he Department of Medical Informatics & Clinical Epidemiology (DMICE) continues to thrive despite uncertain times. This past year has been transitional for us, as the third round of five-year funding for the Evidence-Based Practice Center came to a close, and the large-scale federal support for our various informatics educational programs started to wind down. External to the department, we have also had to deal with uncertainty, both with declining federal funding for biomedical research (exacerbated by the sequester) and continued budgetary challenges at Oregon Health & Science University.

But as always, DMICE manages to move forward. The Evidence-based Practice Center has been renewed in the fourth five-year round of funding and has received a steady stream of new systematic review contracts. At the same time, research grants and enrollment in the graduate program continue to be strong for the informatics side of the department as well.

However, this does not mean

The Informatics Discovery Lab leadership team includes: row one (left to right): Robert Schuff, Aaron Cohen, David Dorr; row two: Judith Logan, Deborah Woodcock, Shannon McWeeney, William Hersh.

Informatics Discovery Lab Focuses on Building Partnerships with Industry

he Informatics Discovery Lab (IDL) has launched. With a goal of building partnerships between the Department of Medical Informatics & Clinical Epidemiology (DMICE) and industry, the IDL is focused on driving innovation and deployment of informatics solutions to problems in healthcare and research.

Not only will the IDL bring fresh perspectives to the work of DMICE researchers and educators, these partnerships will create new educational and employment opportunities for students and external partners, identify research opportunities for faculty, and give the department the ability to

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DMICE Tracks / 2

Largest Number of Students in Program History Receive Biomedical Informatics Degrees in 2012-13

As the OHSU School of Medicine held its commencement ceremony on Monday, June 3, 2013 in Portland, the Department of Medical Informatics & Clinical Epidemiology celebrated a record number of graduates in its programs for the 2012-13 academic year – 108. With 514 graduates in the School of Medicine this year, DMICE students comprised 21% of the total graduates, exceeded only by the 118 students receiving MD degrees.

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

Kyle H. Ambert, Corvallis, OR
Dissertation: Text-mining tools for optimizing community database curation workflows in neuroscience

David L. Gibbs, Loveland, CO
Dissertation: Integrated signatures of disease using network methods

James Arthur McKanna, Nashville, TN
Dissertation: Understanding divided attention and its relation to aging and cognitive decline through unobtrusive continuous measures

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

Priya Bhatt, Portland, OR
Thesis: Assessing multivariate analysis of GWAS for identification of genetic variants in Alzheimer’s Disease

Damian A. Borbolla, Portland, OR
Thesis: Initial evaluation of a continuing medical education system integrated into an Electronic Health Record in an academic hospital in Argentina

Chantel Chivon McCoy, Tigard, OR
Thesis: Identification of miRNA-targeted cellular pathways in Flavivirus-infected cells

Joseph Andrew Reistetter, Gurnee, IL
Thesis: Differential expression of modules by mycobacterium tuberculosis infecting human dendritic cells and macrophages

Vanina Lorena Taliercio, Portland, OR
Thesis: Factors associated with physicians’ clinical research productivity: Can informatics resources improve the capacity for research?

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

Ethan Allen Roger Bachrach, West Richland, WA
Capstone: Evaluation of an eligible hospital’s Electronic Health Record build and implementation, with respect to stage 2 meaningful use requirements

James M. Bailey, Clermont, GA
Capstone: Development of a business intelligence tool for the extraction, analysis, display, and utilization of early warning system alerts

Sary O. Beidas, Augusta, GA
Capstone: What are residents’ information seeking habits during non-work hours?

Tommaso A. Blehl, Orlando, FL
Internship: A journey in Healthcare Informatics: A bumpy road to a moving target

Michelle Lynn Carter, Portland, OR
Internship: Clinical experience for the technically-minded: An internship with the Department of Medical Informatics at NW Kaiser Permanente

David H. Choi, Thousand Oaks, CA

Department Hosts Concussion Guidelines Meeting in June

On June 10-11, 2013, DMICE hosted investigators and funders for the Concussion Guidelines project for a two-day work meeting, including presentation of results to-date and articulation of future projects. The Concussion Guidelines project is a collaboration among the Brain Trauma Foundation, OHSU, the Department of Defense, and the Centers for Disease Control and Prevention. The purpose of the project is to develop an evidence-based definition for concussion and to derive diagnostic criteria and prognostic indicators. The Brain Trauma Foundation’s Center for Guidelines Management, housed in DMICE and directed by Nancy Carney, Ph.D., research associate professor, was awarded a three-year contract to perform the work.

In addition to Dr. Carney, DMICE speakers included Annette Totten, Ph.D., research assistant professor, Hugo du Coudray, Ph.D., professor, Roger Chou, M.D., associate professor and Evidence-based Practice Center director, and William Hersh, M.D., professor and chair.

One outcome of the meeting was a new contract to perform the first task of the “Immediate Action” mandate of the National Research Action Plan response to the Executive Order (NRAP 2013): to develop a clinically meaningful classification system of traumatic brain injury to replace the current mild/moderate/severe nomenclature.

