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DMICE Tracks

From the Chair

The lead article of this issue describes some exciting new changes for the Department of Medical Informatics & Clinical Epidemiology (DMICE). In particular, we are



adding new leadership explicitly for two of the three areas of the department, namely clinical epidemiology and clinical

informatics. While the department did quite well during the recent American Recovery & Reinvestment Act of 2009 (ARRA, also known as the stimulus bill) period, new challenges confront us. I am confident that our leadership, our faculty, and the rest of the department are up to the task.

One promising indicator that the department will continue to thrive is the renewal of the large “glue” grants for both the clinical epidemiology group as well as entire (clinical and bio-) informatics programs. Although DMICE is a department of highly accomplished individuals, we have always been held together by one large program in each part of the department. In the case of the clinical epidemiology program, this is the designation as an Agency for Healthcare Research

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Welcome To DMICE 2.0

It has become somewhat of a cliché to add the moniker “2.0” to the name of something to indicate new changes or directions. Yet there probably is no better way to describe the changes coming to our department than by calling them DMICE 2.0. While DMICE, the Department of Medical Informatics & Clinical Epidemiology, will be celebrating its tenth anniversary next year (in 2013), and we have matured while facing waves of new challenges over our first decade, the leadership and administrative structure have largely remained unchanged since inception of the department.

We were contemplating some changes a few years ago but then got caught up in proposals, funding, and work from the various American Recovery and Reinvestment Act of 2009 (ARRA) grants, contracts, and other programs. The economic stimulus was truly stimulating for all areas of the department, from informatics to clinical epidemiology. Although we are still working on ARRA-related projects, these are winding down. At the same time, we face an array of new challenges, from diminished federal research and training funding to



New vice chairs: David Dorr, M.D., M.S., Heidi Nelson, M.D., M.P.H.

more competition in the educational arena and a new financial model for OHSU departments.

DMICE 2.0 began with a strategic planning process launched in 2011, but even that took a long time due to everyone being so busy. We did complete the planning, and now we are particularly excited at the addition of two new Vice Chairs who will focus on clinical informatics and clinical epidemiology, respectively. In addition, we have also designated some resources for commercialization and interaction with industry as well as marketing and publicity for educational programs. The three existing Vice Chairs will continue their roles, with some changes.

In the new leadership structure, professor Cynthia Morris, Ph.D.,

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Record Number of DMICE Students Receive Biomedical Informatics Degrees in 2011-2012 Academic Year

This academic year, 95 biomedical informatics and bioinformatics students received degrees as the School of Medicine held its hooding and commencement ceremonies on Monday, June 4, 2012. The occasion marked the largest group of graduates for the program since its inception in 1996.

Of note was the selection of Paula Scariati, D.O., as recipient of the Outstanding Master's Thesis Award. Scariati, from San Diego, CA, received her M.S. in biomedical informatics. Her thesis topic was *Making choices about breast cancer screening: A decision aid for women between the ages of 38 & 48*.

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

Thomas Anthony Carr, Indianapolis, IN

Capstone: *Creating a standardized GI endoscopy procedure note, in extensible markup language, formatted using health level seven (Version 3), clinical document architecture (Release 2)*

Danilo Antonio Tuason Dalan, Fargo, ND

Capstone: *Allergy surveys: Are there phone apps for that?*

Paul Robert DeMuro, San Francisco, CA

Capstone: *Accountable care*

Harry Enchin, Toronto, Canada

Capstone: *Adverse event reports: Their role in detecting and preventing drug-drug interactions*

Laura Fochtman, East Setauket, NY

Capstone: *Facilitating safe use of electronic health records (EHRs): Systematic review and development of an EHR safety self-assessment tool*

Courtland B. Fowler, Portland, OR

Capstone: *CHIN/O-HITEC: Working with Oregon's regional extension center and building data interfaces*

Anthony Paul Grecco, Beaverton, OR

Capstone: *Integrating new monitoring and behavioral summary metrics variables for cognitive health coaching data into standard personal health record and electronic health record systems*

Jeremy Richard Harper, Granville, OH

Capstone: *Building an EHR course*

Eric Steven Kirkendall, Cincinnati, OH

Capstone: *A comparison of pediatric drug-dosing rules from proprietary electronic databases and historical guidelines: Are we practicing what we preach?*

Charles W. Laudendach, Spokane, WA

Capstone: *Comparison of adherence to imposed versus self-chosen quality metrics*

Krystal M. Lloyd, Glidden, IA

Capstone: *Use of personal health records by healthcare or health information technology professionals*

Cecelia Jane Madison, Ukiah, CA

Capstone: *Identifying individuals in a multifaceted service organization*

Marcela Christina Musgrove, Laurinburg, NC

Capstone: *Supporting creation of a healthcare toolkit for autistic adults*

Elizabeth P. Nelson, Stow, MA

Capstone: *Screening mammography: A decision aid for women ages 38-48: Technical implementation*

Supachai Parchariyanon, Bangkok, Thailand

Capstone: *Evaluation of open-source versus commercial healthcare interoperability tools*

Julie Pefferman, Portland, OR

Capstone: *Summer internship at the Office of the National Coordinator for Health IT (ONC)*

William Burton Rice, Nashville, TN

Capstone: *The Direct Project: Health information exchange secure messaging to support patient engagement*

David Brian Ross, Silver Spring, MD

Capstone: *An antibiogram data model and implementation schema*

Jorge José Scheirer, Reading, PA

Capstone: *Improving mammogram result data quality in an electronic health record (EHR) with a breast imaging-results and data system-EHR interface*

Nathan Reed Skidmore, Portland, OR

Capstone: *Evaluating the capabilities and adherence to the Digital Imaging and Communication in Medicine (DICOM) standard among ophthalmic imaging modalities and clinical information systems in the OHSU Ophthalmology department*

Daniel E. Slater, Portland, OR

Capstone: *Solutions for stakeholder access to structured pathology data*

Andrew Erik Vanberg, Portland, OR

Capstone: *Lessons learned working with OCHIN's installation team*

Julia Marie Weatherby, Austin, TX
Capstone: Safety in healthcare information systems: A synthesis of the literature

A record 71 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:

Jessica Marie Alexander, Portland, OR
Karen D. Alexander, Portland, OR
Carolyn J. Allen, Moscow, ID
Richard L. Altman, New York, NY
Atul Paul Aneja, Portland, OR
Julianne Adele Bava, Portland, OR
Sary O. Beidas, Augusta, GA
Auræ Beidler, Corvallis, OR
Randy Berger-Sweren, Baltimore, MD
Lorraine S. Bessmer, Portland, OR
Meryl Bloomrosen, Silver Springs, MD
Barry Camarillo, Abilene, TX
Terri Bechtold Camp, Sequim, WA
Patrick M. Campagna, Tigard, OR
Eugene L. Cardi, Portland, OR
Elissa Jean Chandler, Philadelphia, PA
Jitesh J. Chawla, Durham, NC
Matthew J. Cook, Simsbury, CT
Katherine Cox, Hillsboro, OR
Morris Scott Crader, Vancouver, WA
John R. Dainton, III, Park City, UT
Kshama Daphtary, Cleveland, OH
Taylor E. Doren, Portland, OR
Kathy Lynn Gaines, Medford, OR
David Gelman, New York, NY
Linda A. Gerace, Fort Pierce, FL
Chelsea Gertenrich, West Linn, OR
Kimberly Anne Goode, Hartford, CT
Kenneth Robert Gridley, Portland, OR
Kathleen M. Higginbottom, Hammond, LA

Sally M. Holmes, West Linn, OR
Katherine Ann Hopkins, Ridgecrest, CA
Kenneth D. Ingram, Portland, OR
Mark August Johnson, Madison, WI
Jeannette M. Judd, Scappoose, OR
Sujani S. Kakumanu, Madison, WI
Lari Anne Siu Kamei, Honolulu, HI
Eric Mitchel Kardon, Athens, GA
Drew G. Kelts, Santa Barbara, CA
Edwin B. King, II, Pittsburgh, PA
Kenneth A. Klepper, Portland, OR
Donald J. Klingens, Jr., Chester Springs, PA
Jodi Kodish-Wachs, Cherry Hill, NJ
Betty Lee, Portland, OR
Joshua Jeong Yul Lim, Rockville, MD
David Yu-Kwong Ling, Charlottesville, VA
Travis W. Lockwood, Hastings, MN
Marie A. Lowery, Portland, OR
Yair M. Lurie, Santa Barbara, CA
Tara Alyson Macey, Portland, OR
Andrea Jill Martin, Portland, OR
Brian J. McCourt, Raleigh, NC
Neil Stephen Meehan, Boxford, MA
Nicole M. Newland, Portland, OR
Jacelyn Mari Peebles, Denver, CO
Concetta A. Pryor, Centereach, NY
Luke Vincent Rasmussen, Wilmette, IL
Lois A. Ritter, Alameda, CA
Fred G. Rubin, Bloomsfield, CT
Paul Zamora Seville, Los Angeles, CA
Charles D. Sorgie, Portland, OR
Lynn T. Steeves, Portland, OR
Stephen David Swanson, Seattle, WA
Wayne C. Teris, Endicott, NY
Michael J. Tierney, Palo Alto, CA
Minakshi Tikoo, West Simsbury, CT
Heidi Twedt, Moorhead, MN
Jeffery L. Wajda, Medford, OR
Kathleen P. Wecks, Wood Village, OR
Michael WaiHo Yu, San Gabriel, CA
Ronit Zusman, Portland, OR ■

From the Chair

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and Quality (AHRQ) Evidence-Based Practice Center; while for the informatics program, it is the National Library of Medicine Biomedical Informatics Training Grant. As reported elsewhere in this issue, both of these major awards were renewed in 2012.

But this does not mean we do not have challenges before us. We have always been successful at carrying out our core missions, but like all successful organizations, we will need to evolve to new realities. Going forward, we will need to be more creative and resourceful as federal funding for research and training becomes tighter and the educational marketplace more 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.

A big part of our effort will involve collaboration, in all its facets. Collaboration must begin within the department. Part of the task of the new leadership will be to devise ways for faculty to work together in the pursuit of grants and other opportunities. There are actually many opportunities at the intersection of clinical informatics, bioinformatics, and clinical epidemiology.

This collaboration must also extend outside the department. It needs to extend not only to our traditional collaborators, i.e., other researchers, but also to the university's clinical enterprise and other operational activities where we can provide value. To this end, we are in the process of a virtual integration of the informatics service components of the DMICE Biomedical Informatics Shared Resource with the Clinical Research Informatics program of the Oregon Clinical and Translational Research Institute (OCTRI), led by faculty

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DMICE Receives Renewals of Long-standing Federally-funded Projects

With 35 years of funding between them, the two longest-standing, federally-funded programs in the Department of Medical Informatics & Clinical Epidemiology both received five-year renewals this summer. The Biomedical Informatics Research Training Program and the Evidence-based Practice Center (EPC) will continue through the summer of 2017.

Oregon Health & Science University has had the Biomedical Informatics Research Training Program, supported by the National Library of Medicine (NLM), since 1992. Celebrating its 20th anniversary, the fellowship was one of the first grants received by the fledgling biomedical informatics program at OHSU. **William Hersh, M.D.**, professor and chair, directs the program.

Currently one of 14 NLM-sponsored programs in the United States, the DMICE biomedical informatics fellowship supports 11 pre-doctoral and 7 post-doctoral students, studying either clinical informatics or bio-informatics. An addition this cycle is funding for dental informatics fellows, one pre-doc and two post-doc, led by associate professor **Mark Englestad, D.D.S., M.D., M.H.I.** “The OHSU biomedical informatics training program is now one of the longest standing programs in the country, and is in many ways a national leader,” Hersh said. “We are pleased that the NLM – the institute of the National Institutes of Health devoted to biomedical informatics – has chosen to expand the size of our program, especially in light of a reduction in their budget and the number of institutions selected for funding. Our graduates continue to find success in a variety of academic and industry settings.”

Celebrating 15 years of funding



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

this year with a renewal for five more years is the Evidence-based Practice Center, funded by the Agency for Healthcare Research and Quality (AHRQ).

For this 2012-2017 cycle of the AHRQ contract, **Roger Chou, M.D.**, will be EPC director while **Marian McDonagh, Pharm.D.**, will serve as co-director. Both have been long-standing investigators with the EPC, with Chou serving as scientific director from 2007-2012. **Elaine Graham, M.L.S.**, continues as program manager.

The EPC has added the University of Washington and Spectrum Research, Inc. in Tacoma, WA as partners for this funding cycle. The program will now be known as the Pacific Northwest Evidence-based Practice Center.

“The EPC award attests to the quality of the work conducted at our EPC over the last 15 years,” Chou said. “We are excited to be working with our new partners, University of Washington and Spectrum. This partnership brings together the two

pre-eminent academic institutions in the Pacific Northwest with a highly respected technology assessment group and represents our evolution into a truly regional center, the Pacific Northwest EPC.”

The Evidence-based Practice Center has brought in more than \$58 million to OHSU in AHRQ and related funding since its inception in 1997. The center produces systematic reviews on a wide range of healthcare topics that have been used by the US Preventive Services Task Force, AHRQ’s Effective Health Care Program, National Institutes of Health consensus development conferences, the American Pain Society and other stakeholders.

