

IUSM FY 2013-2014 Highlights for the 2014 IUPUI Performance Report

The Success of Our Students

PROMOTE UNDERGRADUATE STUDENT LEARNING AND SUCCESS

- The IU School of Medicine Department of Anatomy and Cell Biology began [collaborating](#) with the Marian University College of Osteopathic Medicine to teach gross anatomy to osteopathic medical students.
- The IU Student Outreach Clinic, which serves as a hands-on [educational](#) opportunity for students, celebrated its fifth year of providing free health care to Indianapolis residents.

OPTIMIZE ENROLLMENT MANAGEMENT

- The IU School of Medicine held the largest [White Coat Ceremony](#) in its 111-year history with 334 first-year medical students beginning training at nine medical education campuses across Indiana.

INCREASE CAPACITY FOR GRADUATE AND GRADUATE PROFESSIONAL EDUCATION

- The IU School of Medicine ranked again in [U.S. News & World Report's Best Graduate Programs](#) and ranked 18th in primary care, a 19-position improvement, and 46th in the research category.
- The IU Department of Surgery opened a [Surgical Skills Training Center](#), which requires surgical residents to prove they are skilled at a procedure before being allowed to perform it on a patient. This center is just one of two in the nation.

Advances in Health and Life Sciences

LEVERAGE OUR STRENGTHS IN HEALTH AND LIFE SCIENCES

- The U.S. Department of Defense and the NCAA announced a three-year, \$30 million [concussion research and education alliance](#). The Concussion Assessment, Research and Education Consortium will involve athletes from as many as 30 universities and be led by the Indiana University School of Medicine in collaboration with the University of Michigan and the Medical College of Wisconsin.
- Indiana CTSI launched SPARC-[Strategic Pharma-Academic Research Consortium for Translational Medicine](#)-to spark innovative collaborations across academic research centers and the biopharmaceutical industry.
- The School of Medicine [adopted](#) the Transforming Research Initiative, a faculty-driven strategic plan to guide the school's research enterprise in the coming years.
- The Vera Bradley Foundation for Breast Cancer announced a \$15 million pledge to support [breast cancer research](#) at the IU Melvin and Bren Simon Cancer Center.
- An [automated system](#) developed by researchers from the IU School of Medicine and Regenstrief Institute helped pediatricians focus on the specific health needs of each patient in the short time allotted for preventive care, which improved autism screening rates by identifying at-risk children at a 24-month visit.
- The OPTIMISTIC [study](#), an innovative initiative developed by IU School of Medicine and Regenstrief Institute research-clinicians developed to improve health care, reduce avoidable hospitalizations and increase access to palliative care, launched in 19 nursing facilities throughout Central Indiana.

- The School of Medicine [created](#) a new Industry Collaboration Portal to increase collaborations between faculty and industry, and appointed a director, JaiPal Singh, experienced in both the pharmaceutical industry and academic research.
- The Indiana CTSI [received nearly \\$30 million](#) from the National Institutes of Health to continue its mission of accelerating research discoveries across Indiana and beyond.
- IU School of Medicine scientists transformed mouse embryonic [stem cells](#) into key structures of the inner ear, which provides new insights into the sensory organ's developmental process and sets the stage for laboratory models of disease, drug discovery and potential treatments for hearing loss and balance disorders.
- An IU School of Medicine researcher created a new [genomic scoring](#) resource designed to predict the ductal carcinoma recurrence in breast cancer patients.

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

ACCELERATE INNOVATION AND DISCOVERY THROUGH RESEARCH AND CREATIVE ACTIVITY

- The IU School of Medicine was the first to analyze [trampoline fracture patterns](#) in children drawn from a national database. The research was published online in the Journal of Pediatric Orthopedics.
- A research team from the IU School of Medicine and Germany determined that a [panel of 11 genes](#) could successfully predict whether an individual is at increased risk of alcoholism.
- IU School of Medicine and Paradigm, a nonprofit genomic sequencing and molecular information company, teamed up to test whether therapy incorporating [advanced genomic technology](#) would provide better outcomes than the current treatments for women with an aggressive form of breast cancer.
- IU School of Medicine research published in the Journal of the American Medical Association Otolaryngology-Head and Neck Surgery found that children with profound deafness who received a [cochlear implant](#) had as much as five times the risk of having delays in areas of working memory, controlled attention, planning and conceptual learning as children with normal hearing.
- Researchers at the IU School of Medicine discovered a highly accurate, noninvasive [test](#) to identify benign pancreatic cysts.
- Investigators at the IU School of Medicine reported that a newly identified protein and other proteins it interacts with could become effective targets for new drugs to control the parasites that cause [toxoplasmosis and malaria](#).
- IU School of Medicine researchers discovered that a [protein](#) that normally suppresses tumors actually promotes the growth and spread of pancreatic cancer.
- Using a form of magnetic resonance imaging, researchers at the IU School of Medicine and Geisel School of Medicine at Dartmouth College found significant differences in [brain white matter](#) of varsity football and hockey players who received non-concussion head impacts compared with a group of noncontact-sport athletes following one season of competition.
- The IU School of Medicine and the Rehabilitation Hospital of Indiana opened one of the [world's most advanced laboratories](#) designed to improve the understanding and treatment of those with moderate-to-severe brain injuries who often have problems with understanding, expressing or controlling their emotions in ways that undermine relationships.

