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DMICE Tracks

From the Chair

As I noted in this column in the last issue, the Department of Medical Informatics & Clinical Epidemiology (DMICE) continues to do well in uncertain



times. We experienced phenomenal growth and funding in the era of the federal economic stimulus and now have

settled back to a somewhat smaller and more compact department.

However, the work we do is as important than ever. Everything the department does plays an essential role in contributing to healthcare reform and achieving the “triple aim” of health care: better health, better care, and lower cost. Whether it is the informatics program advancing the use of data analytics in healthcare organizations and biomedical research, or the Evidence-Based Practice Center (EPC) generating better evidence to guide care and policy, DMICE leads the way through its research, education, and service missions.

A number of activities that were just beginning when the last issue was published are now moving full steam ahead. The EPC has received a substantial number of

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OHSU Faculty and DMICE Alumni Among the First to Receive Clinical Informatics Subspecialist Certification

Six OHSU faculty and 40 students and alumni of the Oregon Health & Science biomedical informatics education program were among the first US physicians to receive certification in the subspecialty of clinical informatics. Qualified applicants who sat for the October 2013 board examination received notification in December. Nationwide, 455 physicians received certification.

OHSU faculty who received certification include Eilis Boudreau, M.D., Ph.D., associate professor; Michael Chiang, M.D., M.A., professor; William Hersh, M.D., professor and chair; Michael Lieberman, M.D., M.S., assistant professor; Vishnu Mohan, M.D., M.B.I. '09, assistant professor; and Thomas Yackel, M.D., M.S. '02, associate professor.

Physicians who are alumni or current students of the OHSU biomedical informatics program and for whom we are aware of their certification include:

Noorullah Akhtar, M.D., M.B.I. '02

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Top (left to right): Eilis Boudreau, M.D., Ph.D.; Michael Chiang, M.D., M.A. Middle: William Hersh, M.D.; Michael Lieberman, M.D., M.S. Bottom: Vishnu Mohan, M.D., M.B.I.; and Thomas Yackel, M.D., M.S.



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DMICE Faculty, Staff, Students and Alumni Attend Annual AMIA Symposium

Dozens of DMICE faculty, staff, students and alumni attended the 2013 Annual Symposium of the American Medical Informatics Association (AMIA), held November 16-20 in Washington, D.C. Many gave presentations or participated in committee or working group meetings.

Professor and chair **William Hersh, M.D.**, participated in several panels: Informatics Research Workforce I – Training for Future Informatics Workforce Needs and Informatics Research Workforce II – Innovative Technologies for Online Teaching, both on November 18th. He was also on a panel on the Health IT Workforce of the Future on November 19th.

Associate professor **Paul Gorman, M.D.**, participated in a panel: Studying Those Who Study Us: Diana Forsythe and the Importance of Interpretive Research in Informatics, on November 19th.

Professor **Michael Chiang, M.D., M.A.**, and associate professor **Thomas Yackel, M.D., M.S. '02**, were co-authors of a presentation: Time-Motion Analysis of Clinical Nursing Documentation during Implementation of an Electronic Operating Room Management System for Ophthalmic Surgery, on November 20th.

Tracy Edinger, N.D., M.C.R., postdoctoral fellow, presented a paper: A Large-scale Analysis of the Reasons Given for Excluding Articles that are Retrieved by Literature Search During Systematic Review, on November 19th. Associate professor **Aaron Cohen, M.D., M.S. '05**, was a co-author.

Alumnus **Damian Borbolla, M.D., M.S. '12**, from Hospital Italiano, Buenos Aires, Argentina, was part of a panel on November

17th and discussed Implementation of Infobuttons in a Patient Portal (tethered PHR).

Alumna **Carolyn Petersen, M.B.I. '09, M.S.**, organized and participated in a panel on Genomic Sequencing and Genetic Testing: Technological, Regulatory, Clinical, and Social Issues and Future Directions on November 18th.

Predoctoral fellow Paul DeMuro, J.D., M.B.I. '12, participated in a panel on Ethical, Legal, and Public Policy Barriers to Unleashing the Full Power of Consumer Health Informatics for Care Delivery, on November 20th.

Among those serving on AMIA committees was **Paul Gorman, M.D.**, who served on the Student Design Challenge Committee.

Julie Doberne, M.D./Ph.D. student, was elected as Member-at-Large (Resident-Fellow) of the Student Working Group.