“The EPC and the NLM training grant are the large glue programs that bind together our faculty into large, common projects,” Hersh noted. “They also serve a vital role as we move forward into a new era of more accountable healthcare and require data, information, and knowledge to facilitate it.” ■

Twenty DMICE Faculty, Staff and Students Present at OHSU's First Research Week

As OHSU held its first research week May 7-10, 2012, 20 faculty, staff and students from the Department of Medical Informatics and Clinical Epidemiology gave oral presentations or displayed posters on their research over the four-day event.

Professor **Cynthia Morris, Ph.D.**, and OCTRI education program coordinator **Karen McCracken, R.N., C.C.R.P.**, served on the Research Week Planning Committee. The event was sponsored by OHSU, OCTRI and

Kyle Ambert, pre-doctoral student: *Virk: an active learning system for optimally identifying biomedical community database contributions*

James McCormack, pre-doctoral student: *Clinician perspectives on the quality of patient data used for clinical decision support: a QUAL study*

Paul Gorman, M.D., associate professor: *Is perceived quality in primary care associate with practice size and/or use of health information technology?*

Shahim Essaid, M.D., former post-doctoral fellow: *Semantic linking of biospecimen resources*

Poster sessions included:

Aaron Cohen, M.D., M.S., associate professor: *Study the potential impact of automated document classification on scheduling a systematic review update*

Amy Cantor, M.D., assistant professor of family medicine and Evidence-based Practice Center



Above left: Jeanne-Marie Guise, M.D., Shelley Selph, M.D., and Elaine Graham, M.L.S.; Above right: Vishnu Mohan, M.D., M.B.I.

the 29th Annual Student Research Forum.

DMICE presentations included:

David Gibbs, pre-doctoral student: *Peptides, proteins and networks: Removing obstacles and getting on the road to systems integration*

Arpita Tiwari, M.H.A., research associate: *Effectiveness of public reporting of health care quality information as a quality improvement strategy*

William Hersh, M.D., professor and chair: *Identifying patients for clinical studies: the TREC Medical Records Track*

Karen Eden, Ph.D., associate professor: *Evidence-based decision aids in women's health improve the decision making process*

Melissa Haendal, Ph.D., assistant professor: *CTSAconnect: a linked open data approach to represent clinical and research expertise, activities, and resources*

investigator: *Body mass index breast cancer risk of women in their 40s: Systematic review and meta-analysis*

Bernadette Zakher, M.B.B.S., research assistant: *Reproductive risk factors for breast cancer for women in their forties: systematic review and meta-analysis*

Dian Chase, M.S.N., M.B.A., A.R.N.P., F.N.P.-B.C., pre-doctoral student: *An in silico model of insulin/glucose transport*

Two DMICE Alumni Attend White House Event to Discuss Health Information Technology

On June 19, 2012, two recent DMICE graduates joined 100 physicians, health care policy leaders and health information technology (HIT) professionals in an invitation-only meeting with senior Obama Administration and Office of the National Coordinator for Health Information Technology (ONC) officials to discuss the state of HIT and how it can help improve patient care quality and health.

Larry Bannister, M.B.I. '11 and **Mark A. Johnson, M.D., certificate '11**, were nominated by the department to attend the event.

Among the topics covered: meaningful use achievement, challenges and solutions; increasing HIT adoption for providers in underserved communities; and leveraging HIT for quality improvement and interoperability and exchange, the two reported.

"Overall this group was quite positive and hopeful for the role of HIT in improving patient health," said Johnson. "Many problems still need attention, including the health information exchange, usability, workflow and vendor relations. Yet, it was heartening to see the ONC was already aware of many of these issues and was open to hearing new ones."

"Despite problems, we, as a nation, have been busy updating our health systems through technology. 110,000 eligible providers and 2,400 hospitals – 48 percent – have met meaningful use criteria. These have been incentivized by legislation from the stimulus package and furthered with the Affordable Care Act," Johnson added.

Bannister shared his perspective. "I see the promise of HIT as a way to improve patient safety and as a possible tool for driving down the cost of health care. I don't see HIT as a panacea, however. It is only a tool and



Larry Bannister, M.B.I., 2011, and Mark Johnson, M.D., certificate 2011.

we must use this tool wisely, as well as implement appropriate policies and practices to get the most out of it."

"The only issues that truly concern me are privacy and security," he noted. "As a software engineer, I know there are many solutions to the technical problems that HIT poses but, in my opinion, we should always choose the solutions that preserve our privacy and maximize our security."

Bannister is currently a test manager for the Certification Commission for Health Information Technology, an independent nonprofit testing organization. He manages the testing process of electronic health records for compliance with meaningful use criteria.

Johnson is an attending physician at the Carle Health System ICU in Urbana, Illinois. Having recently completed a fellowship in critical care medicine at University of Wisconsin-Madison, Johnson is augmenting his clinical work with informatics, working for the hospital's chief medical information officer to help optimize care processes in the ICU, including workflows, usability, quality, meaningful use and patient safety.

"The main benefit I got from this White House experience was a feeling of being at the right place at the right

time for this technology," added Bannister. "I am jazzed to be riding the 'next big wave' in technology."

Both graduates were supported as students by the University-based Training (UBT) grant DMICE received from ONC, with William Hersh, M.D., professor and chair as principal investigator. The grant was part of the American Recovery and Reinvestment Act of 2009. The UBT provides funding for 135 graduate certificate and 13 master of biomedical informatics students through June 30, 2013. To date, 63 certificate and 6 master's students have graduated, many of whom are working in HIT professionally.

Another ONC-funded project for the department has been the Curriculum Development Centers project, which has funded OHSU and four other universities to develop curriculum materials aimed initially for community colleges but now focused on a broader audience. OHSU has also served as the National Training and Dissemination Center for this project and is the lead developer in creating an educational version of the VA's VistA electronic health record project. The entire curriculum is available for download through the OHSU-maintained web site: www.onc-ntdc.info. ■

Faculty Focus: Karen Eden, Ph.D.

Karen B. Eden, Ph.D., has always been interested in how people make decisions. The associate professor of medical informatics & clinical epidemiology has made interactive decision aids a focus of her research here at OHSU while this interest also helps her as she teaches and mentors students in the DMICE education program.

Eden's interest in decision making started early in her research career. With academic training in biomechanics and systems science engineering, Eden then spent seven years in research and development at Nike.

"My first work began in studying how athletes selected shoes," she said. "I designed an interactive decision aid to help runners figure out which shoe was best for them, based on their training, injury history and preferences for the shoe."

