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DMICE Tracks

From the Chair

One of the hallmarks of a successful academic program is the development of new faculty who will someday take the reins of leadership. In



this issue of *DMICE Tracks*, we are pleased to report on the accomplishments of some of our junior faculty includ-

ing Dr. David Dorr, recipient of this year's Young Investigator Award from the American Medical Informatics Association. Other junior faculty in the program are continuing to achieve the fruits of academic success, including research grants funded, papers published, and other accomplishments.

We have also had the opportunity to showcase our program to some national leaders in recent months. We were visited by Nancy Pelosi, Speaker of the U.S. House of Representatives, who was in town to see the health information technology work showcased by our department and others in Oregon. Also present at that event were Rep. David Wu and Oregon Gov. Ted Kulongoski.

As always, we have a number of new initiatives to report on and old ones to update. One new

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David Dorr Receives 2007 AMIA New Investigator Award

David A. Dorr, M.D., M.S., assistant professor of medical informatics and clinical epidemiology, received the 2007 New Investigator Award at the annual symposium of the American Medical Informatics Association (AMIA) in Chicago on November 10, 2007.

The award – presented at the AMIA leadership dinner on Nov. 10 – is given annually in recognition of an individual's early informatics con-

tributions and significant scholarly contributions on the basis of scientific merit and research excellence.

Dorr's work at OHSU currently is focused on collaborative care, chronic disease management and quality enhancement – and the clinical information systems required to support them. He is the principal investigator for the OHSU senior care program known as Care Management Plus, a

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Professor and chair William Hersh, M.D., congratulates assistant professor David A. Dorr, M.D., M.S., on receiving the 2007 AMIA New Investigator Award.



OREGON
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National Leaders Visit DMICE

DMICE has recently played host to some high-profile national leaders. The first visit was by the Speaker of the U.S. House of Representatives, Nancy Pelosi, who traveled to Portland November 27, 2007 to participate in a roundtable devoted to health information technology (IT) and Oregon's leadership role in it. Also participating in the roundtable were Congressman David Wu, Oregon Governor Ted Kulongoski, and OHSU



DMICE Chair William Hersh, M.D., with Speaker of the U.S. House of Representatives, Nancy Pelosi.

President Joe Robertson, M.D., M.B.A. The event was part of an ongoing series of meetings around the country devoted to the Innovation Agenda being promoted by the Speaker.

DMICE chair William Hersh, M.D., was among five local leaders who spoke at the roundtable. Noting that the benefits of IT in improving the quality, safety, and cost of health care would not be met without a well-trained professional informatics workforce, Hersh described the role of DMICE in these efforts. He proudly noted that DMICE had the largest biomedical informatics educational program in the country and perhaps the world, and was widely recognized for its innovation, including the 10x10 Program in partnership with the American Medical Informatics Association, which aims to train

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Joanne Valerius, M.P.H., R.H.I.A.

Joanne Valerius Joins Faculty as Health Information Management Specialist

Joanne Valerius, M.P.H., R.H.I.A., assistant professor, has joined the DMICE faculty as a specialist in health information management (HIM). She is working to develop an HIM track in the biomedical information (BMI) graduate program that will also include the option of obtaining the Registered Health Information Administrator certification.

Ms. Valerius was previously Director of Health Information Management Programs at the College of St. Catherine in St. Paul and Minneapolis, Minnesota and is also completing her doctoral studies at the University of Minnesota.

While BMI and HIM have a great deal of similarity, they have historically existed separately, with HIM being an "allied health" profession and biomedical informatics typically housed in medical schools. Both fields, however, share a commitment to improving the quality, safety, and cost-effectiveness of health care through the use of information technology. Both recognize that the successful use of IT is dependent on more than technology,

but also understanding and engaging health care professionals and the institutions in which they work.

There is a clear need for more HIM professionals. The U.S. Bureau of Labor Statistics estimates a 49% rate of growth in the field. Oregon is particularly underserved in HIM education, with no baccalaureate programs in the field.

Because the OHSU BMI program is currently only offered at graduate level, the initial HIM offering will be a post-baccalaureate program as a track in its Graduate Certificate and Master of Biomedical Informatics programs. Eventually, however, OHSU hopes to expand the program to the baccalaureate level, probably in collaboration with one or more other Oregon colleges or universities.

Ms. Valerius will be aided in her efforts by William Hersh, M.D., DMICE professor and chair who currently serves on the Educational Strategies Committee of the American Health Information Management Association. ■

DMICE Faculty, Students and Alumni Participate in 2007 AMIA Symposium in Chicago

DMICE faculty, students and alumni made their presence known at the 2007 American Medical Informatics Association (AMIA) annual symposium, held November 10-14, 2007, in Chicago. This year's theme was "Biomedical & Health Informatics: From Foundations to Applications to Policy."

