2006-2007 Informatics/Media Arts and Science

Section	Document Name
Mission Statement	• Diversity plan for the school of informatics.doc
Mission Statement	• MASB_Roste 2 08.doc
Mission Statement	• Program_Schedule.doc
Mission Statement	• Recruitment Efforts 2006-08.doc
Mission Statement	• Student_STATS_4078.doc
Mission Statement	• The Career Services Office.ppt
Mission Statement	• Work Accomplished - Fall 2007 - Faiola-b.doc
Fiscal Health	• Informatics.pdf

Mission

"Informatics" is the study and application of information technology to the arts, sciences, and professions, as well as the use of information technology in organizations and society at large.

The mission of the school is to empower the economic development of the state by providing graduates with the knowledge and skills to effectively and creatively use information technology and digital technologies in our rapidly changing society. The goal of the school is to offer interrelated degrees that complement existing academic programs and to expand opportunities for careers involving information technology.

Goals and Objectives

▶ **1. The School of Informatics will have a community of degree seeking students who are committed to achieving their academic goals.**

⊗ b. To provide excellent internship/capstone project opportunities.
Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing.

Actions taken for 2006-2007:

See attached Power Point presentation from SOI Career Services. The Informatics Career Services Office introduced the very first career guide to the student base, organized the first career fair event for the school, created employer presence at the student capstone presentations, posted around 200 positions for students (Sept-Mar), built the employer base to include approximately 435 companies, increase internships taken for credit by 7%, and developed an agreement with the Bloomington Career Services Office that all BL and IN students can use both recruiting systems on each campus. In addition to teaching courses on career planning and preparation, the team in this office has hosted career fairs, oversees the credit-internship program, provides career coaching, provides assistance resumes, cover letters and salary negotiation. They have also partnered with other schools on campus in hosting career opportunities. The team has developed a "don't cancel class" program, where they will step in a the last minute as a guest speaker for faculty in lieu of canceling a class session. The team also works with work with employers on how to start internship programs and employers have been invited to social events at VisionFest.   A new initiative this year is to collect information on graduates – a senior survey – to track what it is that they do after graduation.

Student Projects:

- New Media students Jace Lucas, Jim Ward, Joel Hertzinger, Megan Peterson and Lauren Smith, wrote and illustrated the comic book titled, "The Amazing Adventures of American Heart" for the American Heart Institute targeting elementary school-age children about childhood obesity. The idea of creating the comic book began when a student shared with faculty Durwin Talon regarding the American Heart Association's continuing concern about childhood obesity. Full story: http://informatics.iupui.edu/news/story.php?id=574.

- A documentary film, shot and produced by New Media students, was named Best Documentary at the recent 2007 Indiana Actors.com Film Festival. The winning students - Ja´Juan Shirley, Chris Francis and Matt Turner – along with faculty Edgar Huang, were approached by the Indiana Organ Procurement Organization (IOPO) to produce a video about organ donations, told from the perspectives of donors´ families, recipients and the nurses at Clarian Health Partners´ Methodist Hospital. The film was a featured story on WISH-TV News 8 in Indianapolis. The local CBS television affiliate also shared with viewers that the film was named winner of the 2007 American Association of Critical-Care Nurses Circle of Excellence Award. Full stories: http://informatics.iupui.edu/news/story.php?id=554 and http://informatics.iupui.edu/news/story.php?id=499 Video at: www.iupui.edu/~j21099/miracle/miracle.html

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Evidence of Progress for 2006-2007:

Current students are receiving national recognition and awards. SOI alumni are receiving recognition as evidenced below:

- The Indianapolis Star reported, "Indianapolis City Market isn´t just conducting a $2 million renovation of its building at 222 E. Market St. It´s also sprucing up its website (http://www.indianapoliscitymarket.com/) by teaming with Medical Animatics http://www.medicalanimatics.com/flash-site/index.php, a two-year-old start-up founded by Harlon Wilson and Kurtis Rush, recent graduates of the Indiana University-Purdue University Indianapolis School of Informatics Medical Animatics will provide Disney-style animation, distinctive graphic style and programming for the interactive part of the revamped web site."
- The IUPUI campus website captured a top prize in the country´s oldest and largest educational advertising competition and several IUPUI informatics alumni played major roles in its creation. The site, www.iupui.edu, was a gold prize winner in the 22nd Annual Admissions Advertising Awards competition sponsored by Admissions Marketing Report. Produced by the IUPUI Office of Communications and Marketing, the Web site took the first-place honors in the Internet/Worldwide Web Site category for schools with 20,000 or more students. Steve Hodges, a graduate of SOI, is electronic media manager for IUPUI´s Office of Communications and Marketing, and was responsible for leading the creative team.

