dullabh, M.D., was first author of two recent government publications: 1) Dullabh P, Molfini M. Liability coverage for regional health information organizations; lessons from the AHRQ-funded state and regional demonstration projects in health information technology and other community efforts. AHRQ publication no. 09-0071-EF. Rockville, MD: Agency for Healthcare Research and Quality; 2009. 2) Dullabh P, Moiduddin A, Babalola E. White paper: measurement of the utilization of an installed EHR.

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D\nMICE recently received notification that its new Graduate Certificate in Biomedical Informatics – Health Information Management Track (HIM) has been accredited by the Commission on the Accreditation of Health Informatics and Information Management (CAHIIM). This culminates a several-year effort to establish a track within the biomedical informatics program.

The HIM certificate program prepares graduates for careers emphasizing health care informatics. With this program now accredited, graduates will be able to take a national certification exam to become a Registered Health Information Administrator (RHIA), a credential recognized in all levels of health care delivery.

“The uniqueness of the program at OHSU is that it is at a graduate level, and the curriculum emphasizes the electronic health record,” said Joanne D. Valerius, M.P.H., E.H.I.A., HIM program director. “Many HIM programs are at a bachelor’s level, and the curriculums do not have the strength of long term medical informatics program at OHSU. This program emphasizes the ability of the graduate to engage in the significant changes in health care with electronic health records and electronic health interchange.”

“While we are very proud of this accomplishment, and our desire to integrate informatics and HIM,” noted professor and chair William Hersh, M.D., “it has probably added more confusion to a field already filled with misunderstandings about its name and scope.”

Both fields, biomedical informatics and health information management, started very differently, Hersh said, but are converging toward the same intellectual content and professional work. “Both fields need to adapt if they wish to meet the agenda for health information technology in the 21st century health care system.”

The informatics field began as an academic research discipline, housed mainly in medical schools. Most working in the field had doctoral degrees, either an M.D. or Ph.D. Much of the early work was funded by federal research grants. The HIM field, on the other hand, has always been one of the “allied health” professions.

In recent years, the two fields have moved much closer. Informatics has had to adapt as its applications, mostly notably electronic health records, have become “mainstream,” with the concomitant growing need for professionals who can lead and support their adoption in operational health care settings.

HIM has had to adapt as well. The skills associated with managing folders of paper have become obsolete, requiring updating to focus on other aspects of HIM practice, such as compliance, legal issues, and use of coded data.

“There are many important tasks for the electronic health record, and HIM professionals are highly skilled in leading those efforts.” Hersh said. “Certainly someone who wants their career to focus on classical HIM tasks in an electronic world or identify as a HIM professional ought to pursue the HIM track.”

One positive consequence of the new HIM track is that it provides expanded coursework within the informatics program. Many students in the conventional track have found these new HIM courses interesting and worthwhile. Another important value of having the track is letting the community know that the OHSU informatics program is “HIM-friendly.”

William Hersh, M.D., professor and chair, gave a demonstration of DMICE’s distance learning program in biomedical informatics at the Kennedy Caucus Room in the Russell Senate Building on Capitol Hill. Hersh gave the September 24th presentation at the Health Information Technology Showcase, part of Health IT Week in Washington, D.C.
Faculty/Staff Update

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the National Institutes of Health. On the project, Translation Informatics for Global Health: An Argentina-Oregon Collaboration, Hersh will work with informatics staff at the Hospital Italiano de Buenos Aries to provide training in basic, clinical and translational research informatics.

Jayashree Kalpathy-Cramer, Ph.D., M.S., who has joined DMICE as an instructor, received a K99/R00 grant from the National Library of Medicine. She will study “Clinical image retrieval: User needs assessment, toolbox development and evaluation.”

Associate professor Susan Norris, M.D., M.P.H., M.Sc., was funded by the Agency for Healthcare Research and Quality to examine the relationship between financial conflicts of interest and recommendations in clinical practice guidelines.