Paul DeMuro, J.D., M.B.I. '12, predoctoral fellow, is a member of the Finance Committee and chair of the Subcommittee on the Endowment Fund. DeMuro is also a member of the Ethical, Legal & Social Issues Working Group and the Student Working Group. In addition, DeMuro serves on the Student Editorial Board of the *Journal of the American Medical Informatics Association*.

Alumna **Carolyn Petersen, M.B.I. '09, M.S.**, serves as chair of the Ethical, Legal, and Social Issues Working Group and is a member of the Ethics and Public Policy Committees. ■

Informatics Student Works on Media Review Project for AMIA Symposium

DMICE certificate student **Kate Fultz Hollis, M.S.**, was part of the team of students, including classmate and M.B.I. student **Faiza Khan**, who helped Danny Sands, M.D., M.P.H., a physician at Beth Israel Deaconess Medical Center and assistant clinical professor of medicine at Harvard Medical School, present Informatics in the Media Year-in-Review on November 18th at the 2013 Annual Symposium of the American Medical Informatics Association.

Hollis was a co-manager, along with Nina Multak of Drexel University and Shefali Gupta at the University of Maryland, and they managed 20 informatics students

who reviewed more than 300 articles collected on medical informatics in the popular press.

Dr. Sands and his team were tracking informatics issues that appeared in the lay press from November 2012 through October 2013. For many years, Dan Masys, M.D., of the University of Washington, has done an annual review of the key academic papers published in the informatics literature, and the media review was meant to be a complementary session. The inaugural year for media year-in-review was an experiment for the team, and the presentation was very well attended and well received.

The team initially used NEXIS

Clinical Informatics Subspecialist Certification

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Mark Baker, M.D., certificate student

Sary Beidas, M.D., M.B.I. '12

Mark Binstock, M.D., certificate '11

Thomas Carr, M.D., M.B.I. '12

Chris Corbit, M.D., certificate '10

Tariq Dastagir, M.D., certificate '11

Ajay Dhawan, M.D., certificate '13

David K. English, M.D., M.B.I. '13

Laura Fochtman, M.D., M.B.I. '12

David Gelman, M.D., certificate '11

Roy Gill, M.D., certificate '04

Ron Jimenez, M.D., certificate '02

Charles Laudenschlager, M.D., M.B.I. '12

Julie Lin, M.D., certificate '13

Mohamed Rehman, M.D., certificate '08

Michael W. Riben, M.D., post doctoral fellow '01

Joan Rote, M.D., M.B.I. '12

Jorge Scheirer, M.D., M.B.I. '12

Jonathan Sternlieb, M.D., certificate student



*Danny Sands, M.D., M.P.H. and
Kate Fultz Hollis, M.S.*

as their search tool and later added InfoTrak and EBSCO as well as many news reports from National Public Radio. Dr. Sands noted that overall the news article databases are not nearly as sophisticated as Medline/PubMed, but they are about as good as they get for the lay literature (each database with its own deficiencies). The slides and more information on the process are available here: <http://drdannysands.wordpress.com/media/yir/> ■

Glen Stream, M.D., M.B.I. '07
Chris Tessier, M.D. certificate '10
Keith Woeltje, M.D., Ph.D., certificate '04

Tom Yaeger, M.D., certificate '11

“The new subspecialty is a recognition of the importance that data and information play in health care,” noted Hersh.

“As we move to new models of care delivery where we measure and improve upon quality as well as keep costs under control, informatics will play a key role in acquiring and analyzing the data. Informatics will be important in other ways, too, from patient engagement in his or her own care and health to clinical and translational research.”

Clinical informatics as a subspecialty was approved by the American Board of Medicine Specialties in 2011, with the initial board examination offered in October 2013, through the American Board of Preventive Medicine (ABPM).

According to the ABPM, “Physicians who practice Clinical Informatics collaborate with other health care and information

technology professionals to analyze, design, implement and evaluate information and communication systems that enhance individual and population health outcomes, improve patient care, and strengthen the clinician-patient relationship.”

The American Medical Informatics Association (AMIA) worked over the past eight years toward certification in clinical informatics. In 2008, they spent 18 months defining the core content of a subspecialty in clinical informatics. DMICE professor and vice chair Joan Ash, Ph.D., was a member of the AMIA committee that developed the competency requirements.