Highlights of the meeting included first place in the AMIA student

research systems implementation.

William Hersh, M.D., professor and chair, and **Paul Gorman, M.D.**, associate professor, were two of three presenters in a workshop on harmonizing biomedical and health informatics competencies and curricula. **Hersh** also gave a talk during the Late Breaking News in Research and Policy session on failure to adhere to informatics: a case study of the

M.S., R.N., Ken Guappone, M.D., Richard Dykstra, M.D., (M.S. '06), and Joan Ash, Ph.D.

Overdependence on Technology: An Unintended Adverse Consequence of Computerized Provider Order Entry, by **Emily Campbell, M.S., R.N., Richard Dykstra, M.D., (M.S. '06), Dean Sittig, Ph.D., Ken Guappone, M.D., and Joan Ash, Ph.D.**

Automatic Summarization of Mouse Gene Information by Clustering and Sentence Extraction from MEDLINE Abstracts, by **Jianji Yang, (Ph.D., '08), William Hersh, M.D., and Aaron Cohen, M.D., M.S.**

Recommendations for Clinical Decision Support Deployment: Synthesis of a Roundtable of Medical Directors of Information Systems, by **Robert Jenders, M.D., M.S., Jerome Osheroff, M.D., Dean Sittig, Ph.D., Eric Pifer, M.D., and Jonathan Teich, M.D., Ph.D.**

A Comparative Analysis of Retrieval Features Used in the TREC 2006 Genomics Track Passage Retrieval Task, by **Hari Krishna Rekapalli, Aaron Cohen, M.D., M.S., and William Hersh, M.D.**

Poster presentations included:

Evaluating the AMIA-OHSU 10x10 Program to Train Health Care Professionals, by **Sue Feldman and William Hersh, M.D.**

A Ferret-Based Gastrointestinal Image Retrieval System, by **Steven Bedrick and Jayashree Kalpathy-Cramer, Ph.D.**

Throughout the conference, educational program administrator **Andrea Ilg** staffed the DMICE booth at the AMIA Career Fair along with MBI students **Tom Agresta, Sandy Mendel, TJ Michael, and Carolyn Petersen**; certificate student **Jim McCormack**; and predoctoral fellow **Alexey Panchenko**.



Distance student Amy Wang, M.D., assistant professor David Dorr, M.D., M.S., and post-doctoral fellow Susan Woods, M.D., attended the AMIA dinner for DMICE faculty, students and alumni on November 12th.

paper competition for **Adam Wright, Ph.D.**, who received his doctorate from OHSU in June 2007. Wright's paper, co-authored with **Dean Sittig, Ph.D.**, adjunct associate professor, was based on his dissertation work: SANDS: an architecture for clinical decision support in a national health information network.

Also at the conference, **David A. Dorr, M.D., M.S.**, assistant professor, received the 2007 AMIA New Investigator Award (see cover story).

Dean Sittig, Ph.D., participated in a tutorial on clinical decision support: a practical guide to developing your program to improve outcomes while **Joan Ash, Ph.D.**, associate professor, led a tutorial on people and organizational issues in clinical and

Oregon RHIO.

Judy Logan, M.D., M.S., associate professor, participated in a panel on identifying challenges and opportunities in clinical research informatics: analysis of a facilitated discussion at the 2006 AMIA annual symposium.

Oral presentations included:

Some Unintended Consequences of Clinical Decision Support Systems by **Joan Ash, Ph.D., Dean Sittig, Ph.D., Ken Guappone, M.D., Richard Dykstra, M.D., (M.S., '06), and Emily Campbell, M.S., R.N.**

Recommendations for Monitoring and Evaluation of In-Patient Computer-based Provider Order Entry Systems: Results of a Delphi Survey, by **Dean Sittig, Ph.D., Emily Campbell,**

Department of Medical Informatics and Clinical Epidemiology Strategic Plan 2008

Vision

Achieve excellence in research, education, and service in biomedical informatics and clinical epidemiology in order to improve human health, health care, and biomedical research.

Mission

We will fulfill our Vision through leadership, discovery, and dissemination of knowledge in biomedical informatics and clinical epidemiology via education, research, and service.

Education

Educate and mentor the next generation of researchers and professionals in biomedical informatics and clinical epidemiology as well as across disciplines.

Research

Conduct research that advances our fields and pursue research opportunities consistent with our Vision.

Service

Provide our knowledge and expertise to improve human health, health care, and biomedical research in Oregon and beyond.

Goals

Goal 1. Discover and Disseminate Knowledge

Advance the knowledge base of biomedical informatics and clinical epidemiology through research and disseminate it via teaching, publications, and public awareness across OHSU, Oregon, the nation, and the world.