- In response to rising national health care costs, the IU School of Medicine and Indiana CTSI launched a [new center](#) to increase efficacy and reduce costs at four major health care providers across Indiana.
- IU School of Medicine researchers found a series of RNA [biomarkers](#) in blood that may help identify who is at risk for committing suicide.
- Indiana CTSI and Covance, a leading global drug development services company, announced an [agreement](#) to collaborate in conducting early clinical trials for new medicines on behalf of biotechnology and pharmaceutical companies.
- Researchers at IU School of Medicine and Rutgers University developed a new quantitative [screening method](#) for diagnosing and longitudinal tracking of autism in children after age 3.
- An IU School of Medicine spinoff company won the [2013 Innovation Showcase](#), an annual event in which entrepreneurs pitch their plans to local investors.
- Researchers from the IU School of Medicine, University of Michigan, the Fred Hutchinson Cancer Research Center and Dana-Farber Cancer Institute have identified and validated a [biomarker](#) accessible in blood tests that could be used to predict which stem cell transplant patients are at highest risk for a potentially fatal immune response called graft-versus-host disease.
- A new study from the Regenstrief Institute, Eskenazi Health and Indiana University Center for Aging Research implementation scientists who developed the Healthy Aging Brain Center care model shown that a new patient and caregiver centered model of [innovative, coordinated brain care](#) for older adults improves health outcomes and quality of care for those with cognitive impairment, as well as impressive cost savings.

DEEPEN COMMITMENT TO COMMUNITY ENGAGEMENT

- The IU School of Medicine performed a two [free concerts](#), open to the public, as well as a [holiday concert with musicians of the Indianapolis Symphony Orchestra](#) at Riley Hospital for Children at IU Health, featuring 40 musically talented medical and nursing students, medical residents, faculty and staff of the IU schools of medicine and dentistry.
- IU School of Medicine's [Evening of the Arts](#) variety show raised funds to support the clinics providing free health care services to the homeless and working poor of Indianapolis.
- IU School of Medicine students hosted the 19th annual [Spring House Calls](#)-a student-led event that targets the homes of elderly disabled or minority homeowners where students help with yard work and landscaping.
- Hands in Autism, in partnership with the Indiana Arts Commission hosted "Hidden Talents: Celebrating Abilities Through Exposition"-a display of original works of [art](#) from individuals with autism spectrum disorder at Riley Hospital for Children at IU Health.
- IU School of Medicine researchers were awarded \$300,000 to study area high school athletes and learn how [concussions](#) affect blood flow to the brain. General Electric and the National Football League awarded the grant.

STRENGTHEN INTERNATIONALIZATION EFFORTS

- The IU Center for Bioethics hosted an [international conference](#) to explore emerging ethical, legal and social issues facing scientists, health care institutions and society.

- IU School of Medicine joined a volunteer medical outreach venture organized by the American Society for Clinical Pathology to read and [analyze a backlog of Pap tests](#) in Botswana.
- The director of IU School of Medicine's craniofacial surgery fellowship developed in partnership with Smile Train, the world's largest cleft lip and palate repair nonprofit, the [Virtual Surgery Simulator](#)-a free, web-based, 3-D interactive surgical explorer that educates doctors in cleft lip and palate care. Countries using the simulator include Honduras, Nepal, Egypt, Iraq and other areas too remote or dangerous for many doctors to travel.
- A visit from top [Chinese hospital administrators](#) to the IU School of Medicine cemented the university's reputation as a leader in the field of biobanking, the practice of storing biological samples for use in research.
- An IU School of Medicine researcher forged new partnerships between Indiana and China as the [U.S. leader](#) of a board created to advise the Chinese government on creating a national infrastructure to accelerate biomedical research.
- An IU associate professor of clinical otolaryngology-head and neck surgery has [provided free surgeries and hundreds of pounds of free medical equipment](#) for patients in need in Kenya since 2009.

PROMOTING AN INCLUSIVE CAMPUS CLIMATE

- The chief diversity officer at the Association of American Medical Colleges kicked off the IU School of Medicine's 12th annual [Diversity Week Speakers Series](#) with the keynote address "Diversity 3.0."

DEVELOP FACULTY AND STAFF

- Two IU School of Medicine researchers were named inaugural [August M. Watanabe Translational Scholars](#) for their work pursuing innovative treatments for children with HIV in Africa and for individuals suffering from osteoporosis and osteoarthritis and will receive mentorship from the former director of global health at the Gates Foundation.
- New faculty Peer Review and Mentoring Committees were [established](#) to provide assistance to faculty with resubmissions of grant proposals that were scored but not funded in order to improve research grant funding levels at the School of Medicine.
- A faculty fellow was appointed to [prepare faculty to teach the virtual health system curriculum](#) within the new Foundations of Clinical Practice course being created as a component of the \$1 million grant awarded to the School under the American Medical Association's Accelerating Change in Medical Education initiative.