Through a Challenge Grant from the National Institute on Aging, funded by the American Recovery and Reinvestment Act of 2009, associate professor Holly Jimison, Ph.D., will study “Cognitive Interventions Delivered to Elders in the Home via Coaching Technology.”

Associate professor Paul Gorman, M.D., is a co-investigator on a grant “Shared Decision-Making in Primary Care” from the Foundation for Informed Decision making, where researchers will use principles of participatory design to implement shared decision making processes and tools in rural practices in Oregon.

Gorman is also the principal investigator on a grant from the California Health Care Foundation, “Evaluation of Small Practice eDesign”. This project will evaluate and provide feedback to a team implementing electronic medical record systems (eClinical works) in rural Tulare County, California.

Presentations and Posters

Associate professor Paul Gorman, M.D., was co-author on a poster, “Perceived Impact of a Medication Management System, RxSafe, in Rural Long-Term Care,” presented at the Agency for Healthcare Research and Quality Practice-based Rural Networks meeting in June 2009 in Bethesda, MD.

Assistant professor Aaron Cohen, M.D., M.S., gave a presentation on “Challenge Tasks for Biomedical Text Mining” at the Veteran’s Administration Consortium for Health Informatics Research meeting April 7, 2009.


On May 28, associate professor Paul Gorman, M.D., was on a panel, headed by Bill Hersh, at the AMIA Spring Congress in Orlando, "Building Global eHealth Capacity With Distance Learning."

On June 16, Gorman spoke at the Department of Medicine Grand Rounds, “Ten Myths About Health Care in the US,” examining commonly held beliefs about health care in this country and the evidence against these beliefs.

Professor and chair William Hersh, M.D., and Marcy Jacobs, co-investigator and project manager, funded by Jobs for the Future, Inc. and the U.S. Department of Labor, created the presentation, “A Characterization of the Health Information Technology Workforce in Two Hospital Systems.” DMICE conducted a short-term scan of two Oregon hospital systems: Providence Health and Services, and Asante Health System. The study interviews were conducted from mid-April through July, 2009, with the aim of providing information through interviews and collection of hospital statistics. This report is intended to provide preliminary data for a longer-term research program. The specific goals of this project with JFF were to:

1. Work with two Pacific Northwest health care organizations to obtain a snapshot of their HIT organizations broadly and to collect information about their total HIT workforce, including IT, informatics, health information management, clinicians, and other personnel who support information usage in health care delivery and operations.

2. Address specifically the career pathways for individuals who enter the field through community college programs.

3. Lay the groundwork for further assessing the needs, strengths, barriers, and challenges for the HIT workforce in a program that can assist a much wider number of people and organizations.

Publications


Buck MD, Atreja A, Brunker CP, Jain A, Suh TT, Palmer RM, Dorr DA,


**Babies**

Research associate Jessica Griffin, who works for the Oregon Evidence-based Practice Center, had a baby boy, Julian Bart Griffin, on Sunday, August 2, 2009. Congratulations! ■
Student/Alumni News

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Washington, DC: US Department of Health and Human Services, Office of the Secretary, Assistant Secretary for Planning and Evaluation; 2009.

Certificate student John Norris was the author of a paper published this year: Norris JR. The growth and direction of healthcare support groups in virtual worlds. Virtual Worlds for Health and Healthcare, 2009; 2.


Births

Congratulations to NLM fellow Suzi Fei, who had baby girl Isabelle Yueming Fei on May 9, 2009!

Summer Interns

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“and I want to educate myself so that I can help prepare my students to take advantage of more career options.”

Blackwood and Talbert are developing the curriculum for an associate’s degree in health informatics that they hope will be adopted by the state and available at all community colleges in Oregon. “The jobs are there,” said Blackwood. “We just need to ensure that our students have the right mix of skills to be attractive to employers.”

From the Chair

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ing a master’s degree) students in our program. From ARRA funding, we received a one-time increase in our program for eight additional two-year fellowship slots.