Later, as part of the research group at the Center for Outcomes Research and Education at Providence Health System, Eden studied how medical practice leaders selected information technology, e.g., electronic health records and billing systems.

Eden joined DMICE in 1997 where, as part of her research, she participated in systematic reviews by the Oregon Evidence-based Practice Center for the US Preventive Services Task Force and the Institute of Medicine. She also worked on an evidence report on vaginal birth after cesarean.

"As we crafted our lengthy evidence reports, I wondered how patients and providers used this information to make individual decisions," Eden said. "I also observed that

very little was known about patients' decision making processes around health. I saw an opportunity to create computerized decision products for patients and providers that translated the complex evidence into user-friendly interactive tools."

Eight years ago, an opportunity to be a scholar on a National Institutes of Health K12 career development grant gave Eden the protected research time to develop computerized, interactive decision aids for patients. She spent four years with the Build-

ing Interdisciplinary Research Careers in Women's Health program, where she created a childbirth decision making aid for women who had had a cesarean delivery.

"In partnering with Dr. Jeanne-Marie Guise, we created a decision aid to help a woman with a prior cesarean decide whether

to attempt a vaginal birth or have a planned repeat cesarean," Eden said. "In a pre-post cohort study, we found that a single use of this decision aid informed women about the risks and benefits of both options and also reduced conflict the women had about this decision."

Eden has continued the focus on women's health in her development of interactive decision aids. She is a principal investigator of an R01 grant funded by the National Institute of Mental Health, developing a decision aid for use by abused women.

"Abused women must consider several things when planning for safety," Eden noted. "They are often weighing protection of self and children against resources provided

in the current unsafe environment. To help women plan for safety, Dr. Nancy Glass, a colleague from Johns Hopkins University, and I designed a decision aid to help women plan for safety. This interactive decision aid provides women with a risk assessment (and feedback) and then helps them set priorities for safety."

Eden's work has expanded outside the United States. Within the past year, a colleague in New Zealand got funding to adapt the safety planning decision aid for use on smart phones there with a special effort to help the native people, the Maori.

Last year, collaborating with Eden, a biomedical informatics post-doctoral fellow, Paula Scariati, D.O., M.S. '12, created a decision aid to help average risk women in their 40s decide whether to get a mammogram.

Currently Eden is working with Dr. Suzanne Mitchell in the Department of Behavioral Neuroscience to create a decision aid to help smokers choose a strategy to stop smoking. One of the National Library of Medicine (NLM)-funded summer informatics interns, Nate Soqui, is creating a draft version of the new decision aid.

Wearing her academic hat, Eden currently serves as associate director for pre- and post-doctoral programs that are funded by the NLM-funded biomedical informatics training grant. "I oversee the recruiting and admissions processes, evaluation processes, and mentoring for 17 pre-doctoral and eight post-doctoral fellows," Eden said. "Most of the fellows have primary mentors but I serve as a secondary mentor for the fellows to insure they have sufficient guidance and resources needed to be successful."

The role grew out of Eden's participation in 2010 in the OHSU Lead Mentor Program, a faculty de-

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Karen Eden, Ph.D.

Faculty/Staff Update

Awards and achievements

Congratulations to **Jeanne-Marie Guise, M.D., M.P.H.**, who was promoted to professor of obstetrics & gynecology, medical informatics & clinical epidemiology, and public health & preventive medicine.

Thomas Yackel, M.D., M.P.H., M.S., associate professor, has been elected to a two-year term on the OHSU Faculty Practice Plan (FPP) Board of Directors and FPP Management Committee.

Heidi D. Nelson, M.D., M.P.H., research professor, has been named to the National Institutes of Health (NIH) Advisory Committee on Research on Women's Health (ACRWH) for a four-year term. The ACRWH provides guidance to the director of the NIH Office of Research on Women's Health (ORWH), which resides in the NIH Office of the Director and works with the 27 NIH institutes and centers to ensure that women's health and sex differences research is part of the NIH scientific framework. ORWH also works to ensure that women and minorities are included in clinical research. Janine Austin Clayton, M.D., ORWH acting director, pointed to Dr. Nelson's contributions to women's health globally, nationally, and locally as a reflection of her "deep and accomplished commitment to women's health research."

Marian McDonagh, Pharm.D., associate professor, was appointed to the School of Medicine Women in Academic Medicine committee, which associate professor **Karen Eden, Ph.D.**, co-chairs.

Associate professor **Paul Gorman, M.D.**, was appointed to the School of Medicine Curriculum Committee while **Vishnu Mohan, M.D., M.B.I.**, assistant professor, was

The placebo response in neuropathic pain trials: it's not what you think
 Shelley Selph, MD¹, Susan Carson, MS¹, Marian McDonagh, PharmD¹
¹ Oregon Evidence-based Practice Center, Oregon Health & Science University, USA

Background:
 The placebo response varies across neuropathic pain trials making it challenging to interpret the treatment effect and difficult to compare trials of different medications.

Objectives:
 > The primary objective was to determine the study-level characteristics which predict the placebo response in trials of painful diabetic neuropathy.
 > A second objective was to identify characteristics that are associated with changes in relative effect, independent of the placebo response.

Methods:
 A systematic review of the English-language literature was performed and fair-good quality, randomized, placebo-controlled trials measuring ≥50% pain relief from baseline as an outcome, were identified. Medications included:
 • tricyclic antidepressants
 • serotonin-norepinephrine reuptake inhibitors
 • gabapentin and pregabalin
 • other anticonvulsants

Results:
 Twenty-five trials of diabetic neuropathy were included. The placebo response ranged from 3% to 43%. The treatment effect ranged from 24% to 89%. The predictor of placebo response was whether the study was conducted in the United States or Europe versus another country or region (p=0.053). After adjusting for placebo response, predictors of treatment response were publication and length of trial. For example, assuming a 20% placebo rate, a 6-week trial published in 1997 was 20% more likely to demonstrate pain relief versus placebo than a 12-week trial published in 2000. In contrast to previous research, neither baseline pain levels nor recruitment rate were found to be predictors of response.

Table 1. Significance of Selected Predictors

Predictor Variable	Mean (SD)	Min	Max	p-value
US/EUR vs other countries	—	—	—	0.053
Publication Year	2003 (8.65)	1984	2010	—
Trial Length (weeks)	11.4 (4.64)	5.00	20.00	—
Baseline Pain (0-10)	8.42 (0.45)	7.00	9.00	—

Shelley Selph, M.D., post-doctoral research fellow with the Evidence-based Practice Center, presented a poster at the 19th Cochrane Colloquium in Madrid, Spain in October 2011.

appointed to the School of Medicine Continuing Medical Education Committee.