AMIA also appointed Dr. Hersh to serve as director of its Clinical Informatics Board Review Course, a three-day as well as online course aiming to prepare physicians to take the certification exam. Dr. Hersh will continue to serve in this role in 2014.

In addition, Dr. Mohan is a member of the ABPM’s Examination Committee for Clinical Informatics, which assists in developing the clinical informatics board exam. ■

New DMICE Faculty and Staff

Welcome to recent faculty and staff that have joined the Department of Medical Informatics & Clinical Epidemiology.

Steve Bedrick, Ph.D. '11, assistant professor of pediatrics, now has a joint appointment in DMICE.

Emily Campbell, Ph.D. '10, R.N., lead clinical informaticist at Press Ganey Associates, is an affiliate assistant professor.

Thomas Ricciardi, Ph.D., director of informatics for Blackbird Solutions, Inc. in Portland, is an affiliate assistant professor. **Susan Woods, M.D., M.P.H., certificate '09**, associate professor of medicine and a VA staff physician, received a joint

appointment in DMICE.

As core administrative staff, **Kendra Seybert** joined the department as operations manager while **Dawn Baker** is a business data analyst 1. At the Pacific Northwest Evidence-based Practice Center, **Sheryl Elliott** and **Sara Grusing** have joined the staff in research assistant 2 positions. **Rebecca Holmes** is a research associate working with Dr. Marian McDonagh on the Drug Effectiveness Review Project. **Ashley Evenson** is a research program manager, working for Dr. Jeanne-Marie Guise, while **Joseph Kim** is a research assistant 2 working for Dr. David Dorr. ■

DMICE Faculty Member Leads Project to Produce Guides on Safe Use of Electronic Health Records

To help health care providers more safely use electronic health records (EHRs) and other technologies, the Office of the National Coordinator for Health Information Technology (ONC) recently released new guides and interactive tools, and DMICE

played a role. Professor and vice chair Joan S. Ash, Ph.D., co-led the project on health information technology safety, which resulted in the Safety Assurance Factors for EHR Resilience (SAFER) guides released in January 2014.

The goal of the SAFER project was to develop and validate proactive, self-assessment tools to ensure that EHR-enabled clinical work systems are safe and effective. A 2012 survey of American Society for Healthcare Risk Management and American Health Lawyers Association members found that 53 percent admitted to at least one EHR-related serious safety event in the previous five years.

As stated by ONC, “These guides are a suite to tools that include checklists and recommended practices designed to help health care providers and the organizations that support them assess and optimize the safety and safe use of EHRs.”

Ash worked on the two-year project with Dean Sittig, Ph.D., an affiliate DMICE faculty member now at the University of Texas School of Biomedical Informatics, and Hardeep Singh, M.D., M.P.H., from Baylor College of Medicine and the Houston VA.

“As the 2011 Institute of Medicine report on health information technol-



Joan S. Ash, Ph.D.

ogy safety indicated, there is not a great deal of research evidence in this area,” Ash said. “Therefore, we had to be creative as we tried to fill the gaps in our knowledge about addressing the possible unintended consequences of implementation.”

Ash and her

team used a variety of methods to develop the guides, including literature searches to identify best practices, expert panel meetings, and stakeholder engagement. They also did fieldwork at purposively selected sites, cognitive interviews reviewing the guides, and pilot testing of the guides at five sites.

Each SAFER guide has between 10-25 recommended practices about what to do to optimize the safety and safe use of the EHR. The two Foundational Guides focus on high priority practices and organizational responsibilities while three Infrastructure Guides include contingency planning, system configuration and system interfaces. The four Clinical Process guides cover patient identification, computerized provider order entry with decision support, test results reporting and follow-up, and clinician communication.

“Our goal was development of self-assessment tools that would guide healthcare organizations during their planning processes as they try to make sure that their electronic health record systems do not cause harm,” Ash concluded. “They are meant to be used iteratively so that safe use of these systems improves over time.” ■

Faculty/Staff Update

Awards and achievements

Congratulations to **Joanne Valerius, Ph.D., M.P.H., RHIA**, assistant professor and program director of the Health Information Management track. Valerius successfully defended her doctoral dissertation on Experiences of Health Information Managers with 20+ Years of Experiences in the Complex and Ever-Changing Healthcare Environment in December 2013. She has now received her Ph.D. from the University of Minnesota.

