

Richard M. Fairbanks School of Public Health
2013 – 2014 Highlights
<http://www.pbhealth.iupui.edu/>

In September of 2012, the IU Richard M. Fairbanks School of Public Health was formally established as a stand-alone school. This past year marked the completion of our second full academic year as an official school and the second granting of degrees as a school. The year was noteworthy as well for the tremendous growth seen in all areas, including expansion of the faculty and staff, increased student enrollment, and evolution of academic offerings. The year ahead promises to be one of continuing growth as we welcome new associate deans, new faculty, new students, new research opportunities and new course offerings. In the future, we anticipate moving into our own space on campus, which will position us well to become a true leader in the education of future public health researchers and professionals.

The Success of our Students

- Graduation ceremonies in May brought a number of firsts: the first student graduating with a Bachelor of Science in Public Health (BSPH) in Community Health and the first three students graduating with doctoral degrees, all in Biostatistics.
- Student enrollment in the IU Richard M Fairbanks School of Public Health has grown to exceed 500 students.
- In February of 2014, the Indiana Commission on Higher Education (ICHE) approved the IU Richard M. Fairbanks School of Public Health's application to offer a Master of Science (MS) degree in Biostatistics. This is the only MS in Biostatistics offered in the state of Indiana.
- The IU Richard M. Fairbanks School of Public Health began offering an Honors option for students in the BSPH program, which will enable students to contract with faculty to develop an Honors component to any of our existing courses. This program expands our offering for Honors students.
- A new undergraduate minor in Population Health Science was approved by the IUPUI Academic Policies and Procedures Committee in April of 2014. It includes an Honors option.

Advances in Health and Life Sciences

- Associate Professor Jaroslaw Harezlak, PhD, a member of the Biostatistics department, received funding from the PATH Malaria Vaccine Initiative (MVI) to collaborate on finding "Immune correlates of protection against malaria after vaccination with RTS,S/AS01E." This is an ancillary study to the Phase III double-blind, randomized, controlled multi-center trial of GlaxoSmithKline (GSK)'s vaccine candidate RTS,S/AS01E that is being conducted in seven African research centers. The study is coordinated by the Barcelona Centre for International Health Research (CRESIB) in Spain and involves researchers at a number of US and European universities, including Harvard School of Public Health and Fred Hutchinson Cancer Research Center. The investigators study the mechanisms of vaccine-induced protection against malaria and identify correlates of vaccine-induced protection. Major components of the project deal with the development of the experimental plan to analyze protective immune responses induced by the vaccine in already collected samples and the execution of the pilot

and case-control studies.

- Assistant Professors Dennis Watson, Ph.D., (Health Policy & Management), Emily Ahonen, Ph.D., (Environmental Health Science), and Huiping Xu, Ph.D., (Biostatistics) received an R34 award from the National Institutes of Drug Abuse (NIDA) to examine a strategy for implementing Housing First, a promising new model for improving substance abuse treatment and prevention outcomes by providing permanent supportive housing for the chronically homeless. The information gained from this Midwest-based study can potentially be applied to other efforts to develop and test similar implementation strategies.
- The finding of Professor Jiali Han, Ph.D., chair of the department of Epidemiology, of an association between sildenafil (Viagra) and an increased risk for melanoma was published in *JAMA Internal Medicine*. Researchers, including the senior author, Dr. Han, noted their study does not provide sufficient evidence to change clinical recommendations for erectile dysfunction (ED) treatments. In an Invited Commentary, June K. Robinson, MD, editor of *JAMA Dermatology* and a member of the Department of Dermatology at Northwestern University Feinberg School of Medicine in Chicago, wrote that primary care physicians are in a position to screen for melanoma in older men, especially when prescribing sildenafil. (URL: <http://go.iu.edu/d4a>)
- Professor Jiali Han, Ph.D., chair of the department of Epidemiology, found that women with 15 or more cutaneous nevi, or moles, were 35 percent more likely to be diagnosed with breast cancer than women with no nevi. Having a higher number of moles is a known risk factor for developing melanoma, but this new research indicates a high number of moles may also be a factor in a woman's risk of developing breast cancer. The findings were published in *PLOS Medicine*, a top medical journal. (URL: <http://go.iu.edu/d4d>)
- Professor Jiali Han, Ph.D., chair of the department of Epidemiology, collaborated with colleagues at Harvard University and published a study in the *New England Journal of Medicine* which suggests that people who eat nuts have a lower risk of death compared to people who never eat nuts. Researchers looked at the risk of death from several common health problems, and compared this risk against their consumption of nuts. They found that people who ate an average of one serving of nuts per day had a 20 percent lower risk of death from several common health problems compared to those who never ate nuts. The more nuts they ate, the greater the effect. (URL: <http://go.iu.edu/d4c>)
- In a study published in the *Journal of Clinical Oncology*, Professor Jiali Han, Ph.D., chair of the department of Epidemiology, found a potential association between prostate cancer and melanoma in white men. The findings suggest that a personal history of prostate cancer is associated with significantly increased risk of melanoma, which may not be entirely a result of greater medical scrutiny. The finding of a prostate cancer diagnosis as a risk predictor for melanoma holds general public health significance, which may inform clinical practice to address the queries and aid the care of patients with prostate cancer.
- Associate Professor Yiqing Song MD, ScD, department of Epidemiology, obtained an NIH/NHLBI-funded R01 grant to fund a comprehensive evaluation of the full spectrum of variations in biomarkers of vitamin D/parathyroid hormone (PTH) and to examine their potential contributions to racial/ethnic disparities in cardiovascular disease risk in the Women's