■
**Internship:** Exploring the OHM problem: Evaluating Legacy Employee Health’s software solution  
**Kit R. Crafter**, Cary, NC

**Internship:** Value attribution and the decision support system  
**Anthony Michael Dunnigan**, Phoenix, AX

**Capstone:** Seeking higher ground: A comprehensive review of literature examining utilization of the Electronic Health Record in primary care to optimize workflow and patient care  
**David Keith English**, Oakland, CA

**Capstone:** Evaluation of an emergency department system replacement project  
**Joseph Phillip Fazio, III**, Portland, OR

**Capstone:** Pharmacy informatics certificate program curriculum development  
**Justin Barrows Fletcher**, Portland, OR

**Capstone:** An evaluation of the skills requirements of health information and privacy executives  
**Eric Karl Gebhardt**, La Center, WA

**Capstone:** The patient identification process as it relates to Electronic Health Record safety: A literature review  
**Timothy Peter Gray**, Portland, OR

**Capstone:** Upgrading to Epic 10 at Oregon Health & Science University: Monitoring and assessing the Electronic Health Record upgrade process  
**David Jonathan Gutglass**, San Diego, CA

**Capstone:** Can a clinical decision support tool increase adherence to a practice guideline in children presenting to the emergency department with minor head injury?  
**Michael E. Kordek**, Mountain Top, PA

**Capstone:** Alert fatigue by other names: Review of contributing fields regarding the “cry wolf” effect  
**Yetunde Olubisi Laniran**, Portland, OR

**Internship:** Electronic Health Record for employee health: Challenges and idiosyncrasies  
**Lim SongCheng, Darren**, Singapore

**Capstone:** Physician perceptions of CPOE order set types  
**Mary Ellen Mattson**, Lino Lakes, MN

**Internship:** Bringing awareness of patient care one floor at a time: Patient Dashboard  
**Seema Mohindra**, Salem, OR

**Internship:** Implementing Epic-ACE at West Valley Hospital  
**Marianne Outzen**, Davis, CA

**Internship:** Automated quality reporting: Clinical quality measures and meaningful use  
**Michael Anderson Padula**, Philadelphia, PA

**Capstone:** Development of the HL7 neonatology functional profile for EHR systems  
**Diane Gahan Petersen**, Homer, AK

**Internship:** A tale of two internships: diverse opportunities in Informatics  
**Matthew Thomas Phar**, Beaverton, OR

**Capstone:** My Experience with Impact Advisors  
**Joan Murray Rote**, Medford, OR

**Internship:** Effective EpicCare ambulatory training for provider proficiency  
**Paul Z. Seville**, Los Angeles, CA

**Internship:** mHealth roadmap for wellness and chronic disease  
**Minakshi Tikoo**, West Simsbury, CT

**Capstone:** A meta analysis codebook to assess the relationship between EHR implementation and health outcomes  
**Yves A. Vimegnon**, Portland, OR

**Capstone:** Usability of a medication adherence application on a smartphone  
**Rex Moffett Williamson**, Longview, TX

**Capstone:** Preparation of a genomic dataset for an investigative project: Discovery of sporadic Alzheimer’s Disease implicated gene variants through analysis of epistasis within pathways

Seventy-two students receive 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:

Continued on Page 18
Faculty Focus: Joanne Valerius, M.P.H., R.H.I.A.

It all started with an issue of Reader’s Digest years ago. That’s where the father of assistant professor Joanne Valerius, M.P.H., R.H.I.A., first heard about the new field of health information management (HIM). At the same time Valerius, who was working as a candy striper in a local hospital, found a flyer outside their HIM department and decided to go into the field, then also known as medical records.

Fast forward to 2013 where Valerius is director of the health information management program, one of the tracks in the DMICE educational program at OHSU.

From her start as a medical record technician at North Memorial Hospital and then as a manager at the University of Minnesota Hospital, Valerius moved to the College of St. Catherine in Minneapolis-St. Paul, where she chaired the Information Management Department. Along the way she got her M.P.H. in interdisciplinary studies and is currently finishing her dissertation at the University of Minnesota for a doctorate in work, family, and community education.

Valerius has created and developed HIM programs at the certificate, bachelor, and master’s levels. Arriving at OHSU in 2007, Valerius developed the DMICE HIM curriculum and spearheaded the application for accreditation by the Commission on the Accreditation of Health Informatics and Information Management (CAHIIM), which was granted in 2009 for the certificate program and 2012 for the master’s program.

Today students interested in health information management have the choice of three degree programs at OHSU: graduate certificate, master of biomedical informatics, or master of science. Students completing the program are eligible to sit for the Registered Health Information Administrator (R.H.I.A.) credential.

Valerius regularly teaches the HIM courses on Managing Information Governance; Managing Clinical Classification and Reimbursement Systems; Applied Legal and Ethical Issues in Health Information Practice; and Managing based medical record system and now manage electronic health records. She has also participated in qualitative research with the Kids and Cops program, corporate company, and healthcare, where diversity issues have been the primary obstacles. Valerius is also interested in burnout in faculty in distance education programs.

On the international front, Valerius worked with the Korean Medical Hospital in Ethiopia in 2012 and has spoken at several international conferences. In October 2013, she will travel to Beijing to attend the World Health Organization meeting, where she is a member of the WHO Family of International Classifications Network functioning and disability reference group.

What lies ahead for health information management? The biggest change in HIM that Valerius sees on the horizon is teaching higher level skills in analyzing data, and DMICE is preparing for that challenge.