Presentations and posters

Michael Chiang, M.D., professor, participated in a panel about large-scale registries in ophthalmology November 11, 2013 at the annual American Academy of Ophthalmology meeting, held in New Orleans.

Vishnu Mohan, M.D., M.B.I., '09, assistant professor, spoke at OHSU medical grand rounds on October 29, 2013. His topic was “Help Me- I’m Drowning in Information!” How busy clinicians can efficiently find the information they need in the age of the electronic health record.

William Hersh, M.D., professor and chair, gave a talk on the Health IT Workforce in the Post-HITECH Era: Challenges and Opportunities at School of Biomedical Informatics, University of Texas Health Sciences Center at Houston, Houston, TX, October 18, 2013.

Hersh also spoke at Grand Rounds, Department of Medicine, University of New Mexico Health Sciences Center, Albuquerque, NM, on February 13, 2014. The title of his talk was Clinical Informatics Subspecialty: What It Is and Why It’s Important.

On February 21, 2014, **Hersh**

gave a talk at the Interprofessional Education Seminar, Texas Woman's University, Dallas TX, on Informatics: What Every Clinician Needs to Know.

Hersh participated in a panel on Use of Electronic Data for Feedback in Learning and Practice at the Accelerating Change in Medical Education Consortium Meeting, American Medical Association, Chicago, IL, October 3, 2013.

Hersh also served as a panelist at the HIMSS Northwest Technology & Education Symposium, Portland, OR, October 15, 2013, speaking on Informatics at the Cutting Edge: Update from OHSU.

On November 15, 2013, **Hersh** gave three talks: Keynote Talk: Information Retrieval Evaluation in the Ubiquitous Search Era: A View from the Biomedical/Health Domain, ImageCLEF Medical Image Retrieval Workshop, Washington, DC; Information Retrieval Evaluation in the Ubiquitous Search Era: A View from the Biomedical/Health Domain Department of Computer Science, Georgetown University, Washington, DC; and Re-Use of Operational Electronic Health Record Data for Research and Other Purposes, National Center for Health Statistics, Centers for Disease Control and Prevention, Hyattsville, MD.

Funding received

Aaron Cohen, M.D., M.S. '05, associate professor, received a two-year, R21 grant from the National Cancer Institute entitled Latent Dirichlet Allocation for Protein Inference in Quantitative Proteomics.

Vishnu Mohan, M.D., M.B.I. '09, assistant professor, is an investigator on an Association of American Medical Colleges/Donaghue Foundation grant, with Jeffrey Gold, M.D., associate professor of medicine, as the principal investigator. The grant is entitled Electronic Health Record Simulation to Improve Communication and Safety in ICU.

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Donations to DMICE

The following individuals provided philanthropic gifts to DMICE in 2013 and have agreed to allow publication of their names:

Joan Ash, Lake Oswego, OR
John H. Cooper, Portland, OR
Thomas Durkin, Portland, OR

Timothy P. Hickman, Kansas City, MO
Kate Fultz Hollis, Los Angeles, CA
Robert H. Posteraro, Lubbock, TX
Susan L. Price, Seattle, WA
Joan Rote, Medford, OR
Christopher D. Tessier, Hopkinton, NH

Faculty Focus: Annette Totten, Ph.D.

“Developing better methods and improving the match between methods and the questions we want to answer” is one of the long-term research goals for Annette Totten, Ph.D., research assistant professor.



reviews on quality measures, the role of geriatricians, and a future research needs project on case management.

In addition, Totten has worked with the VA for almost 10 years on various projects related to long-term care for veterans,

Totten, who holds an M.A. in modern languages, M.P.A. in health policy, and Ph.D. in health services research, came to OHSU in 2010 and now works as a core researcher for the Pacific Northwest Evidence-based Practice Center (EPC).

Coming from such an interdisciplinary background, Totten has held a variety of policy, research, and project management positions in New York, Minnesota, and Idaho, prior to coming to Portland.

“My focus has been on the application of research to policy and practice,” Totten said.

With an interest in gerontology, Totten has studied quality of life issues for nursing home residents and in home care. “There is almost no topic or no methodology you can’t link to health and aging,” said Totten. “I like not having to be narrowly focused.”

