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DMICE Tracks

From the Chair

Welcome to another issue of DMICE Tracks, our occasional newsletter about happenings in the Department of Medical Informatics &



Clinical Epidemiology (DMICE). I am pleased to report that all aspects of DMICE are doing well. Our research programs are

well-funded and productive, our educational programs continue to attract bright and motivated students, and the department is increasingly involved in larger roles around the university. The latter include teaching in the medical school curriculum and other programs as well as contributing to the OHSU clinical enterprise that provides the foundational funding for the rest of the activities of the university.

The department continues to do well, both from an academic and a financial standpoint. New students continue to enroll, and those graduating have been able to find challenging and well-paying jobs to start new rewarding careers. As noted in the column to the right, we have received some new grants from the National Institutes of

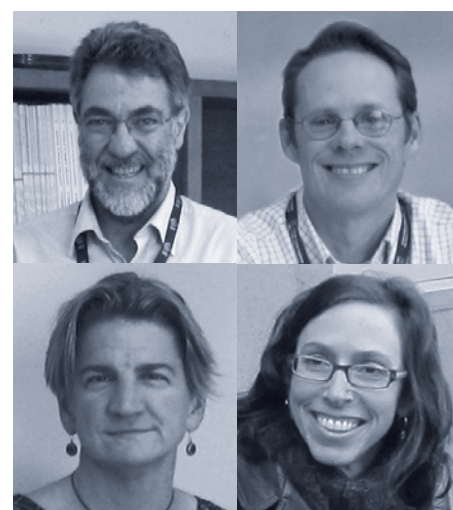
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DMICE Joins the Big Data Era with NIH Education and Research Grants

The Oregon Health & Science University (OHSU) Department of Medical Informatics & Clinical Epidemiology (DMICE) has been awarded two grants to develop educational content and skills courses in the new National Institutes of Health (NIH) Big Data to Knowledge (BD2K) Program. In addition, DMICE was awarded an additional grant in collaboration with Mayo Clinic that makes use of Big Data from electronic health records (EHRs) for the purpose of identifying patients who might be eligible for clinical research studies.

In October 2014, NIH awarded a total of \$32 million for 38 grants in the areas of enabling data utilization, developing analysis methods and software, enhancing training, and establishing centers of excellence. The two DMICE grants total about \$1 million over three years and were among nine grants awarded for development of open educational resources and courses. Eight other institutions in addition to OHSU received more than one grant.

NIH launched the BD2K initiative



Top: William Hersh, M.D.; David Dorr, M.D., M.S. Bottom: Shannon McWeeney, Ph.D.; Melissa Haendel, Ph.D.

in 2012 when it was recognized that an increasingly important aspect of biomedical research was to leverage data from clinical and biological sources. Its mission is to enable biomedical scientists to use big data effectively and appropriately to enhance reproducible research.

The two OHSU BD2K grants are

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Faculty and Students Present at Annual AMIA Symposium in Washington, D.C.

Faculty and students in the Department of Medical Informatics & Clinical Epidemiology participated in the 2014 American Medical Informatics Association Annual Symposium in Washington, D.C., November 15-19, through workshops, presentations and posters.

A highlight of the conference was the OHSU team winning the 2014 Student Design Challenge for their project, Drawn Together: Enhancing Patient Engagement and Improving Diagnostic Tools through Electronic Draw-and-Tell Conversation (see article on page 3).

Associate professor and vice chair **David Dorr, M.D., M.S.**, was elected a Fellow of the American College of Medical Informatics, a college of elected fellows who have made significant and sustained contributions to the field of biomedical informatics.

In addition, **Dian Chase, Ph.D.** '14, was a finalist in the AMIA student paper competition: The EHR's Roles in Collaboration between Providers: A Qualitative Study, **Dian A. Chase; Joan S. Ash; Deborah J. Cohen; Jennifer D. Hall; Gary M. Olson; David A. Dorr.**

Other oral presentations included:

Data Analytics in Patient-Centered Care, *Denise Goldsmith; Patricia Abbott; Suzanne Bakken; Holly B. Jimison; Sally Okun; Bonnie L. Westra; Sunmoo Yoon*

Multiple Perspectives on Clinical Decision Support: A Qualitative Study of Fifteen Clinical and Vendor Organizations, *Joan S. Ash; Dean F. Sittig; Carmit K. McMullen; Adam Wright; Arwen Bunce; Vishnu Mohan; Deborah J. Cohen; Blackford Middleton*



David Dorr, M.D., M.S., newly elected fellow of the American College of Medical Informatics, joins fellow members William Hersh, M.D., and Peter Embi, M.D., M.S. '02.

Innovative Approaches to Medication Reconciliation within the Veterans Health Administration: Designing the 'Magic Pill', **Blake J. Lesselroth; Kathleen G. Adams; Steven R. Simon; Kenneth Boockvar; Peter Kaboli**

Informatics without Borders: International Outreach of US-based Training Programs, *Lucila Ohno-Machado; William R. Hersh; Cynthia Gadd; Gerald P. Douglas*

Layered Spaces for Clinical Information Retrieval, **Stephen Wu; Dingcheng Li; James Masanz; Hongfang Liu**

Automated Identification of Unsuspected Lung Nodule Findings in Radiology Reports with Natural Language Processing and Text Classification, *Ryan Wise; Jonathan Duckart; Jianji Yang*

Evolving Career Landscapes in

Biomedical and Health Informatics, *Rui Zhang; William R. Hersh; Genevieve B. Melton; Yang Huang; Laura K. Wiley; Julie Doberne; Nawanan Theera-Ampornpant*

How Safe are Users of Consumer Health Informatics?, *Thomas Wetter; Mary Czerwinski; George Demiris; Robert Hsiung; Holly B. Jimison*

A Mobile/Web App for Long Distance Caregivers of Older Adults: Functional Requirements and Design Implications from a User Centered Design Process, **Steven S. Williamson; Paul N. Gorman; Holly B. Jimison**

Year in Review 2, **William R. Hersh; Joan S. Ash**

Development and Evaluation of Reference Standards for Image-based Telemedicine Diagnosis and Clinical Research Studies in Ophthalmology, *Michael C. Ryan; Susan Ostmo; Karyn*

Jonas; Audina Berrocal; Kimberly Drenser; Jason Horowitz; Thomas C. Lee; Charles Simmons; Maria-Ana Martinez-Castellanos; R. V. P. Chan; Michael F. Chiang

How Can We Partner with Electronic Health Record Vendors on the Complex Journey to Safer Health Care?, **Dean F. Sittig; Joan S. Ash; Adam Wright; Dian A. Chase; Eric Gebhardt; Elise Russo; Colleen Tercek; Vishnu Mohan; Hardeep Singh**

Patient Health Records (PHRs), Patient Access to their Records/ Medical Information: Issues and Challenges, **Catherine K. Craven; Joseph Kannry; Jessica S. Ancker; Paul R. DeMuro; Carolyn Petersen**

Analyzing and Comparing Clinical Work Systems with Cognitive Work Analysis: Lessons Learned, **James L. McCormack; Paul N. Gorman**

Data Governance Dilemmas for Research and Clinical Care, **Bonnie Kaplan; Paul R. DeMuro; Frank A. Pasquale; Jan Talmon; Peter Winkelstein**

Posters presented by DMICE faculty and students included:

An Informatics Approach to Building a Surgical Residents Log, **Michael Grove**

Using EHR Timestamps for Analyzing Ophthalmology Clinic Workflows, **Sarah Read-Brown; Michelle R. Hribar; Leah G. Reznick; Thomas R. Yackel; Michael F. Chiang**

What Tasks Are Clinical Teams Tracking in Daily Practice? Usage of a Web-based Care Management Tool in Eight Veterans Affairs Medical Centers, **Jianji Yang; Judy McConnachie; Chun J. Sun; Lisa Winterbottom**

Drawn Together: Enhancing Patient Engagement and Improving Diagnostic Tools through Electronic Draw-and-Tell Conversation, **Deborah V. Woodcock; Steven S. Williamson; Dana Womack; Kimberley A. Gray; Kate Fultz Hollis; Michelle R. Hribar** ■

Informatics Students Win AMIA Student Design Challenge

Six students in the OHSU biomedical informatics graduate program won the second annual student design challenge at the American Medical Informatics Association (AMIA) annual symposium November 19, 2014. The team created a prototype of a mobile app that can capture children's drawings and accompanying narratives to better facilitate child-provider communication and engage children in healthcare.

Deborah Woodcock, M.B.A., M.S. student; Steven Williamson, Ph.D. student; Dana Womack, M.S., Ph.D. student; Kimberley Gray, biomedical informatics graduate certificate '14; Kate Fultz Hollis, M.S., M.B.I. student; and Michelle Hribar, Ph.D., post-doctoral fellow, comprised the team that responded to the 2014 challenge theme: "Beyond Patient Portals: Engaging Patients with their Healthcare Providers."

The app they created, Drawn Together, is based on Draw and Tell Conversations, a technique where children draw and explain their problems/symptoms in their own

words. For use in clinical settings or at home with parents, the application allows young children to articulate their own problems during health care encounters. Typically parents and providers talk directly to one another, while the child listens; this program provides a unique communication tool for the child, provider and parents.

Drawn Together supports touch screen drawing as well as image scanning of paper drawings. Drawings can be annotated with text, tags and diagnoses and can be shared through email, electronic health record upload, and syncing between two devices with Drawn Together. The app is based on research by School of Nursing associate professor Martha Driessnack, Ph.D., P.N.P.-B.C., who developed the Draw and Tell Conversation.

The AMIA Student Design Challenge selects eight teams to present posters at the annual symposium. Of these, four teams are chosen to give an oral presentation at the meeting, and the winners are announced on the last day of the symposium. ■



Student design challenge team members (left to right): Michelle Hribar, Ph.D., post-doctoral fellow; Steven Williamson, Ph.D. student; Deborah Woodcock, M.B.A., M.S. student; Dana Womack, M.S., Ph.D. student; and Kate Fultz Hollis, M.S., M.B.I. student.