“We have reduced duplication in HIM specific courses with general biomedical informatics courses.”

– Joanne Valerius, M.P.H., R.H.I.A.
Evidence-based Practice Center Conducts Reviews of 10 Healthcare Topics for Agency for Healthcare Research and Quality

The Pacific Northwest Evidence-based Practice Center (EPC), based in the Department of Medical Informatics & Clinical Epidemiology, has received ten task orders from the Agency for Healthcare Research and Quality since the beginning of 2013.

“These awards are an exciting opportunity as the EPC moves forward in this fourth cycle and underscore the strengths of the strong partnership between OHSU, the University of Washington’s CHASE Alliance, and Spectrum Research, Inc.,” said Roger Chou, M.D., associate professor and EPC director, who is leading five of the ten projects.

Led by Dr. Chou, the systematic review on imaging for hepatocellular carcinoma (HCC) will look imaging techniques available to identify the presence of lesions, diagnose HCC, and determine staging, all critical to making informed treatment decisions. OHSU will partner with the University of Washington (UW) CHASE Alliance for this review, which runs from March 15, 2013 to March 14, 2014.

A task order awarded in May focuses on the effectiveness and risks of long-term opioid treatment of chronic pain. The project will run from May 30, 2013–November 19, 2014, with Dr. Chou as principal investigator, and includes a topic refinement project as well as a systematic review. As one of the EPC partners, the UW CHASE Alliance will work with OHSU on this topic. Richard Deyo, M.D., M.P.H., Kaiser-Permanente Endowed Professor of Evidence-based Medicine in the OHSU Department of Family, is a co-investigator.

EPC investigators on a third task order will conduct a topic refinement and systematic review on diagnosis and treatment of myalgic encephalomyelitis/chronic fatigue syndrome, a condition that affects an estimated 800,000 people in the United States. M.E. Beth Smith, D.O., assistant professor of medicine, leads the project, which runs from June 7, 2013–December 6, 2014. Co-investigators at OHSU include Marian McDonagh, Pharm.D., associate professor and EPC associate director, Heidi D. Nelson, M.D., M.P.H., research professor, Annette Totten, Ph.D., research assistant professor, and Elizabeth Haney, M.D., associate professor of medicine.

Another project led by Dr. Chou, a technical brief, will focus on imaging techniques for metastatic breast cancer and provide an overview of key issue related to these medical technologies. This task order runs from August 12, 2013–March 12, 2014, with OHSU working with the UW CHASE Alliance.

With a rapid increase in the use of spinal injection therapies in the past decade, the EPC will conduct a topic refinement, with an option for a systematic review, on pain management injection therapies for low back pain. With the UW CHASE Alliance and Spectrum Research, Inc. as partners, the project will be led by Dr. Chou and runs from August 21, 2013–February 20, 2014.

A sixth task order from AHRQ will focus on bladder cancer, the fourth most commonly diagnosed cancer in men and the tenth most commonly diagnosed cancer in women in the United States. The project runs from September 9, 2013–March 7, 2014 for topic refinement, with an option for two systematic reviews. Led by Dr. Chou, the project also involves the UW CHASE Alliance, with OHSU co-investigators David Buckley, M.D., M.P.H., research assistant professor of family medicine, and Shelley Selph, M.D., EPC post-doctoral fellow.

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On April 1, 2013, in conjunction with the OHSU School of Medicine 125th anniversary lecture series, the Department of Medical Informatics & Clinical Epidemiology celebrated a decade of excellence, its tenth anniversary as a department.

While biomedical informatics research first came to OHSU in 1989 with the start of the Biomedical Information Communication Center, the research and educational programs came together as a freestanding division within the School of Medicine in 1997, the Division of Biomedical Informatics & Outcomes Research. In 2003, the unit became a full-fledged department, aka DMICE.

As part of the celebration, seven faculty participated in an afternoon panel discussing how their work and contributions of the department have impacted OHSU and health care. Professor and chair William Hersh, M.D., facilitated the panel, which featured:

Joan Ash, Ph.D., M.L.S., M.B.A., professor and vice chair
Roger Chou, M.D., associate professor and Evidence-based Practice Center director
Aaron Cohen, M.D., M.S., associate professor
David Dorr, M.D., M.S., associate professor and vice chair
Karen Eden, Ph.D., associate professor and associate director for Ph.D. and post-doctoral programs
Shannon McWeeney, Ph.D., professor and head, Division of Bioinformatics and Computational Biology
Heidi Nelson, M.D., M.P.H., research professor and vice chair

Following a lecture by Eric Dishman, general manager, Intel Health Strategy & Solutions, DMICE sponsored a poster and demonstration session in the OHSU Old Library.
Posters