Since her arrival at the EPC, Totten has served as principal investigator of a report, Public Reporting as a Quality Improvement Strategy, funded by the Agency for Healthcare Research and Quality. She has also worked on a comparative effectiveness review of treatment for pressure ulcers and is currently working on a large systematic review on health information exchanges (HIE). William Hersh, M.D., professor and chair, leads the HIE review, with associate professors Karen Eden, Ph.D., and Paul Gorman, M.D., serving as co-investigators with Totten.

Totten’s research projects extend beyond the EPC. She has done quick

working with investigators at the VA Puget Sound Health Care System in Seattle. Currently the work focuses on promoting shared decision-making and helping veterans and families manage chronic conditions and disability.

For the Patient-Centered Outcomes Research Institute (PCORI), Totten recently helped staff the methodology committee and contributed to editing the first methodology report. At present she is helping this group develop guidance on how to implement the methodology standards. “It is like translating legislation into regulations,” she said.

Totten has also been working with research associate professor Nancy Carney, Ph.D., last year on a review related to the definition of concussion and this year on in hospital treatment guidelines for traumatic brain injury.

With her varied background and experience, Totten’s interest in methods has two foci. “In my work related to long-term care and quality of life, I have been working on survey methods and I am starting to learn more about decision sciences,” she said. “In my EPC work I am interested in evaluation and systematic review methods for complex interventions.”

Spring term of 2014 will bring Totten from the clinical epidemiology side of DMICE into the informatics one, as she co-teaches BMI 562/662, Quantitative Research Methods, along with instructor Jamie Eastman, Ph.D. “I am excited to learn more about ‘the other side,’” Totten concluded. ■

Student/Alumni News

Awards and achievements

Julie Doberne, M.D./Ph.D. student, is serving as Member-at-Large (Resident-Fellow) on the American Medical Informatics Association Student Working Group Executive Committee for 2014-2015.

Paul DeMuro, J.D., M.B.I. ’12, predoctoral fellow, was named Chair of the Finance and Investment Committee of the American Medical Informatics Association and was reappointed as a member of the Student Editorial Board of the *Journal of the American Medical Informatics Association*.

Jobs/career changes/promotions

James “Zephy” McKanna, Ph.D. ’13, is working as a postdoctoral fellow with Denis Erdogmus, Ph.D., in the electrical and computer engineering department of Northeastern University in Boston. Dr. Erdogmus runs the Cognitive Systems Laboratory, and McKanna is working as a cognitive detection specialist on a project to increase learning speed.

Laura Fochtman, M.D., M.B.I. ’12, received a joint appointment in the newly established Department of Biomedical Informatics at Stony Brook University where she is on the faculty as a Professor of Psychiatry and Behavioral Science. Fochtman also has a joint appointment in Pharmacological Sciences.

Robert H. Posteraro, M.D., M.B.I. ’05, was named assistant program director of the Clinical Practice Management program at Texas Tech University Health Sciences Center, School of Allied Health Sciences.

Charmydevine Beane, certificate ’13, became a certified project management professional (PMP), a credential awarded by

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Student/Alumni News

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the Project Management Institute, in December 2013. She is also a certified professional in healthcare information & management systems, a credential awarded by the Healthcare Information Management and Management Systems Society.

Rhonda Luetkenhaus, BCRT, certificate '13, is a help desk analyst for meaningful use at Wide River, LLC, a healthcare information technology consulting firm, in Lincoln, NE.

Justin Fossum, RHIA, certificate '11, is now a Dragon Voice Recognition Software Trainer at Providence Health & Services. He continues to also work as an Epic Credentialed Ambulatory Trainer for Providence.

Presentations and posters

James "Zephy" McKanna, Ph.D. '13, spoke about Divided Attention, Aging, and Computer Games at the Oregon Center for Aging and Technology meeting on December 6, 2013.

Paul DeMuro, J.D., M.B.I. '12, pre-doctoral fellow, gave several presentations recently: Co-Presenter, Issues Relevant To and Regulations Affecting Social Media Use in Healthcare, Including Privacy and Security, American Bar Association Health Law Section eHealth, Privacy & Security Interest Group Webinar, January 31, 2014. Moderator, Unlocking the Promise of Anonymized Healthcare Data: Leveraging Compliance-Based De-Identification Materials to Drive Better Health Care Outcomes, American Health Lawyers Association Webinar, January 27, 2014. Co-Presenter, Wyoming and the Affordable Care Act, Wyoming State Bar Webinar, December 18, 2013. Co-Presenter, Clinical Integration 2.0-The Informatics Revolution, Fourth National Accountable Care Organization (ACO) Congress, Los Angeles, CA, November 5, 2013.

