

School of Informatics

Annual Highlights

2010-2011

The School of Informatics celebrated its 10th anniversary at the beginning of the 2010-2011 academic year. At the undergraduate level, it concluded a two year focused review of activities impacting undergraduate enrollment, retention, program assessment and implementation of the RISE initiative. At the graduate level, the School deepened its investment in health information technology teaching and research.

Teaching and Learning

- In collaboration with the Regenstrief Institute, and supported by a \$1.4 million grant from the U.S. Department of Health and Human Services' Office of the National Coordinator for Health Information Technology (ONC), the School began offering four new graduate certificates:
 - [Health Information and Management Exchange](#)
 - [Health Information Security](#)
 - [Informatics for Public Health Professionals](#)
 - [Health Information Systems Architecture](#)
- The School finalized an international partnership with a "[2+2 agreement](#)" in Media Arts and Science with China's Sun Yat-sen University. After completing two years' study in China, highly qualified students from Sun Yat-Sen will travel to IUPUI to complete their undergraduate education, eventually receiving a bachelor's degree from both universities. An additional 2+2 articulation agreement is planned for the undergraduate Informatics program.
- Two faculty members were tenured: Josette Jones and Karl McDorman. Felisa Tennant, director of the HIA program, was promoted to Clinical Associate Professor. Josette Jones received the IUPUI Trustees Award for Excellence in Teaching.
- The School established two new internal recognition and awards for teaching and research. Davide Bolchini received the School's first "Excellence in Instruction Award." Jake Chen received the School's first "Research and Creative Activities Award."
- Forty four undergraduate juniors and seniors with a cumulative grade point average of 3.5 or above were inducted into the Informatics League of Excellence in a spring ceremony recognizing their accomplishments.
- Media Arts and Science graduate Frank Tai was part of the team responsible for Toy Story 3, which won an Oscar for best animated feature film.
- Graduate student Cathy Fulton, obtaining a minor in Health Informatics, presented her class project on virtual learning at the [Technology Informatics Guiding Education Reform](#) (TIGER) Summit at the American Academy of Nursing.
- HCI graduate students Arthur Liu and Haidan Huang's paper was accepted at the influential [Association for Computing Machinery Conference on Human Factors in Computing Systems \(CHI\)](#) in the student

design competition. A paper by students Preethi Srinivas and Afarin Pirzadeh was accepted for the prestigious [Pervasive Conference](#).

- A new scholarship in Health Information Technology was established to help student pursue graduate studies in health informatics.

Research, Scholarship, and Creative Activity

- External contract and grant expenditures for the School of Informatics totaled \$1,284,842 as of June 30, 2011, an increase of .7% from the previous fiscal year. Recovered indirect costs, however, totaled \$387,410—an increase of 15.5% over the prior fiscal year.
- The number of external proposal submissions by faculty of the School of Informatics continued to rise and external awards rebounded somewhat from a decline during the preceding year.
- The National Institutes of Health awarded a \$1.25 million Small Business Innovation Research (SBIR) grant to a [collaboration](#) between the IU School of Informatics and [My Health Care Manager, Inc.](#) The grant will be used to enhance the company's software-driven decision support system. The Senior Care Navigation System (SCANS) connects health care managers to industry-wide best practices and real world tools to help seniors and their families make critical decisions.
- Davide Bolchini was awarded \$144,088 for the first year of a three year project from the National Science Foundation, "Navigating the Aural Web." He was also awarded a \$16,000 supplement to fund a Research Experience for undergraduate participation in the project.
- Steve Mannheimer and collaborator Mathew Palakal were awarded \$50,000 by Google, Inc. for their project "Audeme Games and Aural Semantics."
- Mat Powers, in collaboration with Jennifer Stewart, Clint Koch and Pat Rogan of the School of Education, are building a [biological classification game](#) to engage young students in science education with \$40,000 from the HASTAC/MacArthur Foundation's Digital Media and Learning Competition.
- The American Medical Informatics Association (AMIA) awarded \$8,800 to Jennifer Stewart for her work, stemming from a collaboration with Dr. Paul Biondich, in developing an online Health Informatics Building Blocks (HIBBS) program.
- Yaoqi Zhou's grant, "Statistical Energy Functions: a Fragment-based Approach," was renewed by the National Institute of General Medical Sciences for \$275,091 in its third project year. His joint R01 with UC Davis, "Toward experimental quality protein structures: a synergistic approach," was also renewed by the NIGMS for \$81,248 in its third project year.
- Jake Chen was awarded \$297,426 in the 5th year of funding for his ongoing collaboration with Fred Regnier and Purdue University on the NCI-funded "APT: the Analytical Proteomics Team."
- Gunther Schadow's project, "Modeling the Effect of Drugs in Intergomics by Linking Drug Ontology and Pathways," was awarded \$232,566 in a third year of funding from the National Institute for General Medical Sciences.
- For his second year of work with the MITRE Corporation, Mark Pfaff was awarded \$53,000 for research and a \$4,000 travel supplement.