- EPC Reports for the US Preventive Services Task Force, Christina Bougatsos
- A Collaborative Data Visualization Tool for Evidence-Based Guideline Development, Steve Bedrick
- Body Mass Index and Breast Cancer Risk of Women in Their 40s: Systematic Review and Meta-analysis, Amy Cantor
- A Large Scale Analysis of the Reasons Given for Excluding Articles that are Retrieved by Literature Search During Systematic Review, Aaron Cohen and Tracy Edinger
- Understanding Safety Events in Pre-hospital Emergency Medical Services for Children, Erika Cottrell
- Predictors of Hospital TOLAC Policies in California, Erika Cottrell
- Evidence-based Decision Aids in Women's Health Improve the Decision-making Process, Karen Eden
- Skills Requirements of Health Information Security and Privacy Executives, Justin Fletcher
- Pacific Northwest Evidence-based Practice Center, Elaine Graham and Ngoc Wasson
- Biomedical Informatics Shared Resource, Michelle Hribar
- The Importance of Quality Measures in GI Specialty Practices: A Qualitative Study, Judy Logan
- Drug Effectiveness Review Project, Marian McDonagh and Ngoc Wasson
- Using EHR Simulations to Improve Patient Safety, Adriel Gorsuch and Vishnu Mohan
- How Results of BRCA Mutation Testing Predict Risks for Breast or Ovarian Cancer, Heidi Nelson
- Benefits and Harms of Medications to Reduce Risk for Primary Breast Cancer, Heidi Nelson
- American Pain Society, Miranda Pappas
- The Department of Medical Informatics and Clinical Epidemiology, Kathryn Pyle
- Systematic Review of the Benefits and Harms of Metformin to Treat Obesity in Nondiabetic Children, Shelley Selph
- Public Reporting as a Quality Improvement Strategy, Annette Totten
- A Biomedical Informatics Success Story: University-based Training for Workforce Development Funded by the Office of the National Coordinator, Joanne Valerius
- Multivariate Analysis of GWAS for Identification of Genetic Variants in Endophenotypes Related to Alzheimer's Disease, Beth Wilmot
- Making Sense of Medical Research Identify, Evaluating, and Synthesizing Effective Health Care Research, Ngoc Wasson
- Comparative Effectiveness Research Center, Ngoc Wasson

Demonstrations

- Breast Cancer Decision Aid, Karen Eden
- Cognitive Health Coaching Project: Models of Divided Attention, James “Zephy” McKanna
- Cognitive Health Coaching Project: Memory Using Adaptive Computer Games, Krystal Klein
- Mobile Phone Medication Reminder/Education System, Yves Vimegnon
- HitWalker: Variant Prioritization for Personalized Functional Cancer Genomics, Shannon McWeeney
- Using EHR Simulations to Improve Patient Safety, Vishnu Mohan
- Graphlet Counter, Kemal Sonmez
- Making Sense of Medical Research: Identifying, Evaluating, and Synthesizing Effective Health Care Research, Ngoc Wasson
Faculty/Staff Update

Awards and achievements

Judith Logan, M.D., M.S. ’98, was promoted to professor of medical informatics & clinical epidemiology, as of July 1, 2013.

For the third time in the three years of the award, William Hersh, M.D., professor and chair, was selected as one of the Top 25 Clinical Informaticists of the year by Modern Healthcare. The program recognizes medical professionals who excel at using patient-care data to improve both the clinical and financial performance of their healthcare organizations.

Paul Gorman, M.D., associate professor, was appointed Chair of the Curriculum Committee in the OHSU School of Medicine. He is also one of 23 faculty on the Curriculum Transformation team.

Michael Chiang, M.D., professor, is assistant editor of the Journal of the American Medical Informatics Association, where he manages the student editorial board. Chiang has also been named to the editorial board of EyeNet Magazine.

The Emergency Medicine Foundation named professor Robert Lowe, M.D., M.P.H., as one of 12 “EMF Trailblazers” in emergency medicine research over the past 40 years.

Melissa Haendel, Ph.D., assistant professor, has been added to the advisory board for The Reproducibility Initiative, which aims to help scientists validate their research findings by providing a mechanism for blind, independent replication by experts.

Grants

Jayashree Kalpathy-Cramer, Ph.D., M.S., adjunct assistant professor, and professor Michael Chiang, M.D., are principal investigators of a two-year, R21 grant funded by the National Eye Institute, Automated Classification of Retinopathy of Prematurity using Machine Learning.

Mark Helfand, M.D, M.P.H., M.S, professor, is principal investigator of a VA-funded project to conduct a feasibility study of VA patient narratives. Professor Joan Ash, Ph.D., is serving as principal investigator of the OHSU part of the project.

Vishnu Mohan, M.D., M.B.I. ’09, assistant professor, is co-investigator on a three-year grant from the Association of American Medical Colleges and The Patrick and Catherine Weldon Donoghue Medical Research Foundation titled “Electronic Health Record Simulation to Improve Communication and Reduce Errors in the ICU.” Dr. Mohan will develop an EHR-centered ICU rounding simulation and determine how to optimize interprofessional rounds to improve error recognition, foster communication, and enhance patient safety.

Presentations and posters

Professor and chair William Hersh, M.D., gave presentations throughout the nation and across the globe over the past year.


From Implementation to Analytics: The Future Work of Informatics, VII Jornadas Universitarias de Sistemas de Información en Salud, Hospital Italiano Department of Health Informatics, Buenos Aires, Argentina, November 28, 2012.

Opportunities for Collaboration Between Biomedical Informatics and Basic, Clinical, and Translational Sciences, OHSU Knight Cancer Research/Translational Meeting, Portland, OR, December 14, 2012.