Health Initiative Observational Study (WHI-OS), a large racially/ethnically diverse cohort of postmenopausal women. Understanding the sources of racial/ethnic differences in health outcomes is a national priority because it is a prerequisite for designing effective interventions that will eliminate the disparities. The findings of this research have the potential for high impact, and could help to direct public health efforts to prevent cardiovascular disease in women of diverse racial/ethnic backgrounds.

- Associate Professor Yiqing Song MD, ScD, department of Epidemiology, received a grant entitled "Diabetes Prevention in the Vitamin D and Omega-3 Trial (VITAL)." This is Dr. Song's second NIH investigator-initiated R01 grant. The grant allows him to continue to collaborate with the VITAL investigators to lead the VITAL diabetes ancillary study, this time at the IU Richard M. Fairbanks School of Public Health. The findings from this large diabetes prevention trial will clarify potential health benefits and risks of vitamin D and omega-3 fatty acid supplementation on type 2 diabetes, and thus will provide evidence for public health and clinical guidelines for diabetes prevention.
- A meta-analysis vitamin D and type 2 diabetes by Associate Professor Yiqing Song MD, ScD, department of Epidemiology, was chosen as one of the top 20 vitamin D papers for 2013. Dr. Song's paper was chosen from among 3,774 papers with "vitamin D" in the title or abstract. The top-ranked papers were chosen in part by the number of times they have been cited in other works and in part based on expert opinion by vitamin D researchers. The analysis was noted for providing strong support for the role of vitamin D in reducing the risk of type 2 diabetes mellitus.
(URL: <http://go.iu.edu/d4e>)

Contributions to the Well-Being of the Citizens of Indianapolis, the State of Indiana, and Beyond

- Smoking during pregnancy is the leading preventable cause of adverse pregnancy outcomes in the U.S., and Indiana's rate is significantly higher than national rates. An innovative contingency management intervention is being used for prenatal smoking cessation in a prospective randomized trial at multiple clinical sites. Funded by the Maternal and Child Health Division of the Indiana State Department of Health (ISDH), researchers at the IU Richard M. Fairbanks School of Public Health and the IU Bloomington School of Public Health are working to create improved smoking cessation services for pregnant women.
- A major focus of the IU Richard M. Fairbanks School of Public Health is improving the health outcomes of communities. A Memo of Understanding (MOU) has been signed with Eskenazi Health Systems to collaborate on educational, research and service projects. During the past Spring semester, Professor Kathryn Coe, PhD, Social and Behavioral Sciences, based her Culture and Qualitative Methods course in the new 38th and Moller Community Health Center and focused on gathering information from local individuals in order to evaluate the present health status of the community and guide new health programs of the clinic. Interns pursuing a Master of Public Health are continuing to expand on the studies by working with clinic staff to develop programs supporting the development of bilingual training on prenatal care.
- Together with their partners at the Latino Health Organization, Associate Professor Silvia Bigatti, Ph.D., Community Research and Outreach Coordinator Katrina Conrad, MPH, and Research Associate Tess Weathers, MPH, were alarmed with the findings of their pilot study