Melissa Haendel, Ph.D., assistant professor, was appointed to the School of Medicine Blueprint for Research Roadmap Taskforce #3.

Assistant professor **Carlo Torriani, Ph.D.**, served on the program committee of Linked Learning 2012, the 2nd International Workshop on Learning and Education with the Web of Data, held in April 2012 in Lyon, France.

Professor (provisional) **Michael Chiang, M.D., M.A.**, has several recent committee appointments: assistant editor of the *Journal of the American Medical Association*; chair, Medical Information Technology Committee, American Academy of Ophthalmology; member, Clinical Registry Task Force, American Academy of Ophthalmology; and member, Nominating Committee, American Association for Pediatric Ophthalmology & Strabismus.

Professor and chair **William Hersh, M.D.**, was the general conference chair of the ACM SIGIR Annual Conference on Research and Development in Information Retrieval, held

in Portland, OR, August 12-16, 2012.

Hersh is also serving as Scientific Program Committee Chair of the American Medical Informatics Association 2012 Annual Symposium, to be held in Chicago, November 3-7, 2012.

Associate professor **Thomas Yackel, M.D., M.S.**, participated in the final HIMSS Stage 6 confirmation call and OHSU is now certified – one of only 250 hospitals in the country to achieve this level of electronic health record usage, putting OHSU in the top 5%. Hospitals who have achieved Stage 6 recognition from HIMSS have implemented healthcare information technology that supports high levels of automated patient care delivery.

The guidelines for pediatric traumatic brain injury, second edition, for which research associate professor **Nancy Carney, Ph.D.**, was an author (see Publications), have been endorsed by the American Academy of Pediatrics, American Association of Neurological Surgeons, European Society of Pediatric and Neonatal Intensive Care, Neurocritical Care Society, Pediatric Neurocritical Care Research Group, Society of Critical Care Medicine, Paediatric Intensive

Care Society (UK), Society for Neuroscience in Anesthesiology and Critical Care, and World Federation of Pediatric Intensive and Critical Care Societies.

Presentations and posters

Nancy Carney, Ph.D., research associate professor, participated in the International Brain Injury Association Ninth World Congress, held in Edinburgh, Scotland, March 21-25, 2012. Carney gave oral presentations on Guidelines for the Acute Medical Management of Severe Traumatic Brain Injury in Infants, Children, and Adolescents, 2nd Edition; and Early Indicators of Prognosis for Moderate to Severe Traumatic Brain Injury, 2nd Edition. She also had two posters: Family-Provided Home-Care for Pediatric Traumatic Brain Injury in Argentina: Process and Methods for a Multi-Center Randomized Controlled Trial; and Intracranial Pressure Monitoring in Severe Traumatic Brain Injury in Latin America: Process and Methods for a Multi-Center Randomized Controlled Trial.

William Hersh, M.D., professor and chair, visited Singapore and China to teach and give presentations on biomedical informatics in September 2011. In Singapore, Hersh taught a half-day tutorial as part of his on-line course known as 10x10 and also gave a seminar at the School of Computing of the National University of Singapore. He also visited Beijing, China where he gave two presentations at the 90th anniversary celebration of Peking Union Medical College and Hospital. His first presentation was to the Information Technology department and covered the US program for “meaningful use” of electronic health records. His second presentation was part of the celebration’s Academic Forum and focused on the role of informatics in translational research.

Also in September 2011, **Hersh** took part in an Association of American Medical Colleges Group on Information Resources Webinar on

“Informatics and the Workforce.” In his presentation, Dr. Hersh described federal initiatives to increase the informatics workforce, including the role of the biomedical informatics graduate program at OHSU.

Hersh participated in four panels in May 2012: Higher-Ed and Tech Industry Collaboration for Economic Development and Improving Health in Oregon at the Ninth Annual InnoTech Oregon in Portland (along with **Aaron Cohen, M.D., M.S.**, associate professor); Fuzzy Math: Avoiding Common Pitfalls in Reporting Statistics and Clinical Research at the National Association of Cancer Center Development Officers/National Cancer Institute Public Affairs & Marketing Network 2012 Conference in Portland; New Ideas on the Future of Healthcare at Webvisions Portland; and The Changing National Landscape of BMI Training and Education at the AMIA Academic Forum Sixth Annual Conference in Minneapolis.

At the American Health Information Management Association, Assembly on Education in Orlando, FL, in July 2012, **Hersh** gave a talk on The Clinical Informatics Workforce and its Education: The OHSU Experience.

Professor **Robert Lowe, M.D., M.P.H.**, presented on career development strategies in emergency medicine research: next steps for students, residents, fellows and faculty at the Society for Academic Emergency Medicine Western Regional Research Forum in Las Vegas, NV, March 2012.

Lowe also participated in two panels at the Society for Academic Emergency Medicine Annual Meeting in Chicago in May 2012: The Nadir of Clinical Operations Innovation: Implications for Future Growth; and Research Fellowships: Picking the Right One.

At the annual meeting of the Massachusetts Chapter, American College of Emergency Physicians in Waltham May 15, 2012, **Lowe** was part of a Health Care Reform Panel. He also

presented on Community-based Participatory Research with Central City Concern at the OHSU MD/MPH annual retreat April 26, 2012.

In March 2012, **Lowe** presented at the Society for Academic Emergency Medicine Western Regional Research Forum on “Frequent Flyers”: An Unrecognized Clue to Intimate Partner Violence, held in Las Vegas, NV, March 2012.

Carlo Torniai, Ph.D., assistant professor, chaired the panel on Practical Experience with Linked Open Biomedical Data: State of the Art and Future Directions at the 2012 AMIA Summit on Translational Bioinformatics in San Francisco in March 2012.

Assistant professor **Melissa Haendel, Ph.D.**, presented “An Introduction to Anatomy Ontologies” at the Phenotype Research Coordination Network meeting, February 23, 2012, in Durham, NC.

Professor (provisional) **Michael Chiang, M.D., M.A.**, gave the following presentations in Taiwan in December 2011: Telemedicine for Retinopathy of Prematurity Diagnosis, Kaohsiung Medical University, Kaohsiung; Image Analysis for Retinopathy of Prematurity, Ophthalmology Society of Taiwan, Taipei; and Retinopathy of Prematurity, Imaging, and Telemedicine, National Taiwan University, Taipei.

In January 2012, **Chiang** was an invited speaker at the National Autonomous University of Mexico in Mexico City, presenting on Biomedical Informatics, Information Technology, and Ophthalmology.

At the March 2012 American Association for Pediatric Ophthalmology & Strabismus annual meeting in San Antonio, TX, **Chiang** presented Electronic Health Records for Pediatric Ophthalmology.