Global Challenges in Biomedical Informatics: Data-Rich, Information-Driven Future of Healthcare, Monthly Academic Session with Biomedical Informatics Department Faculty, Facultad de Medicina, Universidad Nacional Autónoma de México (UNAM), Mexico City, Mexico, March 14, 2013.


Update on Biomedical and Health Informatics from the US Perspective, Faculty of Tropical Medicine, Mahidol University, Bangkok, Thailand, March 28, 2013.


Informatics is Not Just for Clinicians: Opportunities for a Future in Informatics, OHSU Information Technology Group Meet the Expert Session, Portland, OR, April 19, 2013.


Hersh also participated as a panelist six times in the past year.

Late Breaking Session - Update on the Subspecialty Certification in Clinical Informatics, AMIA Annual Symposium 2012, Chicago, IL, November 5, 2012 (Panelist, Concerns That Must Be Addressed for Building Capacity of the Clinical Informatics Subspecialty).


The New Clinical Informatics Medical Subspecialty in the United States, Medinfo 2013, Copenhagen, Denmark, August 21, 2013.

Professor Judith Logan, M.D., M.S. presented a paper on behalf of first author Vanina Taliercio, M.D., M.S. ’13 at Medinfo 2013 in Copenhagen, Denmark August 22, 2013. The paper was entitled Developing a Survey to Assess Factors that Contribute to Physician Involvement in Clinical Research. Adjunct assistant professor Jayashree Kalpathy-Cramer, Ph.D., M.D., was also a co-author.

This past year Michael Chiang, M.D., professor, was an invited speaker about telemedicine, computer-based image analysis, and electronic health records at conferences in Italy (9/2012), Mexico (1/2013), Boston, MA (4/2013), Washington, D.C. (4/2013), San Diego, CA (5/2013), Hawaii (6/2013), and Brazil (8/2013).

Roger Chou, M.D., associate professor, was interviewed on the OPB radio program Think Out Loud on November 26, 2012, on Making HIV Tests Routine. Chou led the evidence review used by the US Preventive Services Task Force to make a Grade A recommendation for screening persons ages 15-65 for HIV infection.

Melissa Handel, Ph.D., assistant professor, presented Integrated Semantic Framework: Launching the Next Generation at VIVO 2013 in St. Louis, MO August 14-16, 2013.

At the Oregon Health Information Management Association meeting on May 16, 2013, in Portland, Justin Fletcher, Ph.D., gave a talk, Is Medical Privacy and Security an Illusion?

Publications


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Chou R, Hartung D, Rahman B, Wasson N, Cottrell E, Fu R. Treatment for hepatitis C virus infection in adults [Internet]. Rockville (MD): Agency for Healthcare Research and Quality (US); 2012 Nov.


Chou R, Cottrell EB, Wasson N, Rahman B, Guise JM. Screening for hepatitis C virus infection in adults [Internet]. Rockville (MD): Agency for Healthcare Research and Quality (US); 2012 Nov.


Agency for Healthcare Research and Quality (US); 2013 May.


Chou R, Hartung D, Rahman B, Wasson N, Cottrell E, Fu R. Treatment for hepatitis C virus infection in adults [Internet]. Rockville (MD): Agency for Healthcare Research and Quality (US); 2012 Nov.


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Faculty/Staff Update

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McDonagh MS, Peterson K, Balshem H, Helfand M. US Food and Drug Administration documents can provide unpublished evidence relevant to systematic reviews. *J Clin Epidemiol.* 2013 Jul 12. [Epub ahead of print]


Nelson HD, Selph S, Bougatsos C, Blazina I. Behavioral interventions and counseling to prevent child abuse and neglect: systematic review to update the U.S. Preventive Services Task Force recommendation [Internet]. Rockville (MD): Agency for Healthcare Research and Quality (US); 2013 Jan.


Norriss SL, Holmer HK, Ogden LA, Fu R, Abou-Setta AM, Viswanathan MS, McPheeters ML. Selective outcome reporting as a source of bias in reviews of comparative effectiveness [Internet]. Rockville (MD): Agency for Healthcare Research and Quality (US); 2012 Aug.


Thompson M, Dana T, Bougatsos C, Blazina I, Norris Continued on Page 14
New DMICE Faculty and Staff

DMICE would like to welcome new primary, joint, and affiliate faculty members Arie Baratt, Ph.D. (primary); Erika Cottrell, Ph.D. (joint); Jennifer Devoe, M.D. (joint); Hugo du Coudray, Ph.D. (primary); Eric Hanson, M.D. (affiliate); Izhak Shafran, Ph.D. (primary); Xubo Song, Ph.D. (primary); Guanming Wu, Ph.D. (primary); and Jamie Eastman, Ph.D. (joint) to the department. Faculty members with joint appointments hold primary appointments in other OHSU or VA departments but they also contribute significantly to DMICE activities.

Joint, adjunct, and affiliate faculty members who have had longstanding appointments in DMICE have just recently been asked to complete documentation so that we can put into place a formal process for tracking external faculty contributions. Thanks to those who have completed the paperwork; we urge those who received Dr. William Hersh’s invitation to respond so that we can continue to update our files and include you in DMICE functions.

In addition to new faculty, several new staff joined DMICE recently. Monica Fraenkel is a research assistant 2 working for the Evidence-based Practice Center. Deborah Woodcock, M.B.A., is the project manager for the Informatics Discovery Lab.