- **Strategy 1.** Determine areas where we have expertise and the ability to leverage it.
- **Strategy 2.** Conduct recognized research that impacts policy or practice and is consistent with our Vision.
- **Strategy 3.** Expand and improve our educational programs and their visibility so they are increasingly recognized at local, state, national, and international levels.

Goal 2. Attract and Retain Diverse Faculty, Staff, and Students of the Highest Caliber

- **Strategy 1.** Promote and maintain an environment that cultivates and coordinates the diverse interests of the department and is personally and professionally fulfilling.
- **Strategy 2.** Attract, develop, mentor, and retain faculty of the highest caliber while optimizing the professional and intellectual resources of the department.
- **Strategy 3.** Attract, develop, mentor, and retain staff of the highest caliber.
- **Strategy 4.** Attract, develop, and mentor students of the highest caliber.
- **Strategy 5.** Promote diversity within the faculty, staff, and student populations.

Goal 3. Promote Collaboration in Support of Our Mission

- **Strategy 1. Internal Relations:** Build strategic relationships within the department that create opportunities for collaboration.
- **Strategy 2. Internal Relations:** Build strategic relationships within OHSU that create opportunities for collaboration, name recognition, and increased visibility of our fields.
- **Strategy 3. External Relations:** Target and build relationships with public and private organizations that create opportunities for collaboration, increase our name recognition, and enhance our reputation as experts in biomedical informatics and clinical epidemiology.

Goal 4. Achieve Financial Sustainability: Align our research, educational, and service strengths to achieve financial sustainability

- **Strategy 1.** Create and sustain a funding plan that ensures continuity between projects and promotes future operating stability.
- **Strategy 2.** Pursue collaborative opportunities in order to leverage operating costs.
- **Strategy 3.** Identify opportunities and pursue and promote mechanisms to generate revenue.
- **Strategy 4.** Build and maintain infrastructure efficiencies to stimulate and sustain growth.
- **Strategy 5.** Optimize our faculty and our underutilized resources.
- **Strategy 6.** Identify areas of immediate opportunity that we can optimize. ■

Faculty Profile: Thomas R. Yackel, MD, MPH, MS

The Epic electronic health record is making its presence known throughout OHSU's hospitals and clinics and, in April 2008, will go live in the inpatient system. DMICE's link to this process is assistant professor Thomas Yackel, M.D., M.P.H., M.S. Yackel, both a DMICE alumnus and faculty member, serves as OHSU's Associate Medical Information Officer.

An internist, Yackel received both an M.D. and M.P.H. from George Washington University School of Medicine and Health Sciences. After a residency, also at George Washington University, Yackel came to OHSU as a bioinformatics post-doctoral fellow, sponsored by National Library of Medicine, and completed his M.S. in biomedical informatics in 2002. For his thesis, he examined the impact of clinical document imaging (CDI) technology on healthcare, conducting a qualitative analysis of CDI stakeholders at both OHSU and outside institutions.

Joining the DMICE faculty in 2002, Yackel now leads three lives. His primary activity is as Associate Medical Information Officer where he deals with the University's electronic health record system. "I was involved right from the beginning," says Yackel, of the EHR project. "The selection of an integrated electronic health record and practice management system for the ambulatory practice began in 2004. As the OHSU Medical Group and Hospital looked at the Center for Health and Healing project as an opportunity to transform operations, it was clear that an EHR was to be part of the solution."

Since that time, Yackel has helped coordinate the EHR selection process, negotiated the contract with the vendor, and worked as a liaison between practicing physicians and the project team. He believes that his training in medical informatics plays a key role in the day-to-day aspects of his job.

"My role is to bring different groups together, like physicians, administrators, and system analysts, and get them to understand how the technology can be used to our advantage," he said. "There is much to be learned in the process and the field of medical informatics has many of the answers."

Current challenges are completing the ambulatory EHR roll-out to 55

internal medicine practice and holds a joint appointment in the Division of General Internal Medicine and Geriatrics where he sees patients 3 days a week. He was named as one of Portland's "Top Doctors for 2007" by the Portland Monthly magazine.

"I really enjoy seeing patients in clinic and especially using the EHR to help them manage their care," he



Assistant professor Tom Yackel, M.D., M.P.H., M.S., logs into the Epic electronic health record system in a patient exam room in Sam Jackson Hall.

clinics while preparing for the inpatient system big-bang in April. "This definitely is a group project," Yackel said, who is mentoring three inpatient physicians who serve as "physician champions." He has also worked with fellow DMICE faculty member David Dorr, M.D., M.S., on implementing clinical decision support and health-care quality metrics into EpicCare. "Dave's expertise in quality has been an immense boost to our project and an example of the kind of collaboration between 'IT operations' and DMICE I'd like to foster."