Fifty-five Students Receive Biomedical Informatics Degrees in 2013-14

Fifty-five students in the biomedical informatics graduate program received degrees in the 2013-14 academic year, as the OHSU School of Medicine held its commencement ceremony on June 2, 2014, bringing the total number of DMICE alumni to 605 since informatics degrees were first awarded in 1998.

Three students received a doctor of philosophy degree (listed with their dissertation topic):

Dian A. Chase, Portland, OR
Dissertation: *The Electronic Health Record: Effects on collaboration between providers*

Ted Glenn Laderas, Portland, OR
Dissertation: *Connecting genotypes to drug sensitivity in HER2 positive cancer cell lines*

James L. McCormack, Buzzards Bay, MA
Dissertation: *Handling external clinical information in independent primary care practices: a cognitive work analysis*

Seven students received a master of science in biomedical informatics (listed with their thesis topic):

Sonia Elizabeth Benitez, Buenos Aires, Argentina
Thesis: *Cross-cultural adaption and validation of a score for evaluating quality of inpatient clinical notes*

Christopher Richard Betzing, Lake Oswego, OR
Thesis: *Identification of critical pathways altered by radiation exposure and drug target analysis*

Mark Allen Dane, Hood River, OR
Thesis: *Automated analysis of cell spot microarray experiments*



Front row (left to right): Joan Ash, Kathryn Pyle, David Dorr, William Hersh, James McCormack, Faiza Khan. Second row: Abdallah Abdallah, Mark Dane, Ted Laderas, Tracy Edinger, Michael Berman. Third row: Dian Chase, Judith Logan, Karen Eden, Latha Kalaga, Paul Baker, Purabi Panigrahy. Last row: Joanne Valerius, Carlos Otero, Yazan Jaber, Shannon McWeeney.

Tracy Edinger, Portland, OR
Thesis: *Evaluation of clinical text segmentation to facilitate cohort retrieval*

Samuel M. Higgins, Portland, OR
Thesis: *Drug sensitivities in the context of genomic aberrations: applications to cancer*

Carlos Martin Otero, Buenos Aires, Argentina
Thesis: *Improving the granularity in the electronic health record problem list*

Maryann Zirkle, Portland, OR
Thesis: *Developing a manually annotated corpus of VA Electronic Medical Record notes of post-traumatic stress disorder natural language processing tasks*

Twenty-one students received a master of biomedical informatics (listed with their capstone or internship project):

Paul Bruce Baker, Arlington, VA
Capstone: *Quantitative benchmarking of electronic health record (EHR) software*

Michael Richard Berman, Woodbridge, CT
Capstone: *A personal prenatal health record for a culturally diverse, urban community*

Meryl Bloomrosen, Silver Spring, MD
Capstone: *Public policy considerations for mobile health using cell/smartphones in the United States*

Matthew J. Cook, Simsbury, CT
Capstone: *Internship: Planning and implementation of an Electronic Health Record upgrade in a family medicine practice*

Katherine Cox, Hillsboro, OR
Capstone: *Internship: The well visit planner: Integrating practice-based quality improvement into existing systems*

Latha R. Kalaga, Aurora, CO
Capstone: *Qualitative data analysis – Making choices about breast cancer screening*

Faiza Jawad Khan, Portland, OR
Capstone: *Implementing business intelligence and analytics in healthcare: The path to better outcomes*

Eli Matthew Lourie, Media, PA
Capstone: *The effect of a clinical decision support tool on the identification of pediatric hypertension*

Rosemary Tracie Nettleton, Portland, OR
Capstone: *Informatics in super resolution optical imaging: characterization of mitochondria in cochlear hair cells*



James McCormack, Ph.D., is congratulated by professor Paul Gorman, M.D.

Jenny Ng, Singapore
Capstone: *The impact of a decision support system on pharmacy interventions in emergency departments*

Purabi Panigrahy, Portland, OR
Capstone: *Designing the user interface of a sleep management system for an elderly population*

Benjamin Paul Rosenbaum, Cleveland, OH
Capstone: *Modeling disparities in clinician-ordered test results*
Usanisa Setboonsarng, Bangkok, Thailand
Capstone: *Exploring high-level themes in primary care team collaboration*

Jamie M. Slonaker, Bainbridge Island, WA
Capstone: Internship: *Internship at University of Western States: Epic implementation*

Henry Philip Stalker, Durango, CO
Capstone: *Critical success factors for physician adoption of electronic health records: Reconciling systematic and heuristic knowledge*

Jerry Michael Stultz, Coon Rapids, MN
Capstone: *Reinventing pediatric medication preference lists*

Giacomo V. Vinces, Middletown, NY
Capstone: *Revisiting CDS implementation failure: the physician's perspective*

Lisa Karstens Vingara, Portland, OR
Capstone: *Automated segmentation of 7 Tesla Magnetic Resonance Images (MRI)*

Jeffrey Mark Weinfeld, Silver Spring, MD
Capstone: *Can targeting preventive care reminders to primary care providers seeing their own patients improve clinical decision support?*

Martin Michael Yadrack, Jr., Los Angeles, CA
Capstone: *Feasibility and validity of the Academy of Nutrition and Dietetics Health Informatics Infrastructure*

Ya-ju Yang, Seattle, WA
Capstone: Internship: *Standardize CORI with doses of ICD-10 and CDA*

Twenty-four students received a graduate certificate in biomedical informatics, a 24-credit-hour program to provide knowledge and skills in the application of information technology in health care:

Abdallah Abdallah, Beaverton, OR
Susan Jane Bliss, Hillsboro, OR
Matthew Hayden Brush, Portland, OR
Dan Lee Collier, Vancouver, WA
Ajay Dhawan, Fort Wayne, Indiana
Sabrina Rose Gaspar, Lexington KY
Lisa Anne Gleason, San Diego, CA
Lawrence Ham, Los Angeles, CA
Yazan Jabr, Syria
Julie Hsiao-Wen Lin, Charlotte, VT
Cara Blythe Litvin, Charleston, SC
Cassius T. Lockett, Rocklin, CA
Sara Marinucci-SeEVERS, Portland, OR
Phuong T. Nguyen, Portland, OR
Okunola O. Oluola, Kansas City, MO

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Tracy Edinger, N.D., M.S. '14, James McCormack, Ph.D. '14, Ted Laderas, Ph.D. '14, and Dian Chase, M.S.N., M.B.A., Ph.D. '14, await the School of Medicine commencement ceremony.

Faculty Focus: David Dorr, M.D., M.S.

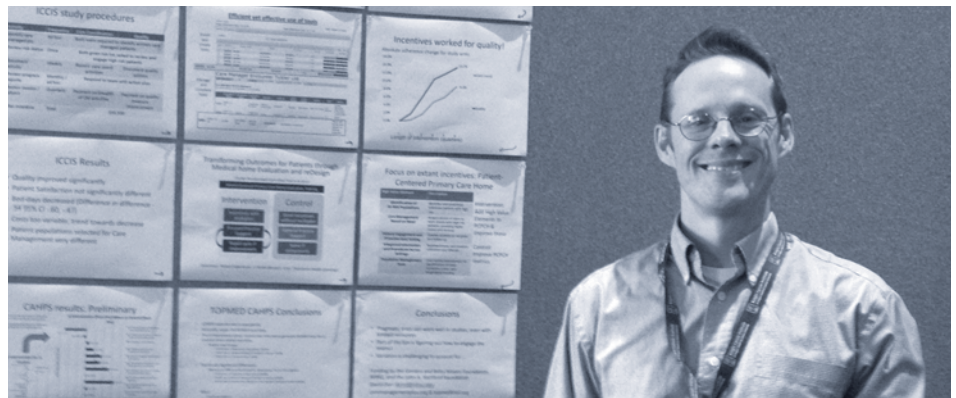
The election of David A. Dorr, M.D., M.S., to the American College of Medical Informatics in November 2014 is a timely tribute to Dorr's ten years as a DMICE faculty member and his research and teaching career here.

An associate professor and vice chair for clinical informatics, Dorr focuses his research and teaching on quality informatics, systems of health care and how to improve efficiency and effectiveness, care management, and population-based health information technology tools.

After receiving his B.A. and M.D. from Washington University in St. Louis, MO, Dorr did a three-year residency in internal medicine at OHSU. He then went to the University of Utah as a National Library of Medicine (NLM)-funded fellow in medical informatics and there received an M.S. in medical informatics and health services administration.

While at Utah, Dorr also worked as an investigator with the Intermountain Healthcare Medical Group on a grant funded by The John A. Hartford Foundation looking at geriatric interdisciplinary teams in practice. This research continued after Dorr joined DMICE as an assistant professor in January 2005, and several years later, Dorr received additional funding from the Hartford Foundation for dissemination of the Care Management Plus (CM+) system.

An innovative, evidence-based model for older adults with chronic illnesses, CM+ is currently available at cost to medical practices and offers care management technology software including a care manager tracking database, a patient summary sheet, and messaging systems to help clinicians access care plans, receive reminders about best practices, and facilitate communication among health care teams. The grant has led



to the creation of an Integrated Care Coordination Information System, which integrates the population management tools with electronic health record data and provides risk prediction, quality measurement, and monitors team-based improvement. With care managers at the heart of the CM+ program, Dorr's team provides in person and online training to these care managers, including special issues on geriatric syndromes and concepts.

"Care Management Plus is a flexible system focused on at-risk patients and their caregivers," Dorr said. "It has enabled more than 400 clinics to provide better care, earn incentives, and help these patients stay in their homes and out of the hospital."