In April 2012, **Chiang** was a visiting professor at the University of Iowa in Iowa City and University of California at San Francisco,

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Faculty/Staff Update

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speaking on Making “Meaningful Use” Meaningful for Ophthalmology, and Electronic Health Record Implementation in an Academic Medical Center, respectively.

Translational Research in Retinopathy of Prematurity was the topic of **Chiang’s** presentation to the Queen Sirikit National Institute of Child Health in Bangkok, Thailand in April 2012.

Associate professor **David Dorr, M.D., M.S.**, presented on The Impact of Care Coordination Versus Pay-for-Performance Incentives on Utilization at 6 Months: The ICCIS Cluster Randomized Controlled Trial at the AcademyHealth 2012 Annual Research Meeting June 24-26, 2012 in Orlando, FL.

Dorr also had a poster on “Effects of a Randomized Controlled Trial Comparing Reimbursement of Care Coordination to Pay-for-performance in Primary Care” at the American Geriatrics Society 2012 Annual Scientific Meeting, May 3-5, 2012 in Seattle, WA.

Funding received

The Gordon and Betty Moore Foundation has invested \$1.6 million to enhance OHSU’s Care Management Plus program, a technology-intensive, innovative primary care model that reduces hospitalizations, lowers costs and improves health outcomes for high-risk older adults with multiple chronic illnesses. Led by OHSU’s **David Dorr, M.D., M.S.**, the nationally recognized program integrates health information technology and personalized, coordinated care and has already been shown to increase patient and health provider satisfaction while improving health outcomes. The new grant will enable Dorr’s team to develop the program further and ultimately transform delivery of care for those living with multiple chronic conditions.

Assistant professors **Melissa Haendel, Ph.D.**, and **Carlo Torniai, Ph.D.**, are investigators on a grant awarded to the OHSU Library from the National Center for Advancing Translational Sciences: CTSAconnect: A Semantic Framework for Linked Data Applications: Promoting Discovery of Research Activities, Resources, and Clinical Expertise.

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Student/Alumni News

Awards and achievements

Christopher Tessier, M.D., certificate '10, is vice chair of the Quality Improvement and Patient Safety Committee for the American Urological Association (AUA) as well as the representative from the AUA to the Surgical Care Improvement Project Technical Expert Committee.

Certificate student **Larry Holder** was a finalist for the McKesson Distinguished Achievement Award for Clinical Excellence in 2011. He also received Modern Healthcare's IT Case Study Award and the AMDIS Award for Excellence and Outstanding Achievement in Applied Medical Informatics, both in 2011.

Certificate student **Jeffrey Brandt** is a member of several work groups: the mHealth Taskforce; the Office of the National Coordinator for Health Information Technology Workgroup to address patient identity proofing and authentication; and the HL7 mHealth workgroup. He is also co-chair of the mHIMSS Mobile Security Workgroup.

Post-doctoral fellow **Sonia Benitez, M.D.**, was selected as a member of the Student Editorial Board of *Methods of Information in Medicine* for 2012.

Paul DeMuro, J.D., M.B.I. '12, post-doctoral fellow, is on the American Medical Informatics Association Finance Committee and also is Chair of the American Health Lawyers' Association Performance Measures and Quality, a subcommittee of the Accountable Care Organization Committee.

M.B.I. student **Patricia E. Martin, Ph.D.**, is currently serving as a member of the Change Management Task Force of HIMSS. A recent project focused on reviewing and providing

feedback on recent proposed changes by the U.S. Department of Health and Human Services for Meaningful Use standards and deadlines to the Secretary.

Jobs/career changes/promotions

MBI student **Patricia E. Martin, Ph.D.**, served as an adjunct faculty member at Mt. Hood Community College winter term of 2012, teaching Vendor Issues, part of the curriculum developed by OHSU and other universities for teaching health informatics at community colleges, which was funded by the Office of the National Coordinator for Health Information Technology.

P. Nelson Le, an MBI student, has accepted a position as Senior Advisor for InterSystems Corporation, a global healthcare information technology company. He will be working with their product, HealthShare, which provides the technologic infrastructure for patient data exchange across disparate platforms.

Funding received

Julie Deberne, M.D./Ph.D. student, won a Tartar Fellowship for her project, In Utero Heart Valve and Great Vessel Development in an Ovine Model. The Tartar Trust Fellowships grant \$2,000 for one year to students, postdocs, and faculty in the OHSU School of Medicine. Deberne is the first M.D./Ph.D. student at OHSU to be doing her Ph.D. work in DMICE.

Presentations and posters

Certificate student **Larry Holder** gave the following recent presentations: A Hospital's Journey to Recovery from Sliding Scales Addiction: a 12 Step Program, McKesson's Distinguished Achievement Award for Clinical Excellence, Charleston SC, February 2011.

Shared Nursing-Physician Leadership Strategies for Achieving Meaningful Use of EHRs, 44th

Annual AONE Conference, San Diego CA, April 2011.

Driving Clinical Excellence with Horizon Clinicals, as well as a CMIO Expert Panel Discussion on Success Strategies for Leading Physician Change, both at Insight 2011 Annual Conference, Pittsburgh, PA, September 22, 2011.

Ousting the Insulin Sliding Scale Using Evidence, CPOE, and Six Sigma. Clinical Leadership Education Session. McKesson Sponsored Webinar, October 20, 2011.

Should CMS Allow Access to Patient-Protected Medicare Data for Public Reporting? The Hospitalists, November 1, 2011.

Journey Towards Patient Centered Care, Nursing and Physician Leadership Congress, Charleston, SC, February 2012.

Insulin Sliding Scale Using Evidence Based Medicine, CPOE, and Six Sigma, HIMSS 2012, Las Vegas, February 2012.

Paul DeMuro, J.D., M.B.I. '12, post-doctoral fellow, gave a presentation on Accountable Care at the HIMSS Oregon Annual Spring Conference in Salem April 30, 2012.

Edward Dyer, certificate student, co-presented a webinar with 2 VA faculty members: Devan Kansagara and David Kagen in April 2012. The webinar was entitled Systematic Review of Treatment of Anemia in Patients with Heart Disease.

Publications

Michael Mooney, Ph.D. '12, post-doctoral fellow, was first author of: **Mooney MA**, Wilmot B, The Bipolar Genome Study, McWeeney SK, The GA and the GWAS: Using Genetic Algorithms to Search for Multilocus Associations, *IEEE/ACM Transactions on Computational Biology and Bioinformatics*, 2012; 9:899-910.

