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DMICE Tracks



Introducing DMICE

In the spring of 2003 the former Division of Medical Informatics and Outcomes Research became the Department of Medical Informatics and Clinical Epidemiology.

Know in OHSU jargon as a “free-standing division,” DMICE operated like a department (with, for example, its own budget, promotion and tenure process, etc.) but with interim status. When the division became a full-fledged department, very little of its day-to-day activities changed but the significance of the new name was enormous. The change recognizes the success and value to the university of DMICE’s respective disciplines.

Becoming a department implies a more permanent status within the OHSU School of Medicine where DMICE can continue its mission of providing an academic environment for teaching, research and service in the disciplines of medical informatics and clinical epidemiology. Like all other departments, however, the onus is on the department to be financially and scientifically viable.

Message From the Chair

Welcome to the first issue of *DMICE Tracks*, the newsletter of the Department of Medical Informatics and Clinical Epidemiology. We hope to produce this newsletter on a quarterly basis to keep people inside and outside of OHSU informed about our department.

These are exciting yet challenging times for the fields of medical informatics and clinical epidemiology. The most exciting news is that we have become a full-fledged department in the School of Medicine, which we view as an acknowledgment of our success and the importance of our disciplines to health and biomedicine. While in reality our day-to-day operations are not much different from when we were the Division of Medical Informatics and Outcomes Research. The new status gives us increased vigor toward our role at OHSU. I am also pleased to announce that Cynthia Morris, Ph.D., M.P.H., has agreed to serve as vice chairwoman of the department. Morris will be particularly helpful in promoting the clinical epidemiology side of the department, mentoring junior faculty and identifying new research opportunities.

These are exciting times for many reasons. The informatics program

continues to grow both in research and education. On the research side, we continue to contribute important findings to the field. This will likely continue with a number of new grants recently received by faculty members. Furthermore, times are bright for us with the growing recognition of the importance of information technology in improving patient safety and health care quality. There are also growing opportunities on the “bio” side as the fields of genomics and proteomics continue to advance.

Educationally we continue to excel, with the launching of our Ph.D. program, continued growth in enrollment in our on-campus and distance learning programs and international acknowledgment of our accomplishments in this arena. We also are proud of our relationship with the local informatics community outside OHSU, in particular local industry, which is providing opportunities for students and collaborating with us in other ways.

The clinical epidemiology side of the department also is having tremendous success. The Oregon Evidence-based Practice Center continues to maintain its status as a national leader

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Medinfo 2004

One of this year's big events is *Medinfo 2004*, a triennial medical informatics meeting taking place in San Francisco, Sept. 6-11. The meeting will bring together, from around the world, those who work in the informatics field. For more details, including how to register, visit the conference Web site www.medinfo2004.org.

Over a dozen papers and posters from DMICE faculty and students have been accepted for presentation at the meeting (see list below). We are hoping to have the DMICE program out in force at Medinfo 2004.

In addition to the paper presentations, OHSU will be an academic sponsor of the meeting and has the opportunity to promote its educational

programs. We also will be hosting a social event again at the American Medical Informatics Association and Health Information Management Systems Society meetings.

The department is particularly interested in finding ways to get students to the Medinfo 2004 meeting. Transportation should be relatively inexpensive, as those on limited budgets can drive or find bargain airfares on Southwest or other airlines. However, there are still costs for lodging and the conference registration, the latter of which will be somewhat reduced for students. **We have established a scholarship fund to facilitate student travel to the meeting. William Hersh, M.D., has donated the first \$2,000 of the fund.**

Papers accepted include:

- J. Aarts. *A tale of two hospitals: a sociotechnical appraisal of the introduction of computerized physician order entry in two Dutch hospitals.*
- J.S. Ash, D.F. Sittig, V. Seshadri, R.H. Dykstra, J.D. Carpenter, P.Z. Stavri. *Adding insight: a qualitative cross-site study of physician order entry.*
- K. Eden, N. Anderson, R.T. Bhupatiraju. *Innovative approach to measuring patient preferences* (poster).
- P.N. Gorman, P. Yao, V. Seshadri. *Finding the answers in primary care: information seeking by rural and non-rural clinicians.*
- W. Hersh, R. Bhupatiraju, S. Corley. *Enhancing access to the bibliome: The TREC Genomics Track.*
- H.B. Jimison, J. Pavel, D. Williams, M. Pavel. *Models and methods for the early detection of cognitive change: an example using elders' performance on a computer game* (poster).
- J.J. Kenagy, J. Hawkins. *A course for business issues in medical informatics.*
- J.R. Logan, T. McCashland, D.A. Lieberman. *Evaluation of reliability in the use of endoscopic terminology.*
- J.A. Perrine, J.R. Logan. *Developing an interaction-centered evaluation tool for distance education.*
- X. Tian, W. Hersh, J. Logan, R. Bennett. *A database for Chinese outpatients with rheumatic diseases.*
- D. Tran, C. Dubay, P. Gorman, W. Hersh. *Applying task analysis to describe and facilitate bioinformatics tasks.*

Open House

Friends, supporters and others interested in DMICE are welcome to attend an open house on Wed., April 7, from 3-5 p.m. The event will take place on the 5th floor of the BICC. Refreshments will be served.

The event will feature brief comments by Joseph Robertson, Jr., M.D., dean, OHSU School of Medicine; Lesley Hallick, Ph.D., provost, OHSU; William Hersh, M.D., chairman, DMICE and Cynthia Morris, Ph.D., M.P.H., vice chairwoman, DMICE. In addition, there will be poster presentations and demonstrations on a number of DMICE research and educational projects.

External Relations

An important part of the OHSU biomedical informatics program is its relationships with the local health care and informatics communities. Since the launch of the informatics master's degree program in 1996, we've worked with local industries to create mutually beneficial relationships. Access to the local informatics community allows us to provide students with real-world experiences and allows students to show off their talents to prospective employers.

Business success also encourages individuals to further their education. The OHSU informatics program offers tuition discounts to members of the health care information technology societies, including the American Medical Informatics Association (www.amia.org), the Healthcare Information Management Systems Society (www.himss.org) and the Association of Medical Directors of Information Systems (www.amdis.org). Full-status members of these organizations receive a 5 percent tuition discount for the distance learning Graduate Certificate program.

We hope to continue to work with the local community to advance academic and industry pursuits in informatics.

Message From the Chair

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in evidence reports and related activities. We are now the sole producer of systematic reviews for the U.S. Preventive Services Task Force, and our leadership in reports on drug class effectiveness continue to attract attention. This side of the department also is active educationally, providing leadership for the Human Investigations Program, a clinical research training program at OHSU.

These times, however, are challenging as well. While the department's success at attracting outside funding has buffered some of the pain from OHSU budget cuts, we are not immune to them. The department receives some financial support from the university for resources that cannot be obtained by grant and tuition revenues. We are dependent on a healthy OHSU and a healthy Oregon economy to continue our success and growth. In addition, grant funding is earmarked for specific projects over fixed time periods, so we need to develop other funding sources that enable us to continue to prosper and grow.

Nonetheless, we maintain our optimism for the future and are driven by the enthusiasm that our work is relevant to improving human health. We hope the wider community will continue to collaborate and support us in this quest.

William Hersh, M.D.
professor and chairman

More Information

Not surprisingly, the best source of information for the Department of Medical Informatics and Clinical Epidemiology is our Web site, which can be found at www.ohsu.edu/dmice. The site features a wealth of information about our research and educational programs.

Evidence-based Practice Center Keeps Rolling

The Oregon Evidence-based Practice Center, directed by DMICE faculty member Mark Helfand, M.D., M.P.H., continues to contribute important findings that improve the evidence base for clinical care. Housed in DMICE, the Oregon EPC is funded by the Agency for Healthcare Research and Quality.