An expert in data quality and measurement issues as well as standards and vocabularies and data integration, Dorr has also served as principal investigator (PI) or investigator on grants and contracts related to care coordination funded by the Agency for Healthcare Research and Quality and the National Institutes of Health (NIH) as well as private foundations. Currently he is PI of a four-year grant from The Gordon and Betty Moore Foundation that supports enhancement, implementation, and evaluation of an improved model for delivering improved primary care to high-risk older adults through the use of health information technology

tools. In September, Dorr received an NIH grant to create an analytics and data skills course (see story on page 1).

"With the increasing amount of data in health care and research, we intend to use our BD2K Skills Course to train students at all levels to discover new knowledge through data and informatics," Dorr said.

Another hat Dorr wears is as principal investigator of the NLM-funded summer internship program for college undergraduates, which funds eight students each year. He has had several interns work on his own research projects as well as short-term trainees from the NLM informatics training program.

In his role as vice chair, Dorr is part of the team overseeing the clinical informatics track in DMICE's graduate program. He also teaches BMI 537, Health Care Quality, each spring and this past summer taught a hybrid course on data analytics.

Continuing to practice medicine, Dorr works a half day per week at the OHSU chronic illness management clinic, attending to patients with complex health care needs.

"When I left Utah to come back to my home state of Oregon, I was very pleased that we had one of the top informatics programs in the country," Dorr stated. "It has provided me a place to continue to try to make real change for people in health care." ■

Joanne Valerius Wins AHIMA Educator Award

Joanne Valerius, Ph.D., M.P.H., R.H.I.A., assistant professor, received the 2014 Educator Triumph Award from AHIMA, the American Health Information Management Association. The award is presented to those who demonstrate excellence in preparing the next generation of professionals for their career in health information management. Valerius was honored at the 2014 AHIMA Convention, held in San Diego September 27-October 2, 2014.

According to AHIMA, Valerius "...is a supportive coach and mentor who has been a dynamic, highly visible member of the HIM profession for over 41 years. She values the diverse viewpoints of students and continuously strives to improve her knowledge and skills to impart to others."

Valerius joined the DMICE faculty in 2007 after directing the health information management (HIM) program at St. Catherine

University in Saint Paul, MN. She directs the HIM track in the OHSU biomedical informatics program and teaches four BMI courses.

Valerius served as a co-investigator on the grant, funded by the Office of the National Coordinator for Health Information Technology, to develop curriculum used by many community colleges, and has published on topics of curriculum and importance of graduate education to advance the HIM profession.

A national and international speaker on educational topics about diversity, human resource management, and current HIM educator issues, she currently serves on the Graduate Resource Alliance of the Foundation of AHIMA. Her international work includes current committee membership of the World Health Organization Functioning and Disability Reference Group for the International Health Information Management Association. ■



Joanne Valerius, Ph.D., M.P.H., R.H.I.A., with Bob Mohle, certificate '13, R.H.I.A., (left) and Willam Watkins, R.H.I.A., OrHIMA president (right).

DMICE Joins the Big Data Era

Continued from Page 1

R25 educational grants. Although national in scope, they will also have important local benefits for OHSU, Oregon, and the rest of the Pacific Northwest. One of the R25 grants will develop open educational resources (OERs) that can be adapted for a variety of educational programs, from the undergraduate to graduate and professional levels. The materials will use the same format as the Office of the National Coordinator for Health IT (ONC) curricular materials developed from 2010-13.

The other R25 grant will develop a big data skills course that will make available curricula and data sets to provide training in methods for basic, clinical and translational researchers as well as clinicians, librarians, and others. All researchers, especially graduate students, will be eligible to take the skills course and hone their skills in data.

DMICE plans to incorporate the materials from both grants in its own courses in its biomedical informatics graduate program, while the OHSU Library will utilize the materials via its educational outreach efforts. The OERs will also join the existing ONC curriculum materials on the American Medical Informatics Association (AMIA) Web site.

The OER project will be led by three principal investigators (PIs) who are DMICE faculty: **William Hersh, M.D.**, professor and chair; **Shannon McWeeney, Ph.D.**, professor and vice chair; and **Melissa Haendel, Ph.D.**, assistant professor. The skills development course will be led by **David Dorr, M.D., M.S.**, associate professor and vice chair, and Drs. **McWeeney** and **Haendel**, with Dr. **Hersh** as a co-investigator. These four OHSU faculty will also become part of the BD2K national community that NIH is establishing to widely

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DMICE Faculty and Students Present at OHSU



RESEARCHWEEK



Krystal Klein, post-doctoral fellow, and Karen Eden, Ph.D.

DMICE faculty, students and staff made a strong showing at the annual OHSU Research Week events, held May 5-8, 2014. Eighteen faculty, twelve fellows/students, three staff members, and two alumni contributed to presentations, posters and panels during the week.

Oral presentations included:

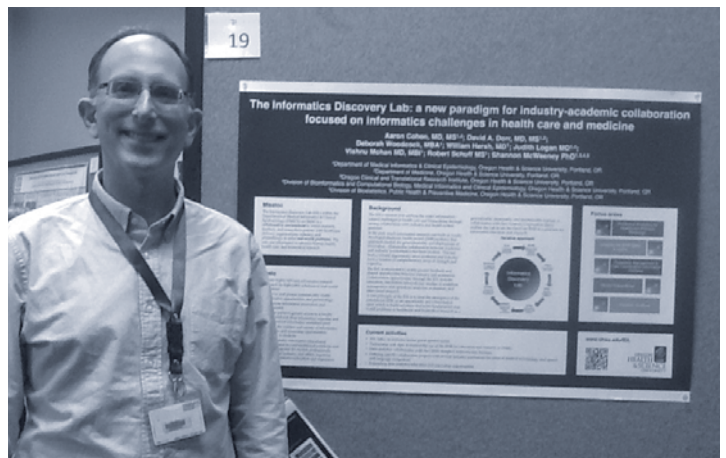
- A Review of Methods for Measuring Distributed Situational Awareness in Medication Reconciliation Tasks. **Nathan Bahr**
- An approach to building a mixed architecture surgical residents log. **Jeffery Emch**
- An informatics approach to building a surgical residents log. **Michael Grove**
- Solving the maximum influence problem using information flow models and ant optimization for biological pathway analysis. **David Gibbs**, Ilya Shmulevich
- Information Technology Tools For Long Distance Caregivers: A Needs Assessment. **Steven Williamson**, **Paul Gorman**, **Holly Jimison**
- Emergency Department Visits for Non-Traumatic Dental Problems in Oregon State. Benjamin Sun, Eli Schwarz, **Robert Lowe**, Susan

Malveau,
Benjamin
Chan, Annick
Yagapen

- Implementation of electronic health record systems in pediatric ophthalmology: impact on productivity and efficiency at an academic medical center. Travis Redd, Sarah Read-Brown, Dongseok Choi, **Thomas Yackel**, Daniel Tu, **Michael Chiang**
- Functional Connectivity in Women with Urinary Urgency Incontinence. **Lisa Vingara**, Chris Krisky, Sam Carpenter, Corrine Stevens, Kamari Aykes, Damien Fair, Rahel Nardos

Posters presented at the event included:

- Evidence Review of Strategies to Improve Rates of Screening Mammography and Its Translation into a Practical Guide for Communities. Lisa Domenico, **Paul Gorman**,



Aaron Cohen, M.D., M.S. '05, presents his poster.

- Frances Lin, Venus Fromwiller, Nancy Magathan, Sharon Vail
- Lessons About Risk Presentation from Developing a Mammography Decision Aid. **Krystal Klein**, **Michelle Hribar**, **Lindsey Watson**, **Karen Eden**
- Requirements Gathering for Building a Post-Traumatic Stress Disorder (PTSD) Ontology. **Bryan Travis Gamble**
- The Informatics Discovery Lab: A New Paradigm for Industry-Academic Collaboration Focused on Informatics Challenges in Healthcare and Biomedicine. **Aaron Cohen**, **David Dorr**, **Deborah**



Evidence-based Practice Center researchers Alexander Ginsberg, M.A., M.C.R.P., Shelley Selph, M.D., M.P.H. and Ngoc Wasson, M.P.H.

Woodcock, William Hersh, Judith Logan, Vishnu Mohan, Robert Schuff, Shannon McWeeney

- Creating Realism for 'in-situ' Simulation Research & Training (in the field). Caitlin Dickinson, Jesika Gavilanes, **Jeanne-Marie Guise**, James McNulty
- LAVA Flow: Distribution and variation of LAVA elements within and between species of gibbons. **Thomas Joshua Meyer, Eisa Mahyari**, Christopher Whelan, Larry Wilhelm, Elizabeth Terhune, Kimberly Nevenon, **Lucia Carbone**
- The Monarch Initiative: leveraging the cross-species phenome for clinical diagnosis of rare disease. **Matt Brush**, Nicole Vasilevsky, Bryan Laraway, **Melissa Haendel**
- Author Contacts to Obtain Additional Data for a Systematic Review of Diagnostic Tests for Hepatic Fibrosis or Cirrhosis in Patients with Hepatitis C Virus Infection. **Alexander Ginsburg, Shelley Selph, Roger Chou**
- Computing a Meaningful Use II Quality Measure Using MIMIC: A case study. **Olubumi Akiwumi**
- Do It Yourself Workflow Assessment Primary Care: What do Primary Care Practices Require to Assess Workflows and Improve Practice? **Paul Gorman**, Lyle J. Fagnan, LeAnn Michaels, Sonya Howk

- On the Reproducibility of Science: At the Root of the Problem. Nicole Vasilevsky, **Matthew Brush, Melissa Haendel**
- Characterizing the Effects of CSF1R Inhibition in Acute Myeloid Leukemia with RUNX1 Abnormalities. David Edwards V, Matthew Siegel, Jill Peters, Anupriya Agarwal, Alyssa Carey, Melissa L Abel, **Shannon K McWeeney**, Jeffrey W Tyner

- Texting for Sexual Health to American Indian/Alaska Native Teens & Young Adults. **Patricia Yao**, Stephanie Craig Rushing, David Stephens, **Karen Eden**

In addition, faculty members **Cynthia Morris, Ph.D., M.P.H.**, and **Karen Eden, Ph.D.**, participated in a workshop on how to establish and manage a mentoring relationship. ■

Degrees 2013-14

Continued from Page 5

Maria Suzanne Parmer, Eagle Point, OR

Carlos J. Perez, San Francisco, CA

Wouter Jan Rietsema, Plattsburgh, NY

Edith Rutledge, Bellvue, WA

Cody Ray Schindeldecker, Troutdale, OR

Jonathan M. Sternlieb, Horsham, PA

Sara Lee Thomas, Corvallis, OR

Ericka Weeks, Sunland, CA

Everett L. Weiss, Chicago, IL ■



Distance students Paul Baker, M.D., M.B.I. '14, (left) and Michael Berman, M.D., M.B.I. '14, (right) celebrate their new degrees with William Hersh, M.D.