Student/Alumni News

Awards and achievements

MD/PhD student Julie Doberne is Student Advisor for Surgery College, OHSU School of Medicine, and is serving this year as student representative to the Biomedical Informatics Curriculum Committee.

Doberne also received the Doernbecher Children's Hospital Foundation Pediatric Clerkship Award.

Meryl Bloomrosen, M.B.I. student, has been appointed to the Editorial Board of the journal Applied Clinical Informatics.

Paul DeMuro, J.D. M.B.A., postdoctoral fellow, has been named by Best Lawyers as Healthcare Lawyer of the Year for 2014 for Portland, OR.

DeMuro has been named Vice-Chair, International Life Sciences and Health Law Committee of the Section of International Law of the American Bar Association.

DeMuro is also a member of the Journal of the American Medical Informatics Association (JAMIA), Student Editorial Board, and Chair, Subcommittee on the Endowment Fund of the AMIA Finance Committee.

Rhonda Luetkenhaus, B.S.R.T., certificate '13, passed the new Certified Associate in Health Information and Management Systems (CAHIMS) certification offered by HiMSS on July 27, 2013. The two-hour test covered topics on healthcare and technology environment; systems analysis, design, selection, implementation, support, maintenance, testing, and evaluation; privacy, and security; and administration leadership and management.

Michael R. Berman, M.D., F.A.C.O.G., M.B.I. student, has become the medical director of the Labor and Delivery Unit and associate chairman for quality and patient safety, Department of Obstetrics.
and Gynecology, Beth Israel Medical Center in New York City.

Meryl Bloomrosen, M.B.A., R.H.I.A., F.A.H.I.M.A., M.B.I. student, has been appointed vice president of the American Health Information Management Association (AHIMA), the organization representing more than 67,000 health information management professionals.

Jobs/career changes/promotions

The University of North Carolina Health Care System in Chapel Hill, N.C., has appointed Donald C. Spencer, M.D., M.B.A., certificate ’10, to the role of chief medical informatics officer. Spencer will play a role in the enterprise system selection process and will be responsible for supporting the development of the chosen clinical information system to improve the delivery of patient care.

Aaron Neinstein, M.D., certificate student, is now assistant clinical professor of medicine and assistant medical director of informatics at University of California, San Francisco.

Ed VanBaak, M.B.I. ’09, is now a senior implementation engineer with Caradigm, while continuing diabetes research with the University of Connecticut’s Family Medicine Department.

Michelle Smerek, certificate ’13, has taken a position as a research informaticist in the Clinical Research Informatics group at the Duke Clinical Research Institute.

Margaret Henderson, M.L.I.S., A.H.I.P., certificate ’12, has become the first director of research data management for VCU Libraries, working with all the schools and programs at Virginia Commonwealth University.

Cherbon VanEtten, ’09 M.B.I., recently took a new position, director of education, at Health Catalyst, a healthcare data warehousing and analytics software company located in Salt Lake City, UT.

Justin Fossum, R.H.I.A., certificate ’10, was hired by Providence Health & Services as an Epic credentialed ambulatory trainer.

Presentations and posters


Paul DeMuro, J.D., M.B.A., postdoctoral fellow, gave several presentations recently: co-presenter, Social Media for More Patient-Cost Effective Healthcare Delivery, MedInfo 2013, The 14th World Congress on Medical and Health Informatics, Copenhagen, Denmark, August 22, 2013.

Using Technology to Improve Quality and Lower Hospital Costs of Care, Los Angeles Regional Hospital Symposium, Los Angeles, CA, June 10, 2013.

Co-presenter, Competitive and Efficient Physician Organizations and Biomedical Informatics and Accountable Care Under Health Reform, 2013 California Society of Healthcare Attorneys Meeting and Spring Seminar, Newport Beach, CA, April 13, 2013.

Co-presenter, Clinical Integration, Health Informatics and Quality of Care, American Health Lawyers Association Webinar, April 4, 2013.

M.D./Ph.D. student Julie Doberne presented a four-minute mic talk at the National Library of Medicine Fellows Meeting in Salt Lake City, UT in June 2013.

Publications


DeMuro also had several commentaries on The Lund Report, a news site about the healthcare industry in Oregon: A healthcare odyssey without electronic health records, December 20, 2012; What interoperable EHRs might have done to improve the patient care experience, January 30, 2013; breaking down healthcare’s silos, March 16, 2013; Is it R.I.P. for solo and small physician practices? April 24, 2013; Hospital-to-hospital clinical integration programs represent good alternative, June 4, 2013; and Befuddled: health reform—where do all the delays leave the little guy, July 11, 2013.


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Twelve Undergraduates Work as Summer Interns During Seventh Year of DMICE Program

Twelve college students spent the summer of 2013 working with DMICE faculty on biomedical informatics research projects. Now in its seventh year, the DMICE summer internship program receives partial funding from a grant from the National Library of Medicine (NLM), which provides support for eight students each summer.

A student from Chapman University, Colleen Tercek worked with Joan Ash, Ph.D., professor and vice chair. Tercek worked on a qualitative research project on making electronic health records safer.