One of the Oregon EPC's flagship projects is its support of the US Preventive Services Task Force project. DMICE faculty member Heidi Nelson, M.D., M.P.H., serves as the principal investigator of this effort.

Begun in 1998 and renewed in 2002 this project involves creation of systematic reviews on screening and prevention topics. Current topics include breast cancer genetic screening, obesity screening in youth, screening for speech and language delay in children, and screening for HIV, herpes, glaucoma, gonorrhea, aortic abdominal aneurysm and hip dysplasia in children. OHSU partners with the Kaiser Permanente Center for Health Research on this project.

Another large project is the Drug Effectiveness Review Project, where the Oregon EPC produces systematic reviews on the effectiveness of drug classes. Originally producing 12 drug-class reviews for the state of Oregon, the EPC is now working for a multi-state collaboration and the OHSU Center for Evidence-based Policy on new reviews including atypical antipsychotics, second generation antidepressants, anti-epileptic drugs, second generation antihistamines and inhaled corticosteroids. The Oregon EPC is partnering with two other EPCs at Rand Corporation and the University of North Carolina for this work, for which DMICE faculty member Marian McDonagh, Pharm.D., serves as principal investigator.

This spring the EPC will receive two new awards. One pending award will update an evidence report on telemedicine services and prepare for a telemedicine workshop to help inform Centers for Medicare and Medicaid Services staff about the viable uses of telemedicine services. DMICE chairman, William Hersh, M.D., will serve as principal investigator of this project. In addition, Roger Chou, M.D., assistant professor, received a contract from AHRQ for a methods project entitled, *Evaluation of Study Design-related Bias in Assessing Complication Rates from Carotid Endarterectomy*. This project builds on earlier work Chou conducted as part of an EPC evidence report on stroke management for AHRQ.

The EPC also will work with the Food and Drug Administration to produce systematic reviews of the research for qualified food-related health claims, for example, the claim that a food can lower the risk of heart disease. With Helfand as principal investigator, the project is currently developing methods for the work, along with two other EPCs at New England Medical Center and Research Triangle Institute/University of North Carolina.

The Oregon EPC has 37 current and past investigators from DMICE and many other departments on campus, including general internal medicine, neurological surgery, obstetrics and gynecology, public health and preventive medicine, dermatology, pediatrics, and the School of Nursing. Fourteen core staff (research associates, research assistants, statisticians, librarians and administrators) support the EPC. The Oregon EPC has produced more than 51 individual systematic reviews since 1997 and brought in more than \$9 million in external funding in the past seven years.

Introducing the DMICE Faculty

A key asset of any academic department is its faculty. DMICE has seen growth in the number of productive faculty, who now total over 60. For core faculty who have their primary appointment in

DMICE, we present their research interests, recent publications and grant support. We then list adjunct/other (in other departments or units of OHSU) and external/clinical (volunteer faculty from outside OHSU) appointments.

William Hersh, M.D.
professor and chairman

(joint appointments:
medicine, public
health and preven-
tive medicine)



Research interests:

Information retrieval – indexing and retrieval of text-based information, evaluation of telemedicine, informatics education.

Publications:

- Hersh W.R., Bhupatiraju R.T. TREC genomics track overview, *The Twelfth Text Retrieval Conference* – TREC 2003, trec.nist.gov/pubs/trec12/papers/GENOMICS.OVERVIEW 3.pdf.
- Hersh W.R. Medical Informatics: improving health care through information, *JAMA*, 2002, 288: 1955-1958.
- Hersh W.R., Crabtree M.K., Hickam D.H., Sacherek L., Friedman C.P., Tidmarsh P., Moesbaek C., Kraemer D. Factors associated with success for searching MEDLINE and applying evidence to answer clinical questions, *Journal of the American Medical Informatics Association*, 2002, 9: 283-293.