investigating Latino youth mental health. Almost 60 percent of participants had experienced some form of depression, and those with low levels of self-mastery were three times more likely to suffer from depression. In response, the academic-community team developed a program in partnership with IU Herron School of Art and Design and IU School of Education called “Your Life, Your Story: Latino Youth Summit.” This year-long pilot program is serving 30 Latino teens, ages 13 to 17. The program kicked off in June with a one-week summer day camp held at the Herron School of Art and it will continue with monthly booster sessions. Activities include a resiliency-building curriculum implemented by Latino therapists from the community, emotional expression/creative activities led by academic and community partners, physical activity with help from partners at Indy Eleven and Indiana Soccer, and a mentoring program with IUPUI undergraduate students.

(Facebook: <https://www.facebook.com/groups/1435253456739542/>; Instagram: <http://instagram.com/ylys5/>)

- For the seventh year, the IU Richard M. Fairbank School of Public Health’s Indiana Public Health Training Center hosted the Indiana Joint National Public Health Week Conference. More than 200 public health professionals and students attended the Conference, which included presentations on a wide variety of topics, including integrating fall prevention into primary care, prevention of youth risk behaviors and maximizing the benefits of a community health needs assessment for planning and policy development.
- Faculty and staff of the Department of Social and Behavioral Sciences of the IU Richard M. Fairbanks School of Public Health are working in partnership with the Indiana Minority Health Coalition to develop and pilot an 11-week wellness curriculum that targets prevention of cardiovascular disease, diabetes and kidney disease.
- Associate Professor Tamara Leech, PhD, Department of Social and Behavioral Sciences, and Professor Gabriel Filippelli, School of Science, received IUPUI Research Support Funds to explore why some areas of Indianapolis have lower than expected rates of high blood lead levels. An advisory board drawn from existing community relationships is being developed and focus groups will be conducted as part of a plan to complete a needs and capacity assessment. These two preliminary steps are essential to the project’s goal of utilizing intervention mapping methodology to develop, implement, and evaluate a lead exposure community action plan for socioeconomically disadvantaged urban communities.

Collaboration

- The IU Richard M. Fairbanks School of Public Health joined with the IU School of Medicine in offering a clinically focused five-year dual MD-MPH degree. The program is supported by a \$1.4 million grant from the Health Resources and Services Administration (HRSA). The first cohort of MD-MPH students enrolled in the summer of 2014.
- The Health Policy and Management department of the IU Richard M. Fairbanks School of Public Health is developing a Health Impact Assessment Journal in collaboration with the Society of Practitioners of Health Impact Assessment (SOPIA). A Health Impact Assessment (HIA) evaluates the health impact of policies, plans and projects in the governmental and private sectors. HIAs have been growing in number in the U.S. over the past eight years, but no U.S. journal has been available to publish the results. This journal will be an online open access journal.

Best Practices

- Professor Wanzhu Tu, Ph.D, adjunct faculty in the Biostatistics department, was elected a Fellow of the American Heart Association in recognition of his significant and sustained contribution to hypertension research.
- Associate Professor Steven E. Lacey, Ph.D., CIH, CSP, chair of the Environmental Health Science department, was elected to be the next president of the American Industrial Hygiene Association (AIHA), a 10,000 member association serving occupational and environmental health and safety professionals practicing industrial hygiene. During the four-year term, which began in June of 2014, Dr. Lacey will serve as Vice President, President Elect, President, and finally Past President. Industrial hygienists work to anticipate workplace health and safety hazards and design solutions to prevent them. AIHA supports the work of its members by providing comprehensive continuing education and laboratory accreditation programs.

(AIHA Press Release: <http://go.iu.edu/d4h>; FSPH News Piece: <http://go.iu.edu/d4i>)

- Associate Professor Tamara Leech, PhD, department of Social and Behavioral Sciences, received the 2014 Chancellor's Diversity Award, which honors a faculty member's commitment to incorporating diversity throughout their research, teaching and service. This was the fourth year for the award. Dr. Leech was the first member of the IU Richard M. Fairbanks School of Public Health faculty to receive the award.

(FSPH News Piece: <http://go.iu.edu/d4j>)