We also received ARRA funding for our summer internship program, which included not only 13 college undergraduates but also two community college faculty. The goal for the undergraduate students was to expose them to the field and possible pursuit of graduate study, while the goal for the community college faculty was to better inform efforts underway in the state to bring health informatics programs to the community colleges.

In addition to our training grant, three faculty have had research grants funded by the ARRA: Joan Ash, Ph.D., Holly Jimison, Ph.D., and Judy Logan, M.D., M.S. Dr. Jimison received a Challenge Grant, a new project specifically funded by ARRA. We are also eagerly awaiting the ARRA RFAs from the health information technology programs that have yet to be announced.

On the other side of the department, clinical epidemiology faculty have been working on proposals in the area of comparative effectiveness research. This type of research focuses on either new or re-appraised (in the form of systematic reviews) research that compares medical tests and treatments in a head-to-head manner. The goal of this process is to better understand “what works” in health care so that more efficient use can be made of our existing health care resources.

Both health information technology and comparative effectiveness research are recognized as being essential to health care reform efforts that are also garnering news from both Salem and Washington, D.C. It is quite gratifying to have both disciplines of the department playing such a central role in health care. Our department has not only the expertise to contribute through its faculty but also is educating students to be future contributors and leaders in these areas.

Speaking of our faculty, they remain busy and accomplished in their research and educational efforts. This issue features a Faculty Focus on professor Joan Ash, Ph.D.

Despite the achievements of our department, we continue to face difficult economic times due to financial challenges at OHSU and the economy in general. Although we have been very successful in obtaining grant revenue and tuition, these monies are earmarked for specific expenses of the research projects and educational programs, respectively. These revenues are very restrictive in how the money can be spent and provide little money for investment in the future. For example, the department may wish to invest in new educational programs or in faculty occasionally hoping to pursue new areas of research, which usually requires learning new techniques or generating preliminary data.

To that end, I hope you will consider investing in DMICE. A form for giving is printed in this newsletter, or you can make your gift online at http://www.ohsu.edu/dmice/giving.

Another use for gift funds is for our students. Having money for student travel to scientific meetings and career development activities will improve their education and increase their competitiveness in the job market, which will in turn attract more students. We also hope to raise funds for student scholarships that will allow us to attract more high-achieving students.

In closing, I want to express my gratitude for the support DMICE has received from faculty, staff, students, OHSU leadership, and the community. I hope we can continue our mutually beneficial relationship with all of you, providing leadership and value in our respective fields.
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For information about the Department of Medical Informatics and Clinical Epidemiology, visit the Web site at www.ohsu.edu/dmice/ or call 503 494-4502.
Joan Ash

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outside of OHSU. She has been very involved with the American Medical Informatics Association (AMIA) and its college of elected fellows, the American College of Medical Informatics. She currently chairs AMIA’s Collen Award Committee and is a member of the program committee for an upcoming AMIA policy conference. In addition, Ash is the chair of the Board of Scientific Counselors for the Lister Hill National Center for Biomedical Communications, part of NLM.

As a medical librarian and informatician, Ash has seen the informatics field grow enormously in the last twenty years. Largely thanks to AMIA and NLM, the field has both broadened and deepened. “The informatics now encompasses many subdivisions, including nursing informatics, consumer health informatics, public health informatics, and bioinformatics as well as medical informatics,” Ash said. “Informaticians now hail from multidisciplinary backgrounds and bring a wealth of diverse knowledge and skills to the field, making it dynamic and intellectually stimulating.”

With President Obama’s spotlight on medical informatics and health care reform, many informaticians find themselves in the gratifying position of having their work validated and their field recognized as being vital to the nation’s economy and health. Says Ash, “After all of these years trying to let the world know that informatics exists, informaticians are now in the fortunate position of gaining the spotlight. We are at a critical point in the history of medical informatics, and it’s probably a good thing that we’ve had 30 years to mature as a field because I’m quite sure there are great things to come thanks to our contributions.”

DMICE Tracks

DMICE Tracks, the newsletter of the OHSU Department of Medical Informatics & Clinical Epidemiology, is published several times per year.

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