Grant Support:

- National Science Foundation, *Enhancing Access to the Bibliome for Genomics*, \$1,206,376; 2003-2008.
- Agency for Healthcare Research and Quality, *Telemedicine Evidence Report Update and Expert Meeting*, \$202,000; 2004-2005. (pending)

Joan Ash, Ph.D.,
associate professor

(joint appointments: OHSU Library)

Research interests:

Evaluation of clinical systems using qualitative methods



Publications:

- Ash J.S., Gorman P.N., Lavelle M., Lyman J., Fournier L., Carpenter J., Stavri P.Z. Perceptions of physician order entry: Results of a cross-site qualitative study. *Methods of Information in Medicine*, 2003;42:313-23.
- Ash J.S., Berg M., Coiera E. Some unintended consequences of information technology in health care: The nature of patient care information system related errors. *Journal of the American Medical Informatics Association*, 2004; 11(2):104-112.
- Ash J.S., Gorman P.N., Seshadri V., Hersh W.R. Computerized physician order entry in U.S. hospitals: Results of a 2002 survey. *Journal of the American Medical Informatics Association*, 2004; 11(2):95-99.

Grant Support:

- National Library of Medicine, *Unintended Consequences of Physician Order Entry*, \$1,565,221; 2003-2006.
- National Library of Medicine, *Physician Order Entry: Field Study of Success Factors*, \$906,000; 2000-2003.

Nancy Carney, Ph.D.
assistant professor



Research interests:

Effectiveness of interventions in the treatment of traumatic brain injury, spanning the continuum from acute medical management through rehabilitation to community reintegration. Quantitative methods for evaluating the process of recovery from traumatic brain injury.

Publications:

- Adelson, Brattons, Carney et al. Guidelines for the acute medical management of severe traumatic brain injury in infants, children and adolescents. *Crit Care Med*, 2003, 31(6 Suppl) S407-91.; *Ped Crit Care Med*, 2003, 4(3 Suppl) S1-75. *J Trauma*, 2003, 54(6 Suppl) S235-310.
- Carney & du Coudray. The effectiveness of rehabilitation for cognitive deficits, Halligan and Wade. *Chapter 25: Cognitive Rehabilitation Outcomes for Traumatic Brain Injury*, Oxford University Press, 2003.

Grant Support:

- National Institutes of Health, Fogarty International Center, 2003. Guidelines Implementation Planning Grant. Response to RFA: Brain Disorders in the Developing World: Research Across the Lifespan. Pediatric Traumatic Brain Injury in Latin America. Randall Chesnut, principal investigator. \$253,320.
- National Institute on Disability and Rehabilitation Research Grant, 1998. *Prospective Study and Randomized Trial. Oregon Traumatic Brain Injury Model System Project*. \$1,328,291.

Christopher Dubay, Ph.D.
assistant professor

(joint appointments: medical and
molecular genetics)

Research interests:

Complex genetic diseases (e.g., diabetes, hypertension, etc.) and the dissection of their genetic basis in model systems

and eventually humans. The use of bioinformatics tools to aid in the scaling up of experiments and analysis required to address the isolation of multiple genetic loci present in complex traits.



Publications:

- Dubay C., Vincent M., Samani N., Hilbert P., Kaiser M., Beressi J.P., Kotelevtsev Y., Beckmann J., Soubrier F., Sassard J., Lathrop G.M. Genetic determinants of diastolic and pulse pressure map to different loci in Lyon hypertensive rats. *Nature Genetics* (1993 Apr) 3(4): 354-7.
- Hilbert P., Lindpaintner K., Beckmann J.S., Serikawa T., Soubrier F., Dubay C., Cartwright P., De Gouyon B., Julier C., Takahasi S., et al. Chromosomal mapping of two genetic loci associated with blood-pressure regulation in hereditary hypertensive rats. *Nature* (1991 Oct 10) 353(6344): 521-9.
- Dubay C., Zimmerman D., Popovich B. Design of a DNA Analysis Information Management System to support clinical laboratory operation. *Am J Hum Genet* (1995 Oct) 57(4)supp: A294.