Professor Michael Chiang, M.D., had two interns. William Wang, a student at Marquette University, worked on a computational analysis of retinopathy of prematurity. Reed College student Maha Pasha looked at electronic health record efficiency and clinical workflow in ophthalmology.

Geoffrey Rosen and Kathryn Cartwright both worked with David Dorr, M.D., M.S., associate professor and vice chair. Rosen, who is studying at Emory University, worked on natural language processing for biomedical test results. Cartwright, from Oregon State University, focused on high value elements.

Working with Karen Eden, Ph.D., associate professor, on a mammography decision aid were Katie Abrams, from Portland State University, and Lindsey Watson, from Washington State University Vancouver. Abrams focused on coding while Watson assisted with cognitive interviewing.

Three students worked with professor Judy Logan, M.D., M.S. ’98. Connor Bohan, from the University of Rochester, worked on a web-based tool for the storage and search of projects and publications while Portland State University student Nasim Sanati conducted a project entitled “from work flow to business rules.” Merlee Avery, a student at Case Western Reserve University, worked on deduplication of patients in the CORI 3 database.

Oregon State University student Song Ge conducted research on improving patient safety through information, working for Vishnu Mohan, M.D., M.B.I. ’09, assistant professor, while Marc Leef, from the University of Oregon, conducted an evaluation of software tools for the annotation of sequence variants for clinical sequencing, with oversight from Christina Zheng, Ph.D., research assistant professor.

William Hersh, M.D., professor and chair, is principal investigator of the NLM grant, while Dr. Dorr serves as faculty lead of the internship program.

Building Partnerships

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diversify its funding base.

“We’re interested in working on major healthcare and health research challenges that can be best addressed by collaborative academic-industry development and implementation of informatics solutions,” said associate professor Aaron Cohen, M.D., M.S., Director of Commercial Partnerships and Collaboration within DMICE.

IDL research, conducted by DMICE faculty in partnership with industry and others, will focus on problems of mutual interest between the department and those partners. At present the IDL will focus on areas where DMICE has core competencies: data-driven approaches focusing on transformation, analysis, and application of data to support healthcare redesign; care management and coordination; making electronic health records (EHRs) more effective tools; and supporting translational research.

“Our deep level of expertise in informatics methodologies and the scientific rigor that we apply to problem-solving are two of the main contributions we bring to our partners,” said Dr. Cohen.

On the educational side, the IDL seeks to complement the existing DMICE educational programs by offering opportunities such as local and remote practicums and internships with industry partners for current students, and “executive sabbaticals” for healthcare system employees.

The idea of better engaging with industry had existed for several years when, in early 2012, the department engaged James Huntzicker, Ph.D., head of the OHSU Division of Management, to conduct a study to determine the feasibility of creating an externally focused informatics lab at the university. Based on the results obtained, the decision was made to move ahead with establishing the Lab.

Strategic planning began in late 2012, and the Lab “soft launched” at the HiMSS Conference in March 2013, where Dr. Cohen and others met with 16 potential industry partners. Of these, 10 companies indicated that they wanted to explore possible collaborations in one or more IDL focus areas with DMICE.

Since March, the IDL has brought many of these potential partners to OHSU for deeper discussions and to present “IDL Industry Leader Talks,” where these industry leaders have shared their perspectives on important healthcare challenges, their pro-
From the Chair
Continued from Page 1

we do not have challenges before us. We have always been successful at carrying our core mission, and like all successful organizations, we will need to adapt to new realities. Going forward, however, we will need to be more creative and resourceful as funding for research and training becomes tighter and competitive. Although we are a mission-driven organization, we also need to meet the financial sustainability that the university wants to see in all its programs. DMICE has weathered challenges before, and I am confident we will adapt to this one.

During the recent good times, we managed to accumulate a modest financial reserve, and we now intend to invest in the future of the department. To that end, we plan to pursue new faculty recruitments in the three major areas of the department: clinical epidemiology, clinical informatics, and bioinformatics. We believe it is vitally important to invest now in new faculty who will carry DMICE forward into the future.

Another area where we are investing is in an initiative described in the lead story for this newsletter, which is the Informatics Discovery Lab (IDL). As the value of informatics is demonstrated throughout healthcare, personal health, research, and public health settings, there is a growing need for collaboration among academia, industry, healthcare delivery organizations, public health agencies, and others. Academic programs will lose their relevance if their efforts are not aligned with the greater advancement of the disciplines in which they work. There are high expectations that informatics will significantly improve healthcare and biomedical research. This will not be possible without academia closely collaborating with companies, health-related organizations, healthcare delivery systems, public health agencies, and other health stakeholders. The IDL will be a collaborative environment where students, teachers, and researchers, as well as representatives from healthcare delivery organizations, industry, and philanthropy, can partner in a variety of activities.

Part of that diversification will involve philanthropy. We hope we can engage our colleagues, friends, and alumni to invest in DMICE. One major use of gift funds will be for our students. We hope to increase the resources for student scholarships and for activities they can undertake, such as travel to meetings or career development activities. Gift funds can also provide needed investment in faculty to pursue new research and other areas of work. A form for giving is printed in this newsletter, or you can make your gift online at www.ohsu.edu/dmice/giving.