Physicians from Buenos Aires, Argentina, Sonia Benetiz, M.D. M.S. '14, (left) and Carlos Otero, M.D., M.S. '14, (right), whose training was funded by an NIH Fogarty Center grant, pose with William Hersh, M.D., the principal investigator of the grant.

OHSU to Offer Clinical Informatics Fellowship for Physicians

Oregon Health & Science University has been approved by the Accreditation Council for Graduate Medical Education (ACGME) to offer a Clinical Informatics Fellowship for physicians. OHSU was the third institution in the country to receive accreditation for this program.

The fellowship is affiliated with the OHSU Department of Medicine, with additional administrative support provided by the Department of Medical Informatics & Clinical Epidemiology. This fellowship is an addition to the suite of informatics educational offerings by DMICE and does not replace any existing programs. DMICE will continue to have its graduate program (graduate certificate, two master's degrees, and PhD degree) as well as its other research fellowships, including the flagship training program funded by the National Library of Medicine.

Professor and chair William Hersh, M.D., is program director, with Vishnu Mohan, M.D., M.B.I., assistant professor, and chief health information officer and associate professor Thomas Yackel, M.D., M.P.H., M.S., serving as associate program directors.

As defined by ACGME, clinical informatics is "the subspecialty of all medical specialties that transforms health care by analyzing, designing, implementing, and evaluating information and communication systems to improve patient care, enhance access to care, advance individual and population health outcomes, and strengthen the clinician-patient relationship." The new specialty was launched in 2013, with physicians already working in the field able to sit for the certification exam by meeting prior practice

requirements. Starting in 2018, this "grandfathering" pathway will go away, and only those completing an ACGME-accredited fellowship will be board-eligible. Last year, seven OHSU faculty physicians became board-certified in the new clinical informatics subspecialty, including the three program directors named above.

"We are excited to be part of this new subspecialty and new pathway for training future leaders in clinical informatics," said Dr. Hersh.

With recruitment underway, two physicians will be appointed as clinical informatics fellows in 2015-16. The fellowship will provide physicians with training in clinical informatics that will enable them to achieve board certification in the new subspecialty of clinical informatics, and will follow the format of the guidelines published by the ACGME.

Fellows will work through various rotations in different clinical informatics operational settings, not only at OHSU Hospital but also at the Portland VA Medical Center.

Fellows will also take classes in the OHSU Graduate Certificate Program that will provide them the knowledge base of the field and prepare them for the board certification exam at the end of their fellowship. Fellows will also continue their clinical practice in their primary specialty.

Several other programs are also in the process of seeking accreditation, and a number of them will be using OHSU distance learning course materials for the didactic portion of their programs. This summer, the first two fellows in the Stanford Packard Children's Hospital fellowship program took the introductory biomedical informatics course from OHSU. ■

Faculty/Staff Update

Awards and achievements

Congratulations to **Roger Chou, M.D., Marian McDonagh, Pharm.D., Shannon McWeeney, Ph.D., and Paul Gorman, M.D.**, who were all promoted to the rank of professor, as of July 1, 2014.

Shelley Selph, M.D., M.P.H., has joined the faculty as an assistant professor. Selph had been a post-doctoral fellow with the Pacific Northwest Evidence-based Practice Center for the past three years.

Stephen Wu, Ph.D., has been appointed adjunct assistant professor. He is also a natural language processing scientist at Trapit, Inc.

Joan Ash, Ph.D., professor and vice chair, was named one of the World's Most Influential Scientific Minds 2014. The list, published by Thomson Reuters, is a selection of authors publishing high-impact papers on groundbreaking and influential research. Ash was one of five recipients from OHSU.

Mark Helfand, M.D., M.P.H., M.S., professor, has been named director of the west coast branch of the US Cochrane Center, one of 14 centers around the world that facilitate the work of the Cochrane Collaboration, which produces and disseminates systematic reviews of healthcare interventions. Known as US Cochrane West, the branch is housed at OHSU. Professor **Jeanne-Marie Guise, M.D., M.P.H.**, is serving as an associate director of US Cochrane West.

Congratulations to **Mark Helfand, M.D., M.P.H., M.S.**, professor, who is president-elect of the Society for Medical Decision Making.

Associate professor and vice chair **David Dorr, M.D., M.S.**, was elected

a Fellow of the American College of Medical Informatics.

Michael Chiang, M.D., professor, received a 2014 Secretariat Award from the American Academy of Ophthalmology. **Chiang** also received the Faculty Award at the 9th Annual OHSU Student Volunteer Recognition and Awards Ceremony, presented by the OHSU All-Hill Student Council. He has been appointed to the editorial boards of *Ophthalmology* and *EyeNet*.

Grants

The Pacific Northwest Evidence-based Practice Center has received several recent task orders from the Agency for Healthcare Research and Quality (AHRQ) to produce systematic reviews. Professor and EPC director **Roger Chou, M.D.**, is principal investigator (PI) of Non Invasive Treatments for Low Back Pain. **Marian McDonagh, Pharm.D.**, professor and EPC associate director, is PI of two orders: Non Invasive Testing for Coronary Artery Disease (CAD) and Use of Point of Care Tests to Improve Appropriate Antibiotic Use for Acute Respiratory Tract Infections. **Annette Totten, Ph.D.**, assistant professor, is PI of Home-based Primary Care Interventions.

David Dorr, M.D., M.S., associate professor and vice chair, received a grant from AHRQ on refinement in study design and analysis for health reform to address multiple chronic conditions. **Dorr** has also received an award from the Commonwealth Fund for his project on Improving Implementation of Risk Prediction in Primary Care. In addition, **Dorr** is serving as a co-investigator and OHSU PI of an R01 grant from AHRQ, made to Brigham & Women's Hospital in Boston, entitled Improving Quality by Maintaining Accurate Problem Lists in the EHR (IQ-MAPLE).

Associate professor **Karen Eden, Ph.D.**, is a co-investigator and OHSU PI of an R01 grant from the National

Institutes of Mental Health to Johns Hopkins University, Effectiveness of a Safety Intervention for Dating Violence.

Professor **Jeanne-Marie Guise, M.D., M.P.H.**, received funding from AHRQ for the Oregon Patient Centered Outcomes Research K12 Program.

With funding from the National Institute of Standards and Technology, professor and chair **William Hersh, M.D.**, is performing relevance assessment work for the Text Retrieval Conference (TREC) 2014 Clinical Decision Support Track.

Presentations and posters

Michael Chiang, M.D., professor, gave nine recent presentations:

Invited speaker (2 sessions), World Ophthalmology Congress, Tokyo, Japan, April 2014.

Invited speaker on electronic health record risks, American Academy of Ophthalmology Mid-Year Forum, Washington, D.C., April 2014.

Speaker, American Ophthalmological Society annual meeting, New York, NY, May 2014.

Invited keynote speaker (3 sessions), Mexican Congress of Ophthalmology, Cancun, Mexico, June 2014.

Invited speaker, Pacific Coast Ophthalmological Society annual meeting, San Diego, CA, June 2014.

Invited speaker, American Eye Study Club annual meeting, Vail, CO, July 2014.

International keynote speaker, Brazilian Congress of Ophthalmology annual meeting, Recife, Brazil, September 2014.

Invited speaker,

PEDIG Advisor's Meeting, Tampa, FL, October 2014.

Invited speaker on quality improvement in electronic health records, American Academy of Ophthalmology annual meeting, Chicago, IL, October 2014.

Assistant professor **Blake Lesselroth, M.D., M.B.I.**, and the Portland Patient Safety Center of Inquiry (PSCI) were involved in recent presentations:

How Do You Successfully Implement and Sustain MR Processes?, Medication Use Crisis Meeting, hosted by the VA Medication Reconciliation Initiative in conjunction with VHA Program Offices, Department of Defense, and Indian Health Service, July, 2014.

Medication Review Software to Improve the Accuracy of Outpatient Medication Histories, poster presentation Northwest Patient Safety Conference, Lynnwood, Washington, May 2014.

Portland Informatics Center & Patient Safety Center of Inquiry: Kiosk Medication and Allergy Review Module, poster presentation Portland

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Paul Gorman, M.D., professor and chair of the School of Medicine M.D. Curriculum Committee, facilitates active learning about evidence-based medicine with OHSU medical students at the new Collaborative Life Sciences Building.

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VA Medical Center Research Poster Fair, Portland, Oregon, May 2014.