In addition to his work on the EHR, Yackel continues his busy

noted. As a general internist, Yackel sees a wide range of adults from those who are looking to stay healthy to many with chronic diseases such as hypertension, diabetes, and high cholesterol. "Patients are so excited when I tell them they can follow their test results online using OHSU's MyChart, as well as send my office secure messages and schedule appointments. Many of them are surprised by such high levels of service from an academic practice," he noted.

Finally, as an assistant professor in DMICE, Yackel stays involved with the biomedical informatics educa-

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Faculty/Staff Update

Awards and achievements

John Jay Kenagy, Ph.D., clinical assistant professor, received his doctorate from Capella University, having successfully defended his dissertation, *Computerized Provider Order Entry in Multispecialty Ambulatory Care Practices: A Quantitative Evaluation of Information Systems Success*. A very special thanks to **Joan Ash, Ph.D.**, associate professor, who served on his dissertation committee; to **Tom Yackel, M.D. M.S.**, assistant professor, and **Ron Marcum, M.D.**, assistant professor and chief medical information officer, for their invaluable advice on the CPOE survey; and to the providers at OHSU and Kaiser who completed the survey.

Funding received

The Oregon Evidence-based Practice Center (EPC), directed by **Mark Helfand, M.D., M.P.H., M.S.**, professor, and **Evelyn Whitlock, M.D., M.P.H.**, adjunct associate professor, received \$10 million in federal research contracts this past fall. The EPC, a collaboration of OHSU, Kaiser Permanente Center for Health Research, and the Portland VA Medical Center, will continue its work supporting the US Preventive Services Task Force as well as its work as the Scientific Resource Center for AHRQ's Effective Healthcare Program.

Susan Norris, M.D., M.P.H., M.S., assistant professor, is working with SAIC as a systematic review expert on a federal contract, *Comprehensive Integrated Clinical Guidelines for Cardiovascular Risk Reduction in Adults*, funded by National Heart, Lung and Blood Institute.

Cynthia Morris, Ph.D., M.P.H., professor and vice chair, is a co-investigator on the recently funded Research CAMP grant awarded to the National College of Naturopathic

Medicine from the National Center for Complementary and Alternative Medicine.

Presentations

William Hersh, M.D., professor and chair, gave several presentations and participated in several workshops recently:

- Distance Learning in Biomedical Informatics at OHSU – Teaching Learning Technology Roundtable (TLTR), OHSU, November 16, 2007.

- Research Challenges and Collaboration Opportunities in Search and Information Retrieval

- Research Conference, Department of Anesthesiology, OHSU, December 12, 2007.

- Cancer Research Group, OHSU Cancer Institute, December 14, 2007.

- Harmonizing Biomedical and Health Informatics Competencies and Curricula

- 12th International Health (Medical) Informatics Congress, Medinfo 2007, Brisbane, Australia, August 19, 2007 (with Janise Richards, Ph.D., **Paul Gorman, M.D.**, Laverne Snow).

- AMIA 2007 Annual Symposium, Chicago, IL, November 10, 2007 (with Janise Richards, Ph.D., **Paul Gorman, M.D.**, Laverne Snow, Bryant Karras, M.D.).

- Healthcare Industry Perspective, Healthcare Transformation: What it means for the CEO's agenda, How IT will need to respond

- HIMSS Oregon Chapter 2007 Annual Meeting, Portland, OR, November 5, 2007 (Panelist, Talk: Healthcare Transformation Through a Competent and Professional Informatics Workforce).

Paul Gorman, M.D., associate professor, recently gave a lecture at Grand Rounds at Providence Medical Center as well as a noon conference on answering clinical questions for Providence Internal Medicine Residency. Gorman also gave a lecture on answering clinical questions to second year medical students last fall.

Roger Chou, M.D., associate professor, gave two Grand Rounds presentation on evidence-based medicine and the challenge of low back pain: new guidelines from the American Pain Society and American College of Physicians, on at St. Charles Medical Center – Bend and Redmond on July 20, 2007, and one at OHSU on October 2, 2007.

Aaron Cohen, M.D., M.S., assistant professor, and **William Hersh, M.D.**, professor and chair, were co-authors of a poster entitled *The OHSU Biomedical Question Answer-*

Staff receive Rose Awards

Two DMICE staff members recently received Rose Awards. These awards are given to recognize outstanding service excellence.

Dolores Newman, senior financial analyst, received an award for “completely reworking the MMA budget spreadsheets that we both inherited. The data is easier to understand and provides improved accountability to the funder – and they are beautiful!! Having you on board has made my life as a project manager much easier, and I'm better able to focus on the science.”