Grant Support:

- National Institute on Alcohol Abuse and Alcoholism, *Alcohol Research Center: Component 2B – Mapping/ Biostatistics Core*, 1995-2005 (PI: Crabbe).
- National Institute of Diabetes & Digestive & Kidney Diseases, *OHSU-NIDDK Biotechnology Center*, 2001-2004 (PI: Rosenfeld).
- National Institute of Environmental Health Sciences, *National Institutes of Health Toxicogenomics Research Consortium: Neurotoxicogenomics and Child Health*, 2001-2006 (PI: Spencer).

Karen Eden, Ph.D.
assistant professor

Research Interests:

Decision-making, patient preferences, early detection, evidence-based medicine.

Publications:

- Eden K.B., Hashima J.N., Osterweil P., Nygren P., Guise J.M. Childbirth preferences after cesarean. *Birth*, 31:49-60, 2004.
- Eden K.B., Orleans C.T., Mulrow C.D., Pender N.J., Teutsch S.M., Does counseling by clinicians improve physical activity? A summary of the evidence for the U.S. Preventive Services Task Force. *Ann Intern Med*, 137:208-215, 2002.
- Eden K.B., Selecting information technology for physician's practices: a cross-sectional study. *BMC Medical Informatics and Decision Making* 2002, 2:4; www.biomedcentral.com/472-6947/2/4, pp. 1-12.

Grant Support:

- NIH National Institute for Child Health and Human Development. Selected as Building Interdisciplinary Research Careers in Women's Health (BIRCWH) scholar. *An innovative approach to childbirth decision making*. (NIH K12 Mentored Scholar), 2003-2006.
- Medical Research Foundation of Oregon: *Measurement of preferences among women with previous cesareans*, (principal investigator, 2003-2004).

Paul Gorman, M.D.
associate professor

(joint appointment: medicine)

Research interests:

Information use by clinicians, evaluation of healthcare information systems, distributed cognition in medicine, patient safety and medical error



Publications:

- Gorman P., Yao P., Seshadri V. Finding the answers in primary care: Information seeking of rural and nonrural clinicians. *MEDINFO 2004* (in press).
- Embi P.J., Yackel T.R., Logan J.R., Bowen J.L., Cooney T.G., Gorman P.N. Impacts of computerized physician documentation in a teaching hospital: Perceptions of faculty and resident physicians. *J Am Med Inform Assoc* 2004 (in press).
- Gorman P., Lavelle M., Ash J.S. Order creation and communication in healthcare. *Methods of Information in Medicine* 2003;42(4):376-384.

Grant Support:

- Agency for Healthcare Research and Quality: *Making Sure: Ethnographic Study of Health Professionals' Work Practices*. 2002-2004.
- National Science Foundation/Digital Libraries Initiative: *Tracking Footprints in an Information Space: Leveraging the Document Selections of Expert Clinicians*. 1998-2003.

Mark Helfand, M.D., M.P.H.
associate professor; director, Oregon Evidence-based Practice Center

(joint appointments: medicine, public health and preventive medicine)

Research interests:

Systematic review methodology, practice networks, outcomes research, medical decision making, meta-analysis, preventive services and drug effectiveness.

Publications:

- Humphrey L.L., Helfand M., Chan B.K.S., Woolf S.H. Breast cancer screening: a summary of the evidence for the US Preventive Services Task Force. *Ann Intern Med*. 2002; 137:347-60.
- Helfand M. Screening for subclinical thyroid dysfunction in non-pregnant adults; a systematic review for the US

Preventive Services Task Force. *Ann Intern Med.* 2004; 140:128-141.

- Guise J.M., McDonagh M., Osterweil P., Nygren P., Chan B., Helfand M. Systematic review of the incidence and consequences of uterine rupture in women with prior caesarean. *BMJ*, in press.