Publications

Kyle Ambert, Ph.D. '13, was first author of: **Ambert KH**, Cohen AM, Burns GA, Boudreau E, Sonmez K. Virk: an active learning-based system for bootstrapping knowledge base development in the neurosciences. *Front Neuroinform.* 2013 Dec 25;7:38

Aurora Blucher, predoctoral fellow, was first author of: **Blucher AS**, McWeeney SK. Challenges in secondary analysis of high throughput screening data. *Pac Symp Biocomput.* 2014:114-24.

Daniel Bottomly, M.S. '10, was an author on three recent publications: **Bottomly D, Ryabinin PA**, Tyner JW, Chang BH, Loriaux MM, Druker BJ, McWeeney SK, Wilmot B. Comparison of methods to identify aberrant expression patterns in individual patients: augmenting our toolkit for precision medicine. *Genome Med.* 2013 Nov 29;5(11):103. Co-author **Peter Ryabinin** was a former DMICE intern.

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David Gibbs, Ph.D. '13, was first author of two recent papers: Gibbs DL, Baratt A, Baric RS, Kawaoka Y, Smith RD, Orwoll ES, Katze MG, McWeeney SK. Protein co-expression network analysis (ProCoNA). *J Clin Bioinforma.* 2013 Jun 1;3(1):11; and **Gibbs DL**, Gralinski L, Baric RS,

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M.S. student Eric Segerdell was first author of: **Segerdell E**, Ponferada VG, James-Zorn C, Burns KA, Fortriede JD, Dahdul WM, Vize PD, Zorn AM. Enhanced XAO: the ontology of *Xenopus* anatomy and development underpins more accurate annotation of gene expression and queries on Xenbase. *J Biomed Semantics.* 2013 Oct 18;4(1):31

Hollis Wright, Ph.D. '11, co-authored: Lomniczi A, **Wright H**, Castellano JM, Sonmez K, Ojeda SR. A system biology approach to identify regulatory pathways underlying the neuroendocrine control of female puberty in rats and nonhuman primates. *Horm Behav.* 2013 Jul;64(2):175-86.

Adam Wright, Ph.D. '07, was an author of several recent publications: **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.* 2013 Oct 7. [Epub ahead of print]

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McCoy AB, **Wright A**, Rogith D, Fathiamini S, Ottenbacher AJ, Sittig DF. Development of a clinician reputation metric to identify appropriate problem-medication pairs in a crowdsourced knowledge base. *J Biomed Inform.* 2013 Dec 7. pii: S1532-0464(13)00191-3.

Jeff Brandt, certificate '13, wrote

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From the Chair

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“task orders” to carry out systematic reviews on a variety of topics. One of the topics crosses over into the informatics side of the department, which is an evidence report on health information exchange.

Another important activity is the Informatics Discovery Lab (IDL). Based on a growing need for collaboration among academia, industry, healthcare delivery organizations, public health agencies, and others, 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. We are developing relationships with other units within OHSU as well as companies.

We are also thinking about the future by recruiting new faculty. Aiming to bring in energetic young talent, we are recruiting faculty both for the EPC as well as clinical informatics.

Of course, all this success does not mean 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. 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.

Part of our funding diversification involves 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

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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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a chapter on mobile security in a new HIMSS publication, *mHealth Innovation: Best Practices from the Digital Frontier*, released in February 2014. This is Brandt's second collaboration on a HIMSS book.

Paul DeMuro, J.D., M.B.I. '12, predoctoral fellow, had several recent publications: E-prescribing and quality and cost metrics," *Electronic Healthcare Review*, Vol. 3, No. 2, November 2013; co-author, Emerging healthcare information technologies and the legal challenges they present," *The Wyoming Lawyer*, October 2013; Health insurance exchanges: were they the solution?" *The Lund Report*, October 21, 2013; and co-author, What businesses should know about the FDA and mobile medical apps," *Portland Business Journal*, October 4, 2013. ■

From the Chair

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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 to use it will be our critical contribution going forward. I hope all students, faculty, staff, and supporters of DMICE will contribute to that mission going forward.

DMICE Tracks

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

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