I remain optimistic for DMICE and the value that we bring to OHSU, the nation, and the world. Discovering and applying new information and tools will be our critical contribution going forward. I hope all students, faculty, staff, and supporters of DMICE will contribute to that mission going forward.
Biomedical Informatics Degrees in 2012-2013

Continued from Page 3

Ronda Jean Adkins, Portland, OR
Saeema Alavi, Chicago, IL
Corneliu A. Antonescu, Fairbanks, AK
Charmydevine Macrianna Beane, San Jose, CA
Julie Anne Belleza, Littleton, CO
Barbara Blasko, Fallbrook, CA
Cora Sue Bosshart, Anchorage, AK
Jeffrey Lee Brandt, San Francisco, CA
Melanie Hart Buehler, Portland, OR
Julie Lynne Byars, Portland, OR
Vivien Lai-Fun Choi, Loma Linda, CA
Darius N. Clarke, Austin, TX
Crystal Evenstar Clearwater, Eugene, OR
Shamsi Rebecca Daneshvari, Albuquerque, NM
Lawrence D. Dardick, Los Angeles, CA
Christopher d’Autremont, West Linn, OR
Tatyana Evgenievna Drevaleva, Novosibirsk, Russia
Jan Drlík, Midland, MI
Tracy Edinger, Portland, OR
Kathleen Engstrom, Vancouver, WA
Madhumita Gangopadhyay, Portland, OR
Kelly A. Gossen, Newburg, OR
Daniel James Graham, Spring Lake, OR
Jonathan T. Gudman, Lake Oswego, OR
Elspeth Gygax, Bend, OR
Jodi M. Harper, Portland, OR
Margaret Ellen Henderson, Midlothian, VA
Timothy B. Hill, Portland, OR
Judi G. Hofman, Bend, OR
Larry W. Holder, Springfield, IL
Chelsea Amanda Hollingsworth, Portland, OR
Hanson Hsu, New York, NY
Jeremy Daniel Jalabert, Eugene, OR
JoAnn L. Jordon, South Hadley, MA
Meredith Susan Josephs, Washington, DC
Isolde Leonie Knaap, Salem, OR

Kerry Alan Knauss, Portland, OR
Molly G. Kneen, Eugene, OR
Arthur Donald Knepper, Portland, OR
Dianne M. Laumann, Cupertino, CA
Leah Marie Lewis, Murfreesboro, TN
Megan Marie Lien, Madison, WI
Rhonda Kay Luetkenhaus, Grand Island, NE
Patricia E. Martin, Fairview, OR
Robert E. Mohle, Villa Park, CA
Emily Mooney, Seattle, WA
Johanna Leigh Morton, Austin, TX
Sara Elisabeth Hayden Nash, Tucson, AZ
Mary J. O’Neill, Somerville, MA
Agwu O. Onuoha, Atlanta, GA
Kim Stalker Osborne, Louisville, KY
Elizabeth Marie Parker, Grayslake, IL
Edward Elisha Pesulima, Moreno Valley, CA
Dustin Michael Pezall, Lexington, SC
Katherine D. Pomeroy, Kapaa, HI

Cynthia Miriam Rand, Rochester, NY
Kristen Marie Sanderson, Denver, CO
Aleen Lynn Saunders, Washington, DC
Melody S. Schniepp, Chatham, IL
Phillip C. Scott, Richmond, IN
Bradley G. Sinner, Madison, WI
Michelle Marie Smerek, Kannapolis, NC
Tara Leigh Smith, Pensacola, FL
Jerry Michael Stultz, Coon Rapids, MN
Lek P. Taylor, San Jose, CA
Michelle Sardernberg Tellez, Oakland, CA
Patricia A. Van Dyke, Portland, OR
Mini Spoorthi Sushma Velagapalli, Bellevue, WA
Raymond K. Whalen, Edmonds, WA
James Wiedower, Boyce, VA
Deborah Virginia Woodcock, Vancouver, WA
Sandhya Yanamadala, Chesterfield, MO

EPC Conducts Reviews

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Dr. McDonagh will serve as principal investigator on a topic refinement on reducing inappropriate antibiotic use in acute cough illness, which encompasses conditions including acute bronchitis, upper respiratory infection, acute respiratory infection, rhinitis, and the common cold. The project runs from September 9, 2013-March 7, 2014, with an option for a subsequent systematic review. Dr. Buckley, Kevin Winthrop, M.D., M.P.H., associate professor of infectious diseases and ophthalmology, and Amy Cantor, M.D., assistant professor of family medicine and obstetrics and gynecology, are co-investigators.

Spectrum Research, Inc. will lead the project and will involve two investigators from Duke University.

With the UW Chase Alliance as the lead, the EPC, from September 23, 2013-September 22, 2014, will assist the Patient Centered Outcomes Research Institute (PCORI) with development of potential research topics in PCORI’s Improving Health Systems program area.

Finally, with professor and chair William Hersh, M.D., as principal investigator, the topic refinement and systematic review on health information exchange brings together investigators from both sides of the department. The project runs from September 23, 2013 through May 22, 2015.

Dr. McDonagh summed up the recent spate of EPC awards: “It is very rewarding to have both our expertise in evidence review and the extensive capabilities of our new partnership be recognized in such a compelling way,” she said. “I think we can anticipate that our future as the Pacific Northwest EPC will be highly successful.”
☐ 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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