Grant Support:

- Agency for Healthcare Research and Quality; *Evidence-based practice centers (EPC-2)*; 2002-2007.
- VA HSR&D Service-Directed Research Project (Quality Enhancement Research Initiative); *Translation of colorectal cancer screening guidelines to practice—a system intervention*; 2003-2005.
- Multi-state collaboration; *Drug Effectiveness Review Project*; 2003-2006.

Holly Jimison, Ph.D.
assistant professor

(joint appointment: public health and preventive medicine)

Research interests:

Health management using the Internet and new communications technologies for patients in the home; technology for successful aging; consumer health informatics; ethics and patient consent issues.



Publications:

- Jimison H.B., Kirby J. Internet-based disease management for home care and self-testing. In: Kost G.E., ed. *Principles and Practice of Point-of-Care Testing*. Philadelphia: Lippincott-Williams & Wilkins; 2002, pp. 516-525.
- Jimison H.B., Sher P.P. Presenting clinical and consumer data to patients. In: Chapman G.B., Sonnenberg F.A., eds. *Decision Making in Health Care: Theory, Psychology, and Applications*. New York: Cambridge University Press, 2000.

- Jimison H.B., Adler L.J., Coye M.J., Mulley A.G., Eng T.R. Health care providers and purchasers and evaluation of interactive health communication applications. Science Panel on Interactive Communication and Health. *Am J Prev Med* 1999; 16(1):16-22.

Grant Support:

- Intel Corporation, *Intelligent Systems for the Early Detection of Dementia*, \$200,000; 2002-2004.
- National Institute of Mental Health, *Internet Multimedia Informed Consent*, \$100,000; 2003-2004.
- National Cancer Institute, *Internet-Based Tools to Enhance Use of Online Health Resources*, \$83,612; 2004-2005.

Dale Kraemer, Ph.D.
assistant professor

Research interests:

Data mining, economic evaluations in health care, and outcomes research.



Publications:

- Kraemer D.F., Fortin D., Neuwelt E.A. Chemotherapeutic dose intensification for treatment of malignant brain tumors: recent developments and future directions. *Current Neurology & Neuroscience Reports.* 2:216-24. 2002.
- Kraemer D.F., Fortin D., Doolittle N.D., Neuwelt E.A.: Association of total dose intensity of chemotherapy in primary CNS lymphoma (human non-AIDS) and survival. *Neurosurgery*, 48, 1033-1040, 2001.

Judith R. Logan, M.D., M.S.
assistant professor

Research interests:

Information integration, terminologies for gastrointestinal endoscopy, order ontology development, image use in clinical reporting and image analysis.



Publications:

- Logan J.R. and Klopfer K.C. The use of a standardized terminology for comparison of free text and structured data entry. *JAMIA Symposium Supplement*; 2000:7.
- Logan J.R., Gorman P.N., Middleton B. Measuring the quality of medical records: A method for comparing completeness and correctness of clinical encounter data. *JAMIA Symposium Supplement*; 2001: 408.
- J.R. Logan, T. McCashland, D.A. Lieberman. Evaluation of reliability in the use of endoscopic terminology. *Medinfo* 2004, in press.

Grant Support:

- National Institute of Diabetes & Digestive & Kidney Diseases: *Clinical Outcomes Research: An Endoscopic Database*; funded by NIH, NIDDK (D. Lieberman, PI). co-investigator, project: *Evaluation of Endoscopic Lexicon*, \$469, 569; 2001-2002.
- National Institute of Diabetes & Digestive & Kidney Diseases: *CORI Phase II: Consortium Expansion & Database Enhancement* (D. Lieberman, PI); co-investigator, project: Acquisition of Endoscopic Images for Lexicon Validation; 2002-2005.

Marian McDonagh, Pharm.D.
assistant professor

Research interests:

Systematic review methods – relating to use of imperfect bodies of evidence, methodology and



use of drug class reviews as evidence for decision-making, implementation of evidence-based medicine.