Christina Bougatsos, a senior research assistant who works on the project supporting the US Preventive Services Task Force for the Oregon Evidence-based Practice Center, received a Rose Award because “you have taken on new management challenges over the last year with confidence, courage, and integrity. You bring intelligence and organization to any project in both tracking the smallest details to considering the big picture. Congrats on project management done well!!” ■

ing System Framework, presented at the Sixteenth Annual Text Retrieval Conference (TREC) held November 7-9, 2007 in Gaithersburg, MD.

Joanne D. Valerius, M.P.H., assistant professor, gave a talk November 5, 2007, on "Human Resources Response to Cultural Diversity and Religion in the Workplace" at the Asian Conference for Human Resource Development held in China.

Publications

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New Faces

We welcome 10 new staff who have arrived over the past few months to work on a variety of projects.

Nima Behkami is a Web designer for Dr. David Dorr's Hartford Foundation project while **Hanh Tran** is a research assistant on that project. **Alia Broman**, a student worker, is assisting Dr. Holly Jimison on her AHRQ-funded evidence report on the use of health information technology. **Tammy Eisenbeis** is Dr. Mark

Helfand's new executive assistant.

We welcome back **Jim Wallace**, working for the EPC Scientific Resource Center, as are student workers **Brian Garvey** and **Jennifer Nguyen**. Jennifer's sister, **Theresa Nguyen**, is a student worker on the Drug Effectiveness Review Project.

Carlo Pearson is a senior research assistant working for Dr. Judy Logan while **Caroline Wethern** returns, now as a research assistant for Dr. Joan Ash on the Physician Order Entry Team. ■



Nima Behkami Alia Broman Tammy Eisenbeis Brian Garvey Jennifer Nguyen



Theresa Nguyen Carlo Pearson Hanh Tran Jim Wallace Caroline Wethern

Faculty/Staff Update

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Thomas R. Yackel

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tional programs through advising graduate students and mentoring capstone projects. Before taking on his role overseeing the EHR, he taught the Clinical Systems course for 2 years. He has also led the program's internship program since 2004. In the past three years, 15 biomedical informatics students have participated in the internship program, working at companies and organizations such as General Electric, Kaiser Permanente, Providence Health System, Kryptiq, the State of Oregon, and Omnimedix.

The internship in medical informatics gives students a real-world, practical experience in applied informatics. Students are matched with a mentor and contribute 8-10 hours of work per week on a mentor-defined project.

When he's not at work, Tom enjoys cooking and running. "I'm definitely a novice at both," he admitted. His remaining free time is spent at home with his family, including his wife, Nicole DeLorio, M.D., (Associate Professor, OHSU Department of Emergency Medicine) and two young children, Caroline (age 5) and Jonathan (age 3). ■

New Investigator Award

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technology-intensive, innovative primary care model that reduces hospitalizations, lowers costs and improves health outcomes for older adults with chronic illnesses. The program is a cooperative project funded by the John A. Hartford Foundation and led by OHSU and Intermountain Healthcare of Salt Lake City.

Dorr works locally as well with the RADAR (Research on Adverse Drug Events and Reports) project at Northwestern University to improve quality and patient safety through informatics applications.

Dorr's focus also includes broader clinical information needs, including electronic health record deployment and health information exchange and interoperability between health care

providers and a range of other health care participants as a way to expand systems-based approaches to all of health care.

"It is always gratifying for a high-quality academic program when one of its members receives an honor like this," said William Hersh, M.D., professor and chair of medical informatics and clinical epidemiology.

Dorr earned his bachelor's in economics and his medical degree from Washington University in St. Louis. He completed an internal medicine residency at OHSU and earned a master's in medical informatics and health services administration from the University of Utah. He did several years of biostatistical consulting during his undergraduate years and at medical school. He worked previously at Intermountain Healthcare. ■

Student/Alumni News

Congratulations to **Jianji Yang** who recently received her Ph.D. in biomedical informatics. Dr. Yang is the second person to graduate from the biomedical doctoral program, with a dissertation on *Automatic Summarization of Mouse Gene Information for Microarray Analysis Using Functional Gene Clustering and Sentence Extraction*. Yang is now working as a program analyst/informatics manager for the Center for the Evaluation of Clinical Services at the Portland VA Medical Center.



Michael Minear (certificate '06) was appointed Chief Information Officer for the University of California Davis Health System in November 2007.

Distance student **Jim Sorensen** is now an application analyst supporting the Flowcast practice management system at Providence Health System.

Mary Gerard (certificate '02) is the Quality Improvement Director for Physician Office Services for the Illinois Foundation for Quality Health Care.

Distance student **Lee Washington, M.D.**, is now a medical director at Active Health Management, a decision support company.

Distance student **Shakti Matta, M.D.**, recently started his own medical practice, Pediatrics For You, in Richland, Washington. Matta also received a grant from Washington Health Information Collaborative for information technology for his practice.