Publications

Heidi Nelson, M.D., M.P.H., research professor and vice chair, is lead author and editor of Nelson HD. *Systematic Reviews to Answer Health Care Questions*. Philadelphia, PA: Wolters Kluwer Health/Lippincott Williams & Wilkins; 2014. Chapter authors, in addition to Nelson, include current and former DMICE faculty and staff **Christina Bougatsos, M.P.H.**, **Ngoc Wasson, M.P.H.**, **Amy Cantor, M.D., M.P.H.**, **Kim Peterson, M.S.**, **Tracy Dana, M.L.S.**, **Robin Paynter, M.L.S.**, **Rose Relevo, M.S.**, **M.L.I.S.**, **Andrew Hamilton, M.L.S.**, **M.S.**, **Marian McDonagh, Pharm.D.**, **Ian Blazina, M.P.H.**, **Bernadette Zakher, M.B.B.S.**, **Roger Chou, M.D.**, and **Rongwei Fu, Ph.D.**

Agarwal A, Mackenzie RJ, Besson A, Jeng S, Carey A, LaTocha DH, Fleischman AG, Duquesnes N, Eide CA, Vasudevan KB, Loriaux MM, Firpo E, Cortes JE, **McWeeney S**, et al. BCR-ABL1 promotes leukemia by converting p27 into a cytoplasmic oncoprotein. *Blood*. 2014 Oct 7. pii: blood-2013-04-497040. [Epub ahead of print]

American College of Obstetricians and Gynecologists (College); Society for Maternal-Fetal Medicine, Caughey AB, Cahill AG, **Guise JM**, Rouse DJ. Safe prevention of the primary cesarean delivery. *Am J Obstet Gynecol*. 2014 Mar;210(3):179-93.

Arao RF, Rosenberg KD, **McWeeney S**, Hedberg K. Influenza vaccination of pregnant women: attitudes and behaviors of Oregon physician prenatal care providers. *Matern Child Health J*. 2014 Jul 18. [Epub ahead of print]

Arwood E, Rowe JM, Singh NS, Carr DB, Herr KA, **Chou R**. Implementing a paradigm shift:

incorporating pain management competencies into pre-licensure curricula. *Pain Med*. 2014 Sep 22. [Epub ahead of print]

Calderwood AH, **Logan JR**, Zurfluh M, Lieberman DA, Jacobson BC, Heeren TC, Schroy PC 3rd. Validity of a web-based educational program to disseminate a standardized bowel preparation rating scale. *J Clin Gastroenterol*. 2014 Nov-Dec;48(10):856-61.

Calderwood AH, Schroy PC 3rd, Lieberman DA, **Logan JR**, Zurfluh M, Jacobson BC. Boston Bowel Preparation Scale scores provide a standardized definition of adequate for describing bowel cleanliness. *Gastrointest Endosc*. 2014 Aug;80(2):269-76.

Cameron MH, Peterson V, **Boudreau EA**, Downs A, Lovera J, Kim E, McMillan GP, Turner AP, Haselkorn JK, Bourdette D. Fatigue is associated with poor sleep in people with multiple sclerosis and cognitive impairment. *Mult Scler Int*. 2014;2014:872732.

Carbone L, Harris RA, Gnerre S, Veeramah KR, Lorente-Galdos B, Huddleston J, Meyer TJ, Herrero J, Roos C, Aken B, Anaclerio F, Archidiacono N, Baker C, Barrell D, Batzer MA, Beal K, Blancher A, Bohrsen CL, Brameier M, Campbell MS, Capozzi O, Casola C, Chiatante G, Cree A, Damert A, de Jong PJ, Dumas L, Fernandez-Callejo M, Flicek P, Fuchs NV, Gut I, Gut M, Hahn MW, Hernandez-Rodriguez J, Hillier LW, Hubley R, Ianc B, Izsvák Z, Jablonski NG, Johnstone LM, Karimpour-Fard A, Konkel MK, Kostka D, Lazar NH, Lee SL, Lewis LR, Liu Y, Locke DP, Mallick S, Mendez FL, Muffato M, Nazareth LV, Nevenon KA, O'Bleness M, Ochis C, Odom DT, Pollard KS, Quilez J, Reich D, Rocchi M, Schumann GG, Searle S, Sikela JM, Skollar G, Smit A, **Sonmez K**, et al. Gibbon genome and the fast karyotype evolution of small apes. *Nature*. 2014 Sep 11;513(7517):195-201.

Carney N, Ghajar J, Jagoda A,

Bedrick S, **Davis-O'Reilly C**, **du Coudray H**, Hack D, Helfand N, Huddleston A, **Nettleton T**, Riggio S. Executive summary of Concussion guidelines step 1: systematic review of prevalent indicators. *Neurosurgery*. 2014 Sep;75 Suppl 1:S1-2.

Carney N, Ghajar J, Jagoda A, Bedrick S, **Davis-O'Reilly C**, **du Coudray H**, Hack D, Helfand N, Huddleston A, **Nettleton T**, Riggio S. Concussion guidelines step 1: systematic review of prevalent indicators. *Neurosurgery*. 2014 Sep;75 Suppl 1:S3-15.

Chou R, Cruciani RA, Fiellin DA, Compton P, Farrar JT, Haigney MC, Inturrisi C, Knight JR, Otis-Green S, Marcus SM, Mehta D, Meyer MC, Portenoy R, Savage S, Strain E, Walsh S, Zeltzer L. Methadone safety: a clinical practice guideline from the American Pain Society and College on Problems of Drug Dependence, in collaboration with the Heart Rhythm Society. *J Pain*. 2014 Apr;15(4):321-37.

Chou R, Weimer MB, **Dana T**. Methadone overdose and cardiac arrhythmia potential: findings from a review of the evidence for an American Pain Society and College on Problems of Drug Dependence clinical practice guideline. *J Pain*. 2014 Apr;15(4):338-65.

Chou R. Response to Katz and Krantz letter to the editor. *J Pain*. 2014 Sep;15(9):977.

Concannon TW, **Guise JM**, Dolor RJ, Meissner P, Tunis S, Krishnan JA, Pace WD, Saltz J, **Hersh WR**, et al. A national strategy to develop pragmatic clinical trials infrastructure. *Clin Transl Sci*. 2014 Apr;7(2):164-71.

Cottrell E, Whitlock E, Kato E, Uhl S, Belinson S, Chang C, Hoomans T, Meltzer D, Noorani H, Robinson K, Schoelles K, Motu'apuaka M, Anderson J, Paynter R, **Guise JM**. Defining the benefits of stakeholder engagement in systematic reviews [Internet]. Rockville (MD): Agency for Healthcare Research and Quality (US); 2014 Mar.

Cottrell EK, O'Brien K, Curry M, Meckler GD, Engle PP, Jui J, Summers C, Lambert W, **Guise JM**. Understanding safety in prehospital emergency medical services for children. *Prehosp Emerg Care*. 2014 Jul-Sep;18(3):350-8.

Dahdul WM, Cui H, Mabee PM, Mungall CJ, Osumi-Sutherland D, Walls RL, **Haendel MA**. Nose to tail, roots to shoots: spatial descriptors for phenotypic diversity in the Biological Spatial Ontology. *J Biomed Semantics*. 2014 Aug 11;5:34.

Del Fiol G, Workman TE, **Gorman PN**. Clinical questions raised by clinicians at the point of care: a systematic review. *JAMA Intern Med*. 2014 May;174(5):710-8.

Deyo RA, Dworkin SF, Amtmann D, Andersson G, Borenstein D, Carragee E, Carrino J, **Chou R**, et al. Focus article: report of the NIH Task Force on Research Standards for Chronic Low Back Pain. *Gastrointest Endosc*. 2014 Jul;80(1):133-43.

Deyo RA, Dworkin SF, Amtmann D, Andersson G, Borenstein D, Carragee E, Carrino J, **Chou R**, et al. Report of the NIH Task Force on Research Standards for Chronic Low Back Pain. *Spine (Phila Pa 1976)*. 2014 Jun 15;39(14):1128-43.

Deyo RA, Dworkin SF, Amtmann D, Andersson G, Borenstein D, Carragee E, Carrino J, **Chou R**, et al. Report of the National Institutes of Health Task Force on Research Standards for Chronic Low Back Pain. *J Manipulative Physiol Ther*. 2014 Sep;37(7):449-67.

Deyo RA, Dworkin SF, Amtmann D, Andersson G, Borenstein D, Carragee E, Carrino J, **Chou R**, et al. Focus article report of the NIH Task Force on Research Standards for Chronic Low Back Pain. *Clin J Pain*. 2014 Aug;30(8):701-12.

Deyo RA, Dworkin SF, Amtmann D, Andersson G, Borenstein D, Carragee E, Carrino J, **Chou R**, et al. Report of the NIH Task Force

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Evidence-based Practice Center Receives Fifth Master Contract from the Agency for Healthcare Research and Quality



Elaine Graham, M.L.S., program manager, Roger Chou, M.D., director, and Marian McDonagh, Pharm.D., associate director, continue as the OHSU leadership team of the Pacific Northwest Evidence-based Practice Center under the EPC-V contract.

The Pacific Northwest Evidence-based Practice Center (EPC) has received a contract to be an EPC for another five years, from December 2014 to November 2019.

Under the EPC-V contract with the Agency for Healthcare Research and Quality (AHRQ), Roger Chou, M.D., professor, continues as EPC director with professor Marian McDonagh, Pharm.D. as associate director and Elaine Graham, M.L.S. as program manager.

Based at Oregon Health & Science University, the EPC partners with the University of Washington CHASE Alliance and Spectrum Research, Inc. OHSU has been designated as an EPC since 1997.

"We are excited to continue our work as the Pacific Northwest Evidence-based Practice Center," Chou said. "This award is a testament to the success of our ongoing partnership with the University of Washington's CHASE Alliance and Spectrum Research. During the last EPC cycle we were extremely successful in secur-

ing awards. OHSU is one of the few centers to have been awarded the EPC designation through all five cycles of the program."

Under the EPC-IV contract, OHSU has had 15 task orders to produce systematic reviews on topics ranging from bladder cancer to home-based primary care to lower back pain to noninvasive testing for coronary artery disease.