Activities planned for 2007-2008:

SOI Career Services continue to build relationships with the business community so students may complete internships and projects.

⊻ To motivate students to persist in achieving their academic goals and provide scholarships and funding to recruit and retain excellent students.

Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit: Student Services
Time Frame: ongoing

Actions taken for 2006-2007:

Initiatives to involve students in the planning and evaluation processes within the school have included:

- Development of the School of Informatics Student Council, consisting of four undergraduates and an Office of Student Services staff member. This council exists to provide a forum for student concerns, including issues specific to the working, urban, commuter student that the campus and School serves.
- Initiated "Lunch with the Dean" as a vehicle for eliciting feedback from students about academic and co-curricular issues.
- Established a student newsletter dealing with issues important to their discipline and career development.
- Established online student forums.
- Initiated a new internship class at the sophomore level to assist students through the sophomore slump.
- Inviting guest speakers from industry and the local business community to provide insights on skill sets needed for the job market.
- Giving students credit for service learning and providing volunteer opportunities through the office of Faith-Based and Community Initiatives.
- Through an online survey, graduate students assisted in the overall strategic planning process undertaken School wide during

- Through an online survey, graduate students assisted in the overall strategic planning process undertaken School-wide during the fall of 2007.

Student Awards and Scholarships:

- Two New Media students, undergraduate student Leana Kruska and graduate student Dezra Despain were selected to receive conference scholarships to Photoshop World (http://www.photoshopworld.com/schedule.html). Photoshop World was held in Boston, April 4-6, 2007. The scholarships include a one year membership to the National Association of Photoshop Professionals (NAPP).
- SOI awarded 22 IUPUI admission-based student scholarships in AY06/07. Six were awarded to HIA student, seven to Informatics students and nine to Media Arts and Science students. A new IU Foundation account was set up for a scholarship in memory of a New Media student who passed away in January 2007. The first Tyler R. Stull Memorial Scholarship was awarded in Fall 2007.
- One TA in New Media and seven FAs (two in Informatics and five in New Media) were supported in FY06/07.
- Fourteen research assistantships were awarded in F06/07: seven for doctoral students, three for HCI, three for Bioinformatics, and one for Chemical Informatics.
- The Anthem Foundation awarded a grant to SOI to establish a fellowship to support doctoral students in HI, for $35,000. Timothy Carney was the first recipient of this Anthem fellowship in FY06/07.
- In January 2006, three University Fellowships were nominated; two were selected and matriculated--both at the MS level. In January 2007, six University Fellowships were nominated; three were selected and will matriculate in the fall semester--two at the PhD level and one in the MS program. We are fortunate to work collaboratively in recruiting efforts with the University Graduate School, the financial supporter of the first year of the fellowship for each student. MS candidates receive a $12,000 stipend; PhD candidates receive a $22,000 stipend – the School of Informatics, IUPUI, waives tuition, fees, and insurance.

Curriculum Development:

- All HIA classes are now offered both in the classroom and via distance education. A new course was offered this year by the HIA faculty; M370, Health Information Management
- The faculty used Breeze technology this year to offer lectures to the distance education students.
- Experimental initiative in the creation of course instructional materials within "Second Life"
- Developed the first New Media undergraduate online course. This course will be offered during the Summer I of the 2007 semester. A new online course is being developed for the HCI graduate program to be offered fall of 2007.

Evidence of Progress for 2006-2007:

SOI continues to attract and retrain students through financial assistance.

Activities planned for 2007-2008:

- Have a brown bag lunch session in N500: students will get to know faculty and have the opportunity to align with faculty who have similar research.
- Consider holding six-week summer courses for students who need to catch up on certain computer software.
- Continue to fund graduate students with fellowships and RAs.
- Seek out grant opportunities through faculty to fund students.
- Media Arts and Science faculty will hold curriculum meetings to revise graduate and undergraduate course titles, descriptions and core requirements.

To recruit students from central Indiana and beyond.
Campus Planning Theme: Teaching and Learning
Secondary Goals:
Sub Unit: Student Services
Time Frame: ongoing

Actions taken for 2006-2007:

See attached report on recruitment locations.