Michael Kirshner, D.D.S., M.P.H., (certificate '03) has been appointed as Program Director for Health Informatics and Assistant Dean of Health Professions at the

Oregon Institute of Technology.

Tina Purnat (MS '05) is now the manager of operations for the European Surveillance System (TESSy) for communicable diseases at the European Centre for Disease Prevention and Control (ECDC), a 2-year-old European Union institution based in Stockholm. Purnat is in charge of setting up all operations-related activities for the new system.

Funding received

MBI student **Bimal Desai, M.D.**, is part of a team at the Children's Hospital of Philadelphia that was awarded a Quality Care Incentive Program Investment Grant from the Pennsylvania Health Care Cost Containment Council to help fund the development of a hospital-acquired infection electronic surveillance and tracking system. Desai is the project lead and clinical liaison on the team.

The informatics department at the Portland VA Medical Center, where **Blake Lesselroth, M.D., (MBI '05)**, works as chief of clinical software

applications was awarded a \$500,000 grant for two years from the National Center of Patient Safety.

Presentations and posters

Andrew James, M.B.Ch.B., (MBI '07), associate professor of pediatrics at the University of Toronto, presented on a patient-centric, Internet-based application for the data management of a multi-centre respiratory syncytial virus prophylaxis program at the AMIA Annual Symposium in Chicago in November 2007.

James was also co-author of two posters at the AMIA Symposium: one on SNOMED CT® as the clinical terminology for the representation of the clinical care of the newborn infant and one on AboutKidsHealth Online Resource Centres: innovation in family health education.

In addition, **James** was co-author of a poster presented at MEDINFO in Brisbane, Australia in August 2007: *AboutKidsHealth: a unique initiative in pediatric consumer health informatics*.

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Close to 20 prospective students attended the second annual Open House for the Biomedical Informatics Graduate Program, held in the Biomedical Information Communication Center on October 27, 2007. DMICE faculty, staff, alumni, and current students met with the prospective students, who also had the opportunity to view posters of recent faculty research projects and hear guest speaker Malcolm Costillo from Kryptiq.

Student/Alumni News

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Current student **Jennie Abrahamson** made two presentations at the Sixth International Conference on Conceptions of Library and Information Science (CoLIS 6) in Borås, Sweden, in August 13-16, 2007. She participated in a forum where she discussed her work on applying a general model of lay information mediary behavior in the health care domain. Abrahamson also presented a paper that proposes an empirically derived model of lay information mediary behavior to be applied in future work in consumer health informatics. The paper was published in the online journal, *Information Research*, in October, 2007.

Peter Embi, M.D., (M.S. '02), Director of the Center for Health Informatics at the University of Cincinnati, was on a panel entitled Challenges and Opportunities in Clinical Research Informatics at the November AMIA Symposium.

Distance student **Rita A. Scichilone, M.H.S.A., R.H.I.A., C.C.S., C.C.S-P., C.H.C.**, who is director of practice leadership for the American Health Information Management Association, was coauthor of a paper at the 2007 AMIA Symposium: Improving clinical and business processes: capitalizing on the investment in controlled medical terminology.

Mary Gerard (certificate '02) presented a poster on the evolution of clinical decision support to increase influenza vaccination at the AMIA Symposium in Chicago in November 2007 and also participated in a panel there on dissecting experiences of a commercial electronic medical record vendor in Chicago.

Surendra Dasari (MS '05) was co-author of a poster on large scale deamidation detection and quantification in aged lens tissues presented at the 55th American Society for Mass Spectrometry conference in Indianapolis in June 2007.

MBI student **Bimal Desai, M.D.**, presented a poster at the 2007 AMIA Symposium: Use of an enterprise wiki as a research collaboration tool and is currently co-investigator of an AHRQ grant on improving otitis media care with EHR-based clinical decision support and feedback.

Susan Price, M.D., (MS '99) presented on moving toward web-scale: adapting semantic components for use in large collections at the British Computer Society Information Retrieval Specialist Group Symposium: Future Directions in Information Access in Glasgow in August 2007. The paper was published in meeting proceedings. Price also received a travel scholarship from the British Computer Society Information Retrieval Specialist Group to attend the European Summer School on Information Retrieval (ESSIR 2007), August 27-31, 2007.

In November, **Price** presented at the ACM Conference on Information and Knowledge Management (CIKM '07), in Lisbon, Portugal, November 6-8, 2007, on semantic components enhance retrieval of domain-specific documents.

Blake Lesselroth, M.D., (M.B.I. '05) clinical informaticist at the Portland VA Medical Center, presented at the Veterans Electronic Health University in Orlando in August 2007, discussing the Portland VA's technology efforts to support medication reconciliation. He also presented a poster focusing on the operationalization of clinical decision support to reduce non-indicated indwelling urinary catheters.