Two recent EPC systematic reviews were presented at National Institutes of Health Pathways to Prevention Workshops. Along with Dr. Chou, Judy Turner, Ph.D., professor of psychiatry and behavioral sciences at the University of Washington, presented The Role of Opioids in the Treatment of Chronic Pain on September 29-30, 2014, in Bethesda, MD.

M. Beth Smith, D.O., associate professor of medicine, and research professor Heidi Nelson, M.D., M.P.H., presented Advancing the Research on Myalgic Encephalomyelitis/ Chronic Fatigue Syndrome on December 9-10, 2014, in Bethesda, MD. ■

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on Research Standards for Chronic Low Back Pain. *Spine J*. 2014 Aug 1;14(8):1375-91.

Deyo RA, Dworkin SF, Amtmann D, Andersson G, Borenstein D, Carragee E, Carrino J, **Chou R**, et al. Report of the NIH Task Force on Research Standards for Chronic Low Back Pain. *J Pain*. 2014 Jun;15(6):569-85.

Deyo RA, Jarvik JG, **Chou R**. Low back pain in primary care. *BMJ*. 2014 Jul 16;349:g4266.

Eden KB, Perrin NA, Vesco KK, **Guise JM**. A randomized comparative trial of two decision tools for pregnant women with prior cesareans. *J Obstet Gynecol Neonatal Nurs*. 2014 Sep;43(5):568-79.

Eriksson J, Evans DS, Nielson CM, Shen J, Srikanth P, Hochberg M, **McWeeney S**, Cawthon PM, **Wilmot B**, Zmuda J, Tranah G, Mirel DB, Challa S, **Mooney M**, et al. Limited clinical utility of a genetic risk score for the prediction of fracture risk in elderly subjects. *J Bone Miner Res*. 2014 Jul 15. [Epub ahead of print]

Feng S, Weaver DL, Carney PA, Reisch LM, Geller B, Goodwin A, Rendi MH, Onega T, Allison K, Tosteson AN, **Nelson HD**, et al. A framework for evaluating diagnostic discordance in pathology discovered during research studies. *Archives of Pathology and Laboratory Medicine*. 2014; 138(7): 955-61.

Geller BM, **Nelson HD**, Carney PA, Weaver DL, Onega T, Allison KH, et al. Second opinion in breast pathology: policy, practice and perception. *J Clin Pathol*. 2014 Nov; 67(11): 955-60.

Guise JM, Chang C, Viswanathan M, Glick S, Treadwell J, Umscheid CA, Whitlock E, **Fu R**, et al. Systematic reviews of complex multicomponent health care interventions [Internet]. Rockville (MD): Agency for Healthcare Research and Quality (US); 2014 Mar.

Haendel MA, Balhoff JP, Bastian FB, Blackburn DC, Blake JA, Bradford Y, Comte A, et al. Unification of multi-species vertebrate anatomy ontologies for comparative biology in Uberon. *J Biomed Semantics*. 2014 May 19;5:21.

Hansen M, Meckler G, Dickinson C, Dickenson K, Jui J, Lambert W, **Guise JM**. Children's Safety Initiative: A National Assessment of Pediatric Educational Needs among Emergency Medical Services Providers. *Prehosp Emerg Care*. 2014 Oct 8. [Epub ahead of print]

Hartung DM, Zarin DA, **Guise JM**, **McDonagh M**, Paynter R, **Helfand M**. Reporting discrepancies between the ClinicalTrials.gov results database and peer-reviewed publications. *Ann Intern Med*. 2014 Apr 1;160(7):477-83.

Hersh WR, **Gorman PN**, Biagioli FE, **Mohan V**, Gold JA, Mejicano GC. Beyond information retrieval and electronic health record use: competencies in clinical informatics for medical education. *Adv Med Educ Pract*. 2014 Jul 1;5:205-12.

Hitzemann R, Darakjian P, Walter N, Iancu OD, Searles R, **McWeeney S**. Introduction to sequencing the brain transcriptome. *Int Rev Neurobiol*. 2014;116:1-19.

Hoehndorf R, **Haendel M**, Stevens R, Rebholz-Schuhmann D. Thematic series on biomedical ontologies in JBMS: challenges and new directions. *J Biomed Semantics*. 2014 Mar 6;5:15.

Hook LM, Grey F, Grabski R, Tirabassi R, Doyle T, Hancock M, Landais I, Jeng S, **McWeeney S**, et al. Cytomegalovirus miRNAs target secretory pathway genes to facilitate formation of the virion assembly compartment and reduce cytokine secretion. *Cell Host Microbe*. 2014 Mar 12;15(3):363-73.

Ibn-Salem J, Köhler S, Love MI, Chung HR, Huang N, Hurles ME, **Haendel M**, et al. Deletions of chromosomal regulatory boundaries

are associated with congenital disease. *Genome Biol*. 2014 Sep 4;15(9):423. [Epub ahead of print]

Köhler S, Schoeneberg U, Czeschik JC, Doelken SC, Hehir-Kwa JY, Ibn-Salem J, Mungall CJ, Smedley D, **Haendel MA**, Robinson PN. Clinical interpretation of CNVs with cross-species phenotype data. *J Med Genet*. 2014 Nov;51(11):766-72.

L'Abbate A, Macchia G, D'Addabbo P, Lonoce A, Tolomeo D, Trombetta D, Kok K, Bartenhagen C, Whelan CW, Palumbo O, Severgnini M, Cifola I, Dugas M, Carella M, De Bellis G, Rocchi M, **Carbone L**, Storlazzi CT. Genomic organization and evolution of double minutes/homogeneously staining regions with MYC amplification in human cancer. *Nucleic Acids Res*. 2014;42(14):9131-45.

Lee-Lin F, Domenico LJ, Ogden LA, Fromwiller V, Magathan N, Vail S, **Gorman PN**. Academic-community partnership development lessons learned: evidence-based interventions to increase screening mammography in rural communities. *J Nurs Care Qual*. 2014 Oct-Dec;29(4):379-85.

Lieberman DA, Holub JL, **Morris CD**, **Logan J**, Williams JL, Carney P. Low rate of large polyps (>9 mm) within 10 years after an adequate baseline colonoscopy with no polyps. *Gastroenterology*. 2014 Aug;147(2):343-50.

Lieberman DA, Williams JL, Holub JL, **Morris CD**, **Logan JR**, Eisen GM, Carney P. Race, ethnicity, and sex affect risk for polyps >9 mm in average-risk individuals. *Gastroenterology*. 2014 Aug;147(2):351-8; quiz e14-5.

Lieberman DA, Williams JL, Holub JL, **Morris CD**, **Logan JR**, Eisen GM, Carney P. Colonoscopy utilization and outcomes 2000 to 2011. *Gastrointest Endosc*. 2014 Jul;80(1):133-43.

Lim MC, **Chiang MF**, Boland MV, McCannel CA, Wedemeyer L, Epley KD, et al. Meaningful Use: how

did we do, where are we now, where do we go from here? *Ophthalmology*. 2014; 121(9): 1667-9.

Liu BY, O'Malley J, Mori M, Fagnan LJ, Lieberman D, **Morris CD**, et al. The association of type and number of chronic diseases with breast, cervical, and colorectal cancer screening. *J Am Board Fam Med*. 2014 Sep-Oct;27(5):669-81.

MacArthur CJ, **Wilmot B**, Wang L, Schuller M, Lighthall J, Trune D. Genetic susceptibility to chronic otitis media with effusion: candidate gene single nucleotide polymorphisms. *Laryngoscope*. 2014 May;124(5):1229-35.

Marshall NE, Vanderhoeven J, **Eden KB**, Segel SY, **Guise JM**. Impact of simulation and team training on postpartum hemorrhage management in non-academic centers. *J Matern Fetal Neonatal Med*. 2014 May 29;1-5.

McDonagh MS, Matthews A, Phillipi C, Romm J, **Peterson K**, Thakurta S, **Guise JM**. Depression drug treatment outcomes in pregnancy and the postpartum period: a systematic review and meta-analysis. *Obstet Gynecol*. 2014 Sep;124(3):526-34.

McEvoy CT, Schilling D, Clay N, Jackson K, Go MD, Spitale P, Bunten C, Leiva M, Gonzales D, Hollister-Smith J, Durand M, Frei B, Buist AS, Peters D, **Morris CD**, Spindel ER. Vitamin C supplementation for pregnant smoking women and pulmonary function in their newborn infants: a randomized clinical trial. *JAMA*. 2014 May;311(20):2074-8.

Mohan V, Abbott P, Acteson S, Berner ES, Devlin C, Hammond WE, Kukafka R, **Hersh W**. Design and evaluation of the ONC health information technology curriculum. *J Am Med Inform Assoc*. 2014 May-Jun;21(3):509-16.

Mooney M, **McWeeney S**. Data integration and reproducibility for high-throughput transcriptomics. *Int Rev Neurobiol*. 2014;116:55-71.

Mooney MA, Nigg JT,

McWeeney SK, **Wilmot B**. Functional and genomic context in pathway analysis of GWAS data. *Trends Genet*. 2014 Sep;30(9):390-400.

Morris CD, **McCracken K**, Samuels M, Orwoll E. Creating an institutional resource for research education and career development: a novel model from Oregon Clinical and Translational Research Institute. *Clin Transl Sci*. 2014 Jun;7(3):187-9.

Nanji KC, Rothschild JM, Boehne JJ, Keohane CA, **Ash JS**, Poon EG. Unrealized potential and residual consequences of electronic prescribing on pharmacy workflow in the outpatient pharmacy. *J Am Med Inform Assoc*. 2014 May-Jun;21(3):481-6.