- Steve Mannheimer was awarded a [patent for an acoustic interface](#) process and system.
- The School hosted the [Midwest Conference on Health Games](#) attracting 100 participants from industry and academia.

Civic Engagement

- Susan Tennant offered the School's first international study abroad program in Paros, Greece. Students worked to preserve the island's cultural heritage by producing a documentary on local agro-tourism, [Food of the Past, Nourishment of the Future](#). The course ran for the second time in Summer 2011 and is being further extended with a RISE Course Development grant.
- In partnership with [RefreshIndy](#), a local organization of web designers, developers and graphic artists, the School hosted professionals and students who donated their time to develop or "refresh" four websites for local non-profit organizations. The work was done in a continuous 48 hours period at the Informatics and Communication Technology Complex.
- The School's dedicated service-learning course, Computing for a Cause, was conducted a second time. Six projects were successfully completed with community partners in May 2011, including
 - School on Wheels - website with database of community resources used for tutoring
 - Volunteers of America - video of services
 - iReach - Website
 - Indiana Organ Procurement Organization - website
 - Health Information Building Blocks (HIBBS) through the American Medical Informatics Association (AMIA) AMIA - training videos
 - Indiana Historical Society - video and display project proposal for the King/Kennedy exhibit
- Joe Defazio's media production classes serve the Indianapolis and the state through pro-bono practice inside the classroom. In 2010-2011, projects were produced for:
 - The Indiana Department of Revenue
 - The Hoosier Oncology Group
 - Teachers Treasures
 - Selican Technologies, Inc.
 - Educate. Engage. Protect
 - Artsy Fartsy
 - Body in Motion
 - Indy Partnership
- Joe Defazio was a faculty sponsor in a Solutions Center-sponsored mobile application proposal for, Rethink, a networking company supporting "green" initiatives.
- The IUPUI's Gamers' Guild held a gaming tournament to [benefit Riley Kids](#)

Diversity

- Undergraduate and graduate students, in partnership with the School of Informatics, have organized Women in Technology (WIT), to developing female leaders in computing and technology. WIT's first Annual Women in Technology Networking and Career Day featured IU's First Lady, [Laurie McRobbie](#), as keynote speaker as well as local employers and roundtable discussions. WIT is open to women from any discipline interested in information technology.

- Dr. Polly Baker was awarded a grant by the STARS Alliance (Students & Technology in Academia, Research & Service). STARS activities are designed to broaden participation in computing through recruiting, bridging and retention. WIT leaders will travel to North Carolina to participate in the [STARS Celebration](#), an annual leadership conference.
- Jake Chen and the [Alivio Medical Center](#) are partnering in bioinformatics research designed to fight diabetes in the Latino community. “Diabetic Genomic Health: SNP analysis in Latino patients with Diabetes Mellitus type II” will examine association patterns in the development of a genetic test that assesses the hidden links between genetics and diabetes among Latinos.
- The School awarded its first “Aspirations in Computing” scholarship, established in concert with the National Center for Women in Computing (NCWIT) Aspirations in Computing program, a scholarship program for young women interested in the technology;
- Albert William provided instructional sessions for students in the Minority Engineering Program at Harshman Middle School.

Best Practices

- Informatics’ Career Services provided oversight for 70 student internship experiences (231 credit hours) over the course of the year, a record number in the School’s history.
- The School brings top animation talent to IUPUI with [VisionFest](#). The juried festival features alumni/mentor stories, animation screening, showcases, and master classes.
- The School continues to develop and refine high quality distance education offerings, using making course available in high definition on mobile devices.
- In a retention initiative, the School began to offer work experience to all of masters’ students. All students hired into positions were retained in their programs during the 2010-2011 year. The School also benefited from 200-300 working-hours per week. The model will be continued in 2011-2012.
- The Health Information Administration (HIA) faculty created a hybrid Professional Practice Experience model that supports a more robust learning experience by combining the best of classroom and experiential instruction.
- Fifty one high school students participated in week long summer workshops focusing on video production, digital imaging, and animation and game design.
- The School’s development director formed an all volunteer Capital Campaign Cabinet which has had notable early success in fund raising.

External Awards and Appointments

- Dr. Davide Bolchini was recognized by the IEEE as a Senior Member, a recognition awarded to IEEE members with at least 10 years of professional experience and research that demonstrates both technical contributions and professional leadership.

- The Institute of Medicine of the National Academies selected Dr. Jake Chen, Ph.D., to serve on national committee seeking to strengthen regulatory systems in developing countries.
- Dr. Amy Shirong Lu held the Martin Fishbein Distinguished Post Doctoral Fellowship of the Annenberg Public Policy Center (APPC) of the University of Pennsylvania.
- The American Asthma Foundation invited Dr. Yaoqi Zhou to apply for a senior investigator fund on the basis of his record as one of the top 5% of cited authors for journals in Biology and Biochemistry.