Jianji Yang, (Ph.D., '08) was co-author of a poster on the OHSU Biomedical Question Answering System Framework at the Sixteenth Annual Text Retrieval Conference (TREC) November 7-9, 2007 in Gaithersburg, MD.

Publications

Surendra Dasari (MS '05) and current Ph.D. student is currently

Staff Scientist, Bioinformatics, at Proteogenix in Beaverton, Oregon. His recent publications include:

Gravett MG, Thomas A, Schneider KA, Reddy, A P, **Dasari S**, Jacob T, Lu X, Rodland M, Pereira L, Sadowsky D W, Roberts CT Jr, Novy MJ, Nagalla SR. Proteomic analysis of cervical-vaginal fluid: identification of novel biomarkers for detection of intra-amniotic infection. *Journal of Proteome Research*. 2007; 6(1):89-96.

Dasari S, Reddy A, Jacob T, Thomas A, Schneider K, Gravett M, Roberts C Jr, Nagalla SR. Comprehensive proteomic analysis of human cervical-vaginal fluid; *Journal of Proteome Research*. 2007; 6(4):1258-68.

Michaels J, **Dasari S**, Pereira L, Reddy AP, Lapidus JA, Lu X, Jacob T, Thomas A, Rodland M, Roberts CT Jr, Gravett MG, and Nagalla SR. Comprehensive proteomic analysis of the human amniotic fluid proteome: gestational age-dependent changes. *Journal of Proteome Research*. 2007; 6(4):1277-85.

Pereira L, Reddy AP, Jacob T, Thomas A, Schneider KA, **Dasari S**, Lapidus JA, Lu X, Rodland M, Roberts CT Jr, Gravett MG, Nagalla SR. Identification of novel protein biomarkers of preterm birth in human cervical-vaginal fluid. *Journal of Proteome Research*. 2007; 6(4):1269-7.

Nagalla SR, Canick JA, Jacob T, Schneider KA, Reddy AP, Thomas A, **Dasari S**, Lu X, Lapidus JA, Lambert-Messerlian GM, Gravett MG, Roberts CT Jr, Luthy D, Malone FD, D'Alton ME. Proteomic analysis of maternal serum in down syndrome: identification of novel protein biomarkers. *Journal of Proteome Research*. 2007; 6(4):1245-57.

Dasari S, Wilmarth PA, Rustvold LD, Riviere MA, Nagalla SR, David LL. Reliable detection of deamidated Peptides from lens crystallin proteins using changes in reverse phase elution times and parent ion masses. *Journal of Proteome Research*. 2007; 6:3819-3826

Susan Price (M.S., '99) had a paper from the Doctoral Consortium of the 2006 European Conference on Digital Libraries recently published:

Price S. Semantic components: A model for enhancing retrieval of domain-specific information. *IEEE Technical Committee on Digital Libraries Bulletin*, 2007; 3(1).

Doctoral student **Ken Guappone, M.D.**, was co-author of a paper: Ash JS, **Guappone KP.** Qualitative evaluation of health information exchange efforts. *Journal of Biomedical Informatics*. 2007; 40(6 Suppl):S33-9.

Guappone was co-author of two papers presented at Medinfo in Brisbane, Australia, along with co-authors **Emily Campell (predoctoral fellow)** and **Richard Dykstra, M.D., (M.S. '06)**

Ash JS, Sittig DF, **Dykstra R, Campbell E, Guappone K.** Exploring the unintended consequences of computerized physician order entry. *Medinfo*. 12(Pt 1):198-202, 2007.

Sittig DF, **Guappone K, Campbell EM, Dykstra RH,** Ash JS. A survey of U.S.A. acute care hospitals' computer-based provider order entry system infusion levels. *Medinfo*. 12(Pt 1):252-6, 2007.

Post-doctoral fellow **Jayashree Kalpathy-Cramer** was co-author of several recent papers:

Hersh WR, Müller H, **Kalpathy-Cramer J,** Kim E. Consolidating the ImageCLEF medical task test collection: 2005-2007. *Proceedings of the Third MUSCLE/ImageCLEF Workshop on Image and Video Retrieval Evaluation*. 2006; 31-39.

Kalpathy-Cramer J, Hersh W. Medical image retrieval and automatic annotation: OHSU at ImageCLEF 2007. *Working Notes for the CLEF 2007 Workshop*, 2007.

Kalpathy-Cramer J, Hersh W. Automatic image modality based classification and annotation to improve medical image retrieval. *Medinfo*. 2007; 12(Pt 1):1334-1338.