Nelson HD, **Pappas M**, Zakher B, Mitchell JP, Okinaka-Hu. Risk assessment, genetic counseling, and genetic testing for BRCA-related cancer in women: a systematic review to update the U.S. Preventive Services Task Force recommendation. *Ann Intern Med*. 2014;160:255-266.

Nelson HD, Weerasinghe R, Martel M, Bifulco C, Assur T, Elmore JG, Weaver DL. Development of an electronic breast pathology database in a community health system. *J Pathol Inform*. 2014; 5:26.

Onega T, Weaver D, Geller B, Oster NV, Tosteson AN, Carney PA, **Nelson H**, et al. Digitized whole slides for breast pathology Interpretation: Current practices and perceptions. *J Digital Imaging*. 2014; 27(5):642-8.

O'Neil M, Berkman N, Hartling L, Chang S, Anderson J, Motu'apuaka M, **Guise JM**, **McDonagh M**. Observational evidence and strength of evidence domains: case examples [Internet]. Rockville (MD): Agency for Healthcare Research and Quality (US); 2014 Apr.

O'Neil M, Berkman N, Hartling L, Chang S, Anderson J, Motu'apuaka M, **Guise JM**, **McDonagh MS**. Observational evidence and strength of evidence domains: case examples. *Syst Rev*. 2014 Apr 23;3:35.

Oellrich A, Koehler S, Washington N, Sanger Mouse Genetic Project, Mungall C, Lewis S, **Haendel M**, et al. The influence of disease categories on gene candidate predictions from model organism phenotypes. *J Biomed Semantics*. 2014 Jun 3;5(Suppl 1 Proceedings of the Bio-Ontologies Spec Interest G):S4.

Quiñones AR, Ramsey K, Newsom JT, **Dorr DA**. Racial and ethnic differences in clinical outcome trajectories for care managed patients. *Med Care*. 2014 Nov;52(11):998-100.

Port AD, Chan RVP, Ostmo S, Choi D, **Chiang MF**. Risk factors for retinopathy of prematurity: insights from outlier infants. *Graefes Arch Clin Exp Ophthalmol*. 2014 Oct;252(10):1669-77.

Sanders DS, Read-Brown S, Tu DC, Lambert WE, Choi D, Almario BM, **Yackel TR**, Brown AS, **Chiang MF**. Impact of an electronic health record operating room management system in ophthalmology on documentation time, surgical volume, and staffing. *JAMA Ophthalmol*. 2014 May;132(5):586-92.

Selph SS, Ginsburg AD, **Chou R**. Impact of contacting study authors to obtain additional data for systematic reviews: diagnostic accuracy studies for hepatic fibrosis. *Syst Rev*. 2014 Sep 19;3(1):107.

Silverstone D, Lim MC, **AAO Medical Information Technology Committee** (including **Chiang MF**). Assuring information integrity in the EHR: the crisis and the challenge. *Ophthalmology*. 2014; 121:435-7.

Sittig DF, **Ash JS**, Singh H. ONC issues guides for SAFER EHRs. *J AHIMA*. 2014 Apr;85(4):50-2.

Sittig DF, **Ash JS**, Singh H. The SAFER guides: empowering organizations to improve the safety and effectiveness of electronic health records. *Am J Manag Care*. 2014 May;20(5):418-23.

Sommer A, Taylor HR, Ravilla TD, West S, Lietman T, Keenan J, Thu-

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Faculty/Staff Update

Continued from Page 15

lasiraj RD, **Chiang MF**, Robin A, Mills RP. Challenges of ophthalmic care in the developing world. *JAMA Ophthalmology*. 2014 May;132(5):640-4.

Stephenson LS, Gorsuch

A, **Hersh WR**, **Mohan V**, Gold JA. Participation in EHR based simulation improves recognition of patient safety issues *BMC Medical Education*. 2014, 14:224.

Thacker RW, Díaz MC, Kerner A, Vignes-Lebbe R, Segerdell E, **Haendel MA**, Mungall CJ. The Porifera Ontology (PORO): enhancing sponge systematics with an anatomy ontology. *J Biomed Semantics*. 2014 Sep 8;5(1):39.

Van Slyke CE, Bradford YM, Westerfield M, **Haendel MA**. The zebrafish anatomy and stage ontologies: representing the anatomy and development of *Danio rerio*. *J Biomed Semantics*. 2014 Feb 25;5(1):12.

Viswanathan M, Carey TS, Belinson SE, Berliner E, Chang SM, **Graham E**, **Guise JM**, et al. A proposed approach may help systematic reviews retain needed expertise while minimizing bias from nonfinancial conflicts of interest. *J Clin Epidemiol*. 2014 Jul 9. pii: S0895-4356(14)00211-X.

Wacholder AC, Cox C, Meyer TJ, Ruggiero RP, Vemulapalli V, Damert A, **Carbone L**, Pollock DD. Inference of transposable element ancestry. *PLoS Genet*. 2014 Aug 14;10(8):e1004482.

Weimer MB, **Chou R**. Research gaps on methadone harms and comparative harms: findings from a review of the evidence for an American Pain Society and College on Problems of Drug Dependence clinical practice guideline. *J Pain*. 2014 Apr;15(4):366-76.

Wright A, **Ash JS**, Erickson JL, Wasserman J, Bunce A, Stanesco A, St Hilaire D, Panzenhagen M,

Gebhardt E, McMullen C, Middleton B, Sittig DF. A qualitative study of the activities performed by people involved in clinical decision support: recommended practices for success. *J Am Med Inform Assoc*. 2014 May-Jun;21(3):464-72.

Wright A, Sittig DF, McGowan J, **Ash JS**, Weed LL. Bringing science to medicine: an interview with Larry Weed, inventor of the problem-oriented medical record. *J Am Med Inform Assoc*. 2014 Nov;21(6):964-8.

Wu G, Dawson E, Duong A, Haw R, Stein L. ReactomeFIViz: a Cytoscape app for pathway and network-based data analysis. Version 2. *F1000Res*. 2014 Jul 1 [revised 2014 Sep 12];3:146.

Yao H, Goldman DC, Nechiporuk T, Kawane S, **McWeeney SK**, Tyner JW, Fan G, Kerenyi MA, Orkin SH, Fleming WH, Mandel G. Corepressor Rcor1 is essential for murine erythropoiesis. *Blood*. 2014 May 15;123(20):3175-84.

Zakher B, **Blazina I**, **Chou R**. Association between knowledge of HIV-positive status or use of antiretroviral therapy and high-risk transmission behaviors: systematic review. *AIDS Care*. 2014 Apr;26(4):514-21.

Zemojtel T, Köhler S, Mackenroth L, Jäger M, Hecht J, Krawitz P, Graul-Neumann L, Doelken S, Ehmke N, Spielmann M, Oien NC, Schweiger MR, Krüger U, Frommer G, Fischer B, Kornak U, Flöttmann R, Ardeshirdavani A, Moreau Y, Lewis SE, **Haendel M**, Smedley D, Horn D, Mundlos S, Robinson PN. Effective diagnosis of genetic disease by computational phenotype analysis of the disease-associated genome. *Sci Transl Med*. 2014 Sep 3;6(252):252ra123.

Zheng CL, Kawane S, Bottomly D, **Wilmot B**. Analysis considerations for utilizing RNA-Seq to characterize the brain transcriptome. *Int Rev Neurobiol*. 2014;116:21-54. ■

Student/Alumni News

Awards and achievements

Robert H. Posteraro, M.D., M.B.I. '05, received the Outstanding Faculty Member of the Year award in 2014 from the students in the Clinical Practice Management program at Texas Tech University Health Sciences Center School of Allied Health Sciences, his third such award since joining the faculty in 2009. In addition, **Posteraro** has been elected to serve as a member of the Faculty Senate there. He is assistant professor and assistant program director of the Clinical Practice Management Program, Department of Clinic Administration and Rehabilitation Counseling.

Paul DeMuro, J.D., M.B.A., M.B.I. '12, post-doctoral fellow, was appointed as the only US co-chair of the International Life Sciences and Health Law Committee of the Section of International Law of the American Bar Association. DeMuro was also appointed vice-chair of the American Health Lawyers Association Accountable Care Task Force, in charge of strategic planning. He has also been named one of the Best Lawyers in America for the 20th year in a row.

Jobs/career changes/promotions

Congratulations to **Paula Scariati, D.O., M.P.H., M.S. '11**, who was appointed chief medical information officer at Marin General Hospital in Greenbrae, CA. Paula began as CMIO on November 17, 2014, and among her first activities she is working to establish formal structure for physician participation in information technology governance and strengthening the hospital's order set and documentation creation, maintenance and support functions. Marin General is the largest acute care hospital in Marin County.



Pramod Jacob, M.S. '04, spoke on informatics workforce development at APAMI 2014, Health IT Solutions for Improving Patient Care, held November 12, 2014, in New Delhi, India.

As Manager of Business Intelligence Architecture for Providence Health Plans in Portland OR, **Christine Klein, certificate '09**, leads a team of developers/analysts engaged in a partnership between business and IT stakeholders, with the collective goal of improving access to actionable information. **Klein** oversees the implementation of an enterprise data warehouse, which will consolidate data from disparate sources, including but not limited to claims and EHR data. **Klein** is also engaged in establishing data governance as additional sources are integrated, as well as insuring that the Providence IT roadmap continues to align with their business strategy specific to business intelligence.

Chris Tessier, M.D., certificate '10, is now working as an editor for the Point of Care division of Elsevier. **Tessier** also served as the panel lead for a white paper on data elements for ambulatory quality measurement through the Physician Consortium for Performance Improvement and as a member of a technical expert panel for a project developing an outcome measure on surgical complications for

the Yale School of Medicine Center for Outcomes Research & Evaluation. **Charmydevine Beane, certificate '13**, is now a part-time faculty member at San Jose State University in San Jose, CA, lecturing in the College of Applied Sciences and Arts, Department of Health Science.