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DMICE Investigator Works with Department of Defense on Definition of Concussion

Nancy Carney, Ph.D., research associate professor, and her DMICE research team are part of an effort to help the United States military develop an evidence-based definition of concussion. The US Department of Defense (DoD) and the Centers for Disease Control and Prevention have provided funding to the Brain Trauma Foundation (BTF) in New York City, with Carney serving as principal investigator of the OHSU “Concussion Methods Group” subcontract. The OHSU Methods Group will provide a systematic review of the existing literature about concussion, which will be the foundation of the definition and precursor to new research.

“Currently there are over 30 concussion definitions being used, all of which are consensus-based to varying degrees,” Carney said. “Our product will be distinct in that we will use the rigorous review methods we learned from our work with the Oregon Evidence-based Practice Center to assess and synthesize the published literature.”

Carney’s group works with a task force of about 25 individuals who represent various disciplines and stakeholders involved with concussion and mild traumatic brain injury (TBI). During the past year of the project, her research team has included research associates Cindy Davis-O’Reilly, Amy Huddleston, Kim Peterson, and Susan Carson; and student assistant Nora Helfand. Pre-doctoral student Tracie Nettleton and post-doctoral researcher Steven Bedrick, Ph.D. ’11, round out the team.

The research team at BTF and OHSU is working with Colonel Dallas Hack, M.D., director of the US Army Medical Research and Materiel



Col. Jamie Grimes, M.D., Nancy Carney, Ph.D., Col. Dallas Hack, M.D.

Command’s Combat Casualty Care Research Program, and Colonel Jamie B. Grimes, M.D., National Director of the Defense and Veterans Brain Injury Center. Colonel Hack intends to use the results of this project to help identify priorities for DoD research initiatives.

Carney has made evidence-based guidelines for treatment of TBI the major focus of her research at OHSU. She also conducts clinical research in

Latin America, where she is principal investigator (PI) of a randomized trial of a family-provided, post-discharge intervention for children with TBI in Argentina. Carney also serves as co-PI of a randomized trial of the use of the intracranial pressure monitor to direct treatment for severe TBI in Bolivia and Ecuador and as co-investigator of a pilot study of early vs. late decompressive craniectomy for patients with severe TBI in Colombia. ■

Where Do OHSU Biomedical Informatics Students Live?

We have always known that OHSU students in the distance learning biomedical informatics program live all over the country, and the world, but thanks to associate professor David Dorr, M.D., M.S., and business data analyst Kelly Jones-Weir, we now have a graphical depiction of their distribution across the United States. Each dot (star) in the figure represents where one student lives.

The concentration of dots in the Portland area represents an interesting phenomenon. We have a number of what we call “local distance” students in the program, people who live in the Portland area yet are enrolled in our distance program. For the most part, these individuals prefer

the flexibility that the online courses offer. Some may have jobs or obligations during the day when on-campus classes are offered. One nice aspect is that they take part in other program activities, such as our local research conferences.

But still, our students are literally spread out across the United States. In addition to those students, we also have students from a number of different countries. Some of these students come to Oregon to study but others are distance learning students (who even come on-campus for our hybrid short courses, as all master’s students must do). The countries with one or more biomedical informatics students in the program include:

• Argentina

- Australia
- Canada
- Egypt
- India
- Israel
- Kuwait
- New Caledonia
- Saudi Arabia
- Singapore
- Thailand
- United Kingdom
- Zimbabwe

While the content of our program is somewhat US-centric, since those who practice informatics in the US must understand the nuances (some might say craziness) of the US healthcare system, many informatics problems and solutions are global in their nature. ■

Location of Biomedical Informatics Distance Learning Students in the United States



Faculty Focus

Continued from Page 7

velopment program in the School of Medicine.

“This training has been ideal for my role with these graduate students. I also help these students with eIRB submissions, review materials prior to conference submission and serve as a confidential sounding block when they need help with their programs.”

Her interest in decision making extends to the classroom. Within the DMICE education program, Eden teaches BMI 538, Medical Decision Making, where students learn to model uncertainty and expected outcomes of various decisions.

In addition, Eden partners with assistant professor Vishnu Mohan, M.D., M.B.I., to teach a managerial decision making class in the OHSU Healthcare MBA program, a course that combines quantitative and qualitative approaches.

Outside of DMICE, Eden serves as co-chair of the Women in Academic Medicine (WAM) Committee, which addresses issues of concern to faculty, particularly women, around career advancement, career satisfaction, pay equity and discrimination, participation by women in key decision making at OHSU, parenting, flexible schedules and childcare.

In 2009, Eden served as a representative from WAM on a task force to bring a child care center to the OHSU South Waterfront campus. The Healthy Starts Children's Center opened in November 2010.

What does the future hold for research on decision making in healthcare?

“My sense is that patients will become much more involved in their own healthcare decisions,” Eden said. “To do this, they must be sufficiently informed and empowered to be a partner in the decision. The push toward patient-centered healthcare requires that patients also understand (and express) their own priorities

around a healthcare decision. In the future, I would like to see decision aids integrated with personal health records. Patients can then use the de-

cision aids before they go into scheduled appointments and be prepared for a shared decision making discussion with their providers.” ■

Student/Alumni News

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Certificate student **Isolde Knaap** had a recent publication: Kaza N, Knaap GJ, **Knaap I**, Lewis R. Peak oil, urban form, and public health: exploring the connections. *American Journal of Public Health*. 2011;101:15980-606.

Jeffrey Brandt, certificate student, is a co-author of the HIMSS ebook *mHealth: Smartphones to SmartSystems*, published in 2012.

Paul DeMuro, J.D., M.B.I. '12, post-doctoral fellow, is author of an article, Accountable Care, to be published in *The Health Lawyer*, a publication of the American Bar Association. The work was derived from his capstone project.

Carolyn Petersen, M.S., M.B.I. '09, and **Paul DeMuro, J.D., M.B.I. '12**, post-doctoral fellow, were contributors to the *Accountable Care Organization Member Briefing* for the Accountable Care Organization Task Force, part of the American Health Lawyers Association, published in May 2012.

In Memoriam

Former student **Daniel L. Baker** passed away April 13, 2012. A biomedical informatics student from 1999-2001, Dan worked as a pediatrician for Kaiser Permanente in Portland from 1985-2002. More recently, he was a physician consultant in Seattle, specializing in electronic medical records. ■

From the Chair

Continued from Page 3

members Michelle Hribar, Ph.D., and Robert Schuff, M.S.

Collaboration needs to extend even further to partner with companies, healthcare organizations, and others. To this end, we are launching a Commercialization and Collaboration Leadership Program, led by faculty member Aaron Cohen, M.D., M.S. We hope to collaborate externally not only in research, but also in education (including customization of our offerings) and service.