Müller H, Deselaers T, Kim E, **Kalpathy-Cramer J,** Deserno TM,

Hersh W. Overview of the Image-CLEF 2007 medical retrieval and annotation tasks. *Working Notes for the CLEF 2007 Workshop*, 2007.

Master's student **Hari Rekapalli** was first author of an AMIA Symposium paper: **Rekapalli HK,** Hersh W. A comparative analysis of retrieval features used in the TREC 2006 Genomics Track passage retrieval task. *Proceedings of the AMIA 2007 Annual Symposium*. 2007.

Recent graduate **Jianji Yang,**

(**Ph.D., '08**) co-authored two papers:

Cohen AM, **Yang J,** Fisher S, Roark B, Hersh WR. The OHSU biomedical question answering system framework. *Proceedings of the Sixteenth Annual Text Retrieval Conference (TREC) 2007*.

Yang J, Cohen AM, Hersh W. Automatic summarization of mouse gene information by clustering and sentence extraction from MEDLINE abstracts. *Proceedings of the AMIA 2007 Annual Symposium*. 2007.

From the Chair

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initiative is the development of a track in our biomedical informatics graduate program in health information management (HIM). With the growing adoption of electronic health records, the HIM field is undergoing substantial change. There is a growing need for competencies in health care organization, information technology, business and management, and other skills. Not surprisingly, the competencies identified by the American Health Information Management Association (AHIMA) for next-generation HIM professionals have substantial overlap with those deemed important in biomedical informatics. Led by AHIMA, the field is aiming to recalibrate its professional practice and educational programs for the new digital and data-driven health care environment. Leaders of AHIMA have encouraged OHSU to pursue an educational program in HIM, and we have hired Joanne Valerius, M.P.H., R.H.I.A. to lead this effort. (See article on page 2).

Another new initiative is the establishment of an Alumni Advisory Board. The goal of this entity will be to provide feedback on what we can do to provide continuing value to alumni. We also hope that alumni can provide us help in improving the program for students currently enrolled and by identifying strategies to recruit

high-caliber students into the program. We held a breakfast meeting of those who attended this year's American Medical Informatics Association meeting, obtaining many great ideas. These will be followed with further discussions via conference calls and other communications.

This month's faculty profile features Dr. Thomas Yackel. Although Tom is not as visible around the BICC Building as other faculty, he arguably has one of the most important jobs at OHSU, which is serving as the Physician Lead for the Epic electronic health record implementation.

This issue also features publication of a milestone for the department, our first ever strategic plan. This plan lays out guidance for the initiatives and investments we hope to pursue in the coming years. Of course, part of the purpose of strategic planning is to help the department identify and leverage more resources. In other words, we need to think about funding, both to sustain existing programs and invest in new ones.

One goal of the strategic plan is to increase our external outreach. To that end, Marcy Jacobs has joined the department as our external relations liaison. Marcy is gathering data and building relationships that will facilitate collaboration with industry, health care systems, other academic institutions, alumni, and others. ■

National Leaders Visit

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10,000 health care professionals in informatics by the year 2010.

Hersh also lauded Congressman Wu for his passage of HR 1467 in the House to fund additional research and education in the field.

Governor Kulongoski announced that Oregon has received a \$20 million grant from the Federal Communications Commission to fund the Oregon Health Network. The Network will enhance the connectivity of various regional networks into one broadband network for health applications. DMICE will be well-poised to partner with organizations around Oregon to develop, implement, and evaluate innovative applications on top of that network.

The second visit was by Carolyn Clancy, M.D., Director of the Agency for Healthcare Research and Quality (AHRQ), who came to OHSU January 14, 2008. Dr. Clancy's visit gave the department a chance to showcase its work, particularly projects funded by AHRQ. "It was a delight to show

Dr. Clancy how effectively we serve as stewards for the generous funding from her agency," said Hersh.

Dr. Clancy met with leaders of the following AHRQ-funded programs based in DMICE: the Oregon Evidence-based Practice Center (directors Mark Helfand, M.D., M.P.H., and Evelyn Whitlock, M.D., M.P.H.), RxSafe (director Paul Gorman, M.D.), the Oregon Research-based Practice Network (research director Cynthia Morris, Ph.D., M.P.H.), and the John M. Eisenberg Clinical Decisions and Communications Center (director David Hickam, M.D., M.P.H.). Dr. Clancy also gave a public lecture, *Translating Research into Practice: Making Today's Goals Tomorrow's Reality*, which is available for viewing on the DMICE blog: oninformatics.com/?p=74

Co-hosting Dr. Clancy's visit was the Oregon Clinical & Translational Research Institute. Drs. Hersh and Clancy met with OCTRI leaders Eric Orwoll, M.D., and Mary Durham, Ph.D, to discuss the role of AHRQ in clinical and translational research. ■

DMICE Tracks

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