Justin Fossum, R.H.I.A., certificate '10, became an Epic Credentialed Trainer in the Willow Inpatient application for Providence Health & Services in August 2014. Fossum continues to be an Epic Credentialed Trainer for the Ambulatory application as well as a Dragon Voice Recognition trainer for Providence health professionals.

Song Ge, summer intern '13, has been hired by Epic to do quality assurance for their Willow-Inpatient pharmacy application.

Presentations and posters

Paul DeMuro, J.D., M.B.A., M.B.I. '12, post-doctoral fellow, gave several recent presentations: co-presenter, The Current State of mHealth (Mobile Health): Legal and Regulatory Issues, American Bar Association Webinar, May 15, 2014, and co-presenter, Clinical Integration, Health Care Information and Alignment of Incentives, Schwabe, Williamson & Wyatt conference, Portland, Oregon, May 14, 2014.

Robert H. Posteraro, M.D., M.B.I. '05 presented a poster, A Loss of Distinction at the Crossroads Conference 2014: Navigating Health Care in West Texas. The poster discussed the difficulty of identifying the roles of healthcare professionals, due to the abandonment of distinctive professional attire. **Posteraro** presented two talks: Medical Informatics: What is it and why should I know about it? and Medical Informatics: What is it and why should it be a part of my curriculum? at the Atlanta Society of Radiologic Technologists conference, March 1-4, 2014.

M.D./Ph.D. student Julie

Doberne presented **Doberne J, Redd T, Lattin J, Eriksson C, Mohan V, Gold J, Ash J, Yackel T, Chiang M. Identifying First Patient Encounter Information Needs in the EHR at the American Academy of Pediatrics Council on Clinical Information Technology, October 12, 2014, San Diego, CA.**

Publications

Ben Rosenbaum, M.B.I. '14, was author of a publication: **Rosenbaum BP. Radio frequency identification (RFID) in health care: privacy and security concerns limiting Adoption. Journal of Medical Systems. 2014 Mar;38(3):19.**

Paul DeMuro, J.D., M.B.A., M.B.I. '12, post-doctoral fellow, had several recent publications:

DeMuro P. Social Media-Healthcare Law and Ethical Issues. Electronic Healthcare Law Review. August 2014, 4 (1).

DeMuro P. The Changing Face of Consumer Health Informatics: mHealth and Social Media and What it Means to Attorneys, Health Lawyers Weekly, June 13, 2014. XII (23).

DeMuro P. Keeping our health information secure from data breaches. The Lund Report. February 12, 2014.

DeMuro P. It's high time for our elected officials to fix Obamacare. The Lund Report. March 21, 2014.

DeMuro P. Personalized medicine – can its full benefits be realized if we continue to have access problems? The Lund Report. June 23, 2014.

DeMuro P. The questions is – are we risking our life when we go into the hospital? The Lund Report. August 26, 2014.

Eric Kirkendall, M.B.I. '12, was first author of: **Kirkendall ES, Spooner SA, Logan JR. Evaluating the Accuracy of Electronic Pediatric Drug Dosing Rules. J Am Med Inform Assoc. 2014;21:e43-e49.**

Damian Borbolla, M.D., M.S.

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Student/Alumni News

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'12, and Vanina Taliencio, M.D., M.S. '12, were authors of: **Taliencio V**, Schachner B, **Borbolla D**, Luna D, Villalba E, Quiros F. The expectations of nurses about the implementation of a barcoded medication administration system: a qualitative study. *Stud Health Technol Inform*. 2014;205:191-195.

Borbolla and Taliencio were authors of another paper, along with alumnus **Carlos Otero, M.S. '14**: **Borbolla D**, Del Fiol G, **Taliencio V**, **Otero C**, Campos F, Martinez M, Luna D, Quiros F. Integrating personalized health information from MedlinePlus in a patient portal. *Stud Health Technol Inform*. 2014;205:348-352.

Steven Bedrick, Ph.D. '11 and **Tracie Nettleton M.B.I. '14**, were authors of two publications: Carney N, Ghajar J, Jagoda A, **Bedrick S**, Davis-O'Reilly C, du Coudray H, Hack D, Helfand N, Huddleston A, **Nettleton T**, Riggio S. Executive summary of Concussion guidelines step 1: systematic review of prevalent indicators. *Neurosurgery*. 2014 Sep;75 Suppl 1:S1-2, and Carney N, Ghajar J, Jagoda A, **Bedrick S**, Davis-O'Reilly C, du Coudray H, Hack D, Helfand N, Huddleston A, **Nettleton T**, Riggio S. Concussion guidelines step 1: systematic review of prevalent indicators. *Neurosurgery*. 2014 Sep;75 Suppl 1:S3-15.

Michael Mooney, Ph.D. '11, was first author of two recent papers: **Mooney M**, McWeeney S. Data integration and reproducibility for high-throughput transcriptomics. *Int Rev Neurobiol*. 2014;116:55-71, and **Mooney MA**, Nigg JT, McWeeney SK, Wilmot B. Functional and genomic context in pathway analysis of GWAS data. *Trends Genet*. 2014 Sep;30(9):390-400.

Adam Wright, Ph.D. '07, was first author of: **Wright A**, Sittig DF, McGowan J, Ash JS, Weed LL.

Bringing science to medicine: an interview with Larry Weed, inventor of the problem-oriented medical record. *J Am Med Inform Assoc*. 2014 Nov;21(6):964-8, and **Wright A**, Ash JS, Erickson JL, Wasserman J, Bunce A, Stanescu A, St Hilaire D, Panzenhagen M, **Gebhardt E**, McMullen C, Middleton B, Sittig DF. A qualitative study of the activities performed by people involved in clinical decision

support: recommended practices for success. *J Am Med Inform Assoc*. 2014 May-Jun;21(3):464-72.

Other News

Steve Kassakian, M.D., post-doctoral fellow, was acknowledged as the person who traveled the farthest to participate in the 72nd Annual

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From the Chair

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Health related to Big Data, including those to develop educational content to use for our and other programs. The Pacific Northwest Evidence-Based Practice Center, housed in the department, continues to receive funding and produce evidence reports on a variety of topics. (These include one I am leading, on health information exchange.) We have also hired one new full-time faculty in informatics and are recruiting for another in clinical epidemiology. OHSU has also provided a new "faculty compact" program that provides additional base funding for productive faculty.

We have also achieved continued success in other initiatives we have launched in recent years. The most visible of these has been our Informatics Discovery Lab (IDL). We aim for the IDL to address the important challenges that are facing healthcare and biomedical research and that require a combination of informatics innovation and commercial collaboration. The first fruit of the IDL was our partnership with Epic Systems Corp. that enables us to use the Epic electronic health record both in our teaching and in our research. We are in dialogue with a number of other industry partners to also participate in the IDL.

We also continue to explore ways to make the program valuable to our remote students and our alumni.

One way we have done this has been to start streaming our Thursday lunchtime informatics research conferences live (at <http://www.ohsu.edu/dmiceconf>), which will augment the recorded videos that we have been posting after each event for several years. While we are not able to deliver the pizza we serve locally to remote sites, we do hope the streaming allows students, alumni, and others not on campus to view the presentations and participate interactively via tweeting questions and comments.

I also hope that alumni and others will consider providing financial support to the program in this year's annual giving drive. (See details on page 19.) The challenge with the steady stream of grants and other revenue sources is they provide funding targeted to specific projects and activities. They do not cover other aspects of the program, such as investments in the future, financial support to attract the top students or those in need, or otherwise adding value for our existing students and alumni.

While the future is never certain, I am confident in the success of the department going forward. We have created an environment that allows us to pursue our academic goals while contributing to the larger world around us. I hope those on and off campus will continue to work with us to improve the world through the work we do. ■

☐ **Yes!** I support the OHSU Department of Medical Informatics and Clinical Epidemiology as a leader in healing, teaching and discovery.

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Student/Alumni News

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Roy Webster Cross-Channel Swim across the Columbia River, held in Hood River, OR September 5, 2014. Kassakian is from Providence, RI.

In Memoriam

Leeann Stahn, M.B.I. '13, R.H.I.A., from Sisters, Oregon passed away on October 21, 2014. She is survived by her husband, Chuck and four sons. Leeann was a Health Information Management (HIM) graduate from Central Oregon Community College (COCC) where she earned her RHIT credential. She became an HIM instructor at COCC and an active volunteer in the Oregon Health Information Management Association. Leeann was in the OHSU biomedical informatics program from 2011-13. ■

DMICE Joins the Big Data Era

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disseminate knowledge, tools, and educational materials around big data.

The additional R01 grant was funded by the National Library of Medicine, the NIH institute devoted to basic research in biomedical informatics. Dr. **Hersh** will be collaborating with new DMICE faculty and principal investigator **Stephen Wu, Ph.D.**, adjunct assistant professor, as well as colleagues from Mayo Clinic, led by contact PI, Hongfang Liu, Ph.D. Both institutions will investigate techniques to use data from 100,000 patients each in their EHR systems for the task of cohort discovery, i.e., identifying patients who might be candidates for research studies. ■

DMICE Tracks

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

Department chair:

William R. Hersh, M.D.

Editor: Kathryn I. Pyle, A.M.L.S., M.A.

Layout: Charlotte Woodward

Contributors to this issue:

William Hersh, Kathryn Pyle

Photographs supplied by:

Kathryn Pyle, William Hersh, Paul Gorman, Rita Rand, Dean Sittig, Joanne Valerius, Deborah Woodcock

Questions?

Please contact the editor at 503 494-6058.



OREGON
HEALTH & SCIENCE
UNIVERSITY

Oregon Health & Science University
Department of Medical Informatics and Clinical Epidemiology
Mail Code: BICC
3181 S.W. Sam Jackson Park Road
Portland, OR 97239-3098