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

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 am excited for the new changes in the department. New leadership will bring new ideas and energy to its leadership. A well-rounded leadership team will also enable the members of the team to continue their intellectual activities, which is critical not only for their ability to provide scientific and educational leadership, but also providing greater job satisfaction. I know that I could never solely be an administrator, as it is the intellectual activity, in the form of teaching and research, that is the most gratifying aspect of my job. ■

DMICE 2.0

Continued from Page 1

M.P.H., will take on the title of Vice Chair for Education and Training, with a focus on educational activities, especially in the clinical and translational research realm. Joan Ash, Ph.D., professor, will take on the title of Vice Chair for Faculty Development, with a focus on faculty development and mentoring. She will also assume the chair of the department's Promotion and Tenure Committee after David Hickam steps down at the end of this year's P&T cycle. Associate professor Shannon McWeeney, Ph.D., will continue as Vice Chair and Head of the Division of Bioinformatics & Computational Biology.

The two new Vice Chairs will be Heidi Nelson, M.D., M.P.H., research professor, and David Dorr, M.D., M.S., associate professor. Heidi will take on a new role as Vice Chair for Clinical Epidemiology. She will provide leadership and cohesion for the clinical epidemiology faculty in DMICE, who have been highly successful in their work with the Evidence-Based Practice Center and other projects and anticipate future expansion and collaborations. Heidi's role will focus on integrating the activities of the clinical epidemiology group and looking for new opportunities to carry out the research, educational, and service missions of the group as well as the larger department.

David Dorr will take on a new role as Vice Chair for Clinical Informatics. Similar to Heidi, David will focus on maintaining the current strengths in research, education, and service while looking for new opportunities within the group and the department. He will also look for ways to leverage informatics opportunities within and beyond OHSU.

William Hersh, M.D., professor and chair, will continue in his overall leadership role of the department, seeking ways to integrate the vari-

ous parts of DMICE into a larger and more cohesive whole. He will also continue in his explicit leadership role of the informatics educational program. Rounding out the leadership team, Anne Marshall, M.B.A., will continue in her role as Department Director.

All of the leadership team will also continue their scholarly and educational activities, as well as their engagement regionally, nationally and internationally in their areas of expertise. ■

OHSU Research Week

Continued from Page 5

Mark Engelstad, D.D.S., M.D., M.H.I., associate professor: *Clinical documentation quality – Can our notes be used for outcomes research?*

Tracy Edinger, N.D., certificate student: *Barriers to retrieving patient information from electronic health record data: Failure analysis from the TREC medical records track*

Vishnu Mohan, M.D., M.B.I., assistant professor: *Interdisciplinary collaborative research by the Physician Order Entry Team (POET) of the Department of Medical Informatics and Clinical Epidemiology (DMICE) at Oregon Health & Science University*

Shelley Selph, M.D., Evidence-based Practice Center Fellow: *Conflict of interest among clinical practice guidelines AND The placebo response in neuropathic pain trials: it's not what you think*

Tracie Nettleton, pre-doctoral student: *Mapping neural response to alcohol using optical imaging techniques*

Matthew Brush, Ph.D., post-doctoral fellow: *The Reagent Ontology: an integrated resource for curation of biomedical research reagents*

In addition, **Robert Lowe, M.D., M.P.H.**, professor, was co-author of a poster by Glenn Kautz: *Rural-urban differences in access, utilization and time spent uninsured in an Oregon Medicaid population.* ■



Bernadette Zahker, M.B.B.S., Amy Cantor, M.D., and Heidi Nelson, M.D., M.P.H., at OHSU Research Week

College Students Spend Summer as Interns Working with DMICE Faculty

Then undergraduate students spent the summer of 2012 working with DMICE faculty members as part of the department's summer internship program. Eight of the students were funded by a grant from the National Library of Medicine, with William Hersh, M.D., professor and chair, as principal investigator.

Two students worked with associate professor David Dorr, M.D., M.S., who also directs the internship program. Erin Thayer, from Portland, is a student at University of Pennsylvania who helped Dr. Dorr with patient focus group work. Hailing from Rochester, NY, Steven Heisler attends the University of Rochester. He worked on continuity of care documents this summer.

Working with Judith Logan, M.D., M.S., associate professor, were Brett Boston of Portland, a student at the University of Washington, and Merilee Avery of Portland, who attends Case Western Reserve University. Boston worked on meaningful use and CORI, the Clinical Outcomes Research Initiative, which studies outcomes of gastrointestinal endoscopic procedures in "real life" settings. Avery also worked on CORI.

Professor (provisional) Michael Chiang, M.D., M.A., had two interns: Anne Kizmiller and William Wang, from Wilsonville and Portland, OR, respectively. Kizmiller is a student at Washington University, St. Louis, MO while Wang attends Marquette University. Kizmiller worked on implementation of electronic health record systems at OHSU. Wang's research project was computational analysis of retinoplasty of prematurity

Portland State University 2012 graduate Gabrielle Choonoo worked



Undergraduate students who spent the summer in DMICE, standing with Dr. David Dorr, program director (far left), include Steven Heisler, William Wang, Gabrielle Choonoo, Brett Boston, Lindsey Watson, and Nathaniel Soqui. Not pictured are Anne Kitzmiller, Erin Thayer, Daivik Orth and Merilee Avery.

with associate professor Shannon McWeeney, Ph.D. on a project related to head and neck cancer.

Karen Eden, Ph.D., associate professor, has Lindsey Watson of Portland, a student at Washington State University, Vancouver, as her intern, working on a quantitative analysis project. Dr. Eden also shared an intern with Dr. Dorr. Nathaniel Soqui, of Chandler, AZ, a student at Arizona State University, worked on

both SQL for quality measures for Dr. Dorr and a smoking cessation decision aid for Dr. Eden.

Rounding out the group of interns was Daivik Orth, from Beaverton, OR. A student at Johns Hopkins University, Orth worked with associate professor Kemal Somnez, PhD., on transcription factor binding site statistical representation analysis in genetic networks. ■

Research Shows Health IT Enables Quality Measurement, but Obstacles Remain

Judy Logan, M.D., M.S., associate professor, was one of 17 investigators who received grant funding from the Agency for Healthcare Research and Quality's Enabling Quality Measurement initiative, which made advances in measuring quality using health information technologies.

Transforming data into meaningful feedback that clinicians can use to improve practice is an issue faced in automated quality measurement. To conquer this obstacle, Logan worked

with clinicians to generate and report prioritized quality measures through interactive Web-based quality reports.

Her project on Using Electronic Health Records to Measure and Improve Quality for Colonoscopy Procedures is included in the synthesis report *Findings and Lessons from the Enabling Quality Measurement Through Health IT Grant Initiative*, recently published by AHRQ. The report is available at: <http://healthit.ahrq.gov/ASQEQMRPT2012.pdf>

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