Publications:

- McDonagh M., Carson S., Russman B., Helfand M. An evidence review of hyperbaric oxygen treatment for traumatic brain injury. *Archives of Physical Medicine and Rehabilitation*, in press.
- Guise J.M., McDonagh M., Chan B., Osterweil P. The risk of uterine rupture in women attempting vaginal birth after C-section. *BMJ*, in press.
- McDonagh M.S., Whiting P.F., Wilson P.M., Sutton A., Chestnutt I., Cooper J., Miso K., Bradley M., Treasure E., Kleijnen J. Systematic review of water fluoridation. *BMJ* 2000; 321:855-9

Grant Support:

- Multi-state collaboration; *Drug Effectiveness Review Project*; 2003-2006, \$2,400,000.
- Office of Medical Assistance Programs – State of Oregon, *Drug Effectiveness Review Project*; \$399,500; 2003-2004.
- Agency for Healthcare Research and Quality, *Hyperbaric Oxygen Evidence Report/Technology Assessment*, \$150,000; 2001-2002.

Cynthia Morris, Ph.D., M.P.H.
professor and vice chairwoman

(joint appointments: medicine, public health and preventive medicine)

Research interests:

Clinical trials, population-based studies, patient registries, and systematic reviews. Her principal interest has been in the area of maternal and child health, with a dual focus on congenital heart malformations and preeclampsia.



Publications:

- Morris C.D., Jacobson S.L., Anand R., Ewell M.G., Hauth J.C., Curet L.B., Catalano P.M., Sibai B.M.,

Levine R.J. Nutrient intake and hypertensive disorders of pregnancy. Evidence from a large prospective cohort. *Am J Obstet Gynecol* 2001; 184:643-651.

- Morris C.D., Carson S. Vitamin supplementation to prevent cardiovascular disease: a review of the evidence. *Ann Intern Med* 2003; 139:56-70.
- Morris C.D., McCracken K.W., Seif A.E., Chan B., Reller M.D. Folic acid supplementation in early pregnancy reduces the risk of conotruncal heart defects and ventricular septal defects (submitted, 2004).

Grant Support:

- National Institute of Diabetes & Digestive & Kidney Diseases: *Clinical Outcomes Research: An Endoscopic Database*; funded by NIH, NIDDK (D. Lieberman, PI). \$469,569; 2001-2004.
- National Institutes of Health, *Oregon Human Investigations Program*, 2000-2004.

Heidi D. Nelson, M.D., M.P.H.
associate professor

(joint appointments: medicine, public health and preventive medicine)

Research interests:

Women's Health – osteoporosis, postmenopausal hormone therapy, domestic violence and other topics. Screening, prevention, evidence-based medicine.

Publications:

- Nelson H.D. Postmenopausal estrogen for treatment of hot flashes: clinical applications. *JAMA*. 2004; in press.
- Nelson H.D., Nygren P., McInerney Y., Klein J. Screening women and elderly adults for family and intimate partner violence: a review of the evidence for the US Preventive Services Task Force. *Ann Intern Med*. 2004;140:387-396.
- Nelson H.D., Humphrey L.L., Nygren P., Teutsch S.M., Allan J.D. Postmenopausal hormone replacement therapy: scientific review. *JAMA*. 2002;288: 872-881.

Grant Support:

- Agency for Healthcare Research and Quality (AHRQ), *Technical support of the US Preventive Services Task Force*, 2002-2007, \$5,752,500.

Kent Spackman, M.D., Ph.D.
professor

(joint appointments: Pathology)

Research interests:

Clinical terminology standardization, formal ontologies, description logic, decision support, standards for electronic health records.



Publications:

- Spackman K.A. Normal forms for description logic expression of clinical concepts in SNOMED RT. *Proceedings/AMIA Annual Symposium*. 627-631, 2001.
- Spackman K.A., Dionne R., Mays E., Weis J. Role grouping as an extension to the description logic of Ontology motivated by concept modeling in SNOMED. *Proceedings/AMIA Annual Symposium*. 712-716; 2002.
- Spackman K.A., Reynoso G. Examining SNOMED from the perspective of formal ontological principles: some preliminary analysis and observations. KR-MED 04. 2004.

Funding:

College of American Pathologists, SNOMED scientific director. National Library of Medicine, *Training Program in Health Informatics*.

Patricia Tidmarsh, J.D., M.S.
instructor

Research interests:

Educational technology, instructional design and qualitative research.



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DMICE Faculty

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Thomas Yackel, M.D., M.P.H., M.S.
assistant professor; associate medical
information officer for OHSU

(joint appointment: medicine)

Research interests:

Clinical informatics
and practical
applications of
medical informatics
research.



Adjunct/Other OHSU

(primary OHSU appointment)

- Michelle Berlin, M.D., M.P.H., associate professor (Obstetrics & Gynecology).
- Dana Braner, M.D., associate professor (Pediatrics).
- Roger Chou, M.D., assistant professor (Internal Medicine).
- Jamie Dickey, Ph.D., assistant professor (Psychiatry).
- Richard Dykstra, M.D., adjunct assistant professor (Kaiser).
- Linda Felver, Ph.D., R.N., assistant professor (Nursing).
- Jeanne-Marie Guise, M.D., assistant professor (Obstetrics & Gynecology).
- David Hickam, M.D., M.P.H., professor (Medicine, Public Health & Preventive Medicine).
- Sandra Joos, Ph.D., assistant professor.
- John Kenagy, M.S., assistant professor (ITG).
- Robert Lowe, M.D., associate professor (Emergency Medicine, Public Health & Preventive Medicine).
- Richard Lowensohn, M.D., associate professor (Obstetrics and Gynecology).
- Shannon McWeeney, Ph.D., assistant professor (Public Health & Preventive Medicine).
- Alan Melnick, M.D., M.P.H., assistant professor (Family Medicine, Public Health & Preventive Medicine).
- Katherine O'Meara, Ph.D., assistant professor (Nursing).

- Motomi Mori, Ph.D., associate professor (Public Health & Preventive Medicine).
- Jere Retzer, M.S., assistant professor (ITG).
- Somnath Saha, M.D., assistant professor (Medicine).
- William Smith, Ph.D., adjunct professor (Educational Communications).
- Kent Spackman, M.D., Ph.D., professor (Pathology).
- Kent Thornburg, Ph.D., professor, (Medicine).
- Jessica Zeaske, Ph.D., assistant professor, (Technology Transfer).

External/Clinical

(place of employment)

- Diane Audiss, Ph.D., clinical assistant professor (St. Charles Medical Center).
- Brad Bowman, M.D., clinical assistant professor (Wellmed, Inc.).
- Homer Chin, M.D., M.S., clinical assistant professor (Kaiser-Permanente Northwest).
- Mary Devlin, M.L.S., clinical assistant professor.
- Jay Eisenberg, M.D., clinical associate professor (Cerner).
- Richard Gibson, M.D., Ph.D., clinical assistant professor (Providence Health System).
- Robert Gluckman, M.D., clinical assistant professor (Providence Health System).

- Warren Harrison, Ph.D., adjunct professor (Portland State University).
- Brian Hazlehurst, Ph.D., clinical assistant professor (Kaiser-Permanente Center for Health Research).
- Michael Krall, M.D., clinical assistant professor (Kaiser-Permanente).
- Mark Leavitt, M.D., clinical assistant professor, (Health Information Management Systems Society).
- J.A. Magnusson, Ph.D., clinical assistant professor (Oregon Health Division).
- Philip Marshal, M.D., M.P.H., clinical assistant professor (WellMed, Inc.).
- Brian Martin, M.D., clinical assistant professor (medPortal.net).
- Fred Masarie, M.D., clinical assistant professor.
- Robin Miller, M.D., clinical assistant professor (Asante Health Systems).
- Jeffrey Pentecost, D.O., clinical assistant professor (physiology).
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