The School of Informatics, IUPUI recruits students from high schools in Marion County and the seven surrounding counties. We participate in Jag Days, Step Onto Campus and Campus Days. We also offer opportunities for students at internal prospective student days, which include tours of our facilities, meetings with faculty members and observing a class. We partner with the Indianapolis Urban League and the 'Soon to Make a Difference' initiative to reach junior high girls.

VisionFest (www.visionfest.org) is another strong recruiting opportunity both the undergraduate and graduate level. The school holds special sessions for high school students. The first VisionFest brought 19 new students matriculating the following year. The first place winner in the high school category was awarded a full scholarship to the School of Informatics, IUPUI.

The School of Informatics, IUPUI works in close partnership with Indiana University Purdue University Columbus campus' 2-2 program, and recruits for them as well during events. We use alumni to speak to prospective students and provide focus groups of current students about "selling points" of the degree to share.

IUPUI's University College is prime recruiting ground, with 7800 undecided students seeking admission to various disciplines-- including informatics. We staff informational tables throughout the year; mail flyers to UCOL students; and hold specific events for the undecided. We identify and recruit students from high school new media specialists and guidance counselors.

We have found that as prospective students evaluate colleges, they are most interested in internship programs and the institutions' reputations of their intended major. The School of Informatics, IUPUI, provides a full-service Career Services Office that provides coursework and career counseling to all of our majors.

We advertise in area high school newspapers, billboards and special events to boost the rate of recruited students and to assist in stopout/dropout prevention.

The School of Informatics, IUPUI, Office of Student Services' staff targets specific high school clubs and organizations and invites them to campus for specific presentations or we send a faculty member as a special guest speaker to their monthly meetings.

Two of Indiana's community colleges, Ivy Tech and Vincennes University, promote our degree programs as a 2+2 opportunity. Students can complete their first two years as an AS degree at these institutions and then complete the following two years of a BS degree at the School of Informatics, IUPUI.

Finally, the School of Informatics, IUPUI, devotes close attention to the School's presence on the Web. Albeit a more passive form of communication, a tremendous amount of information about the School is available to students searching 24/7. Undergraduate students are also recruited by the Office of Undergraduate Admissions and the Enrollment Center. Many times, the staff of the Office of Student Services will accompany Admissions personnel and present to students, parents, and school faculty about the multiple opportunities our school can provide. Externally we attend large events such as Indiana Black Expo, State Fair, HASTI [Hoosier Association of Science Teachers], Making "IT" Happen and the Intel International Science and Engineering Fair to promote our undergraduate programs.

Evidence of Progress for 2006-2007:

Credit hours increased 2.8% over 2005/2006. The first VisionFest brought 19 new students matriculating the following year.

There are several important, ongoing initiatives at the undergraduate level. One of the most significant has been our move towards distance and distributed education. Health Information Administration is a burgeoning field – with a supply of exciting and well-paying jobs that exceed the number of graduates. In response to this, our HIA curriculum has been developed so that it can accommodate both in-person and online students. As a result, enrollments in this program have increased from a mere handful of students just a few years ago to more than 100 at this time, with approximately 35 new students this year. HIA faculty members have also created two online certificates – one in Cancer Registry and the other in Medical Coding. Inspired by their efforts, other faculty members have been transitioning their courses to online and distance formats. For example, I303 Organizational Informatics, a key course in the informatics curriculum, will be offered online for the first time this fall.

Activities planned for 2007-2008:

Continue recruitment efforts as in 2006-2007 and:

- A new Human-Computer Interaction Graduate Certificate Program offered online begins Spring 2008. Related to this accomplishment, the HCI distance education program began with the launching of several courses: HCI 1 (Spring 07) and Usability Methods and Psychology of HCI (Fall 2007- Sp 2008). Post card advertisements will be sent out in the fall of 2007 to promote the HCI programs.
- There is great demand for people who can develop, implement and manage technology in the practice of law; however, few formal academic programs exist to prepare people for this emerging field. This certificate will be offered entirely online. Four of the five courses are already in place: I303 Organizational Informatics, I330 Legal and Social Informatics in Security, I350 Foundations in Legal Informatics and N480 Technology and the Law. The fifth course for this certificate, Litigation Support Systems and Courtroom Presentations - will be taught this summer for the first time and a permanent course number will be obtained.
- A doctoral program in Informatics with a track in Human-Computer Interaction (HCI)—to begin in fall of 2008.
- Certificate program in MAS is planned to begin fall 2008.
- Consider a certificate in Health Informatics in the near future.
- Update graduate recruiting marketing materials.
- Meet with Office of Communications and Marketing for program marketing advice and collaboration.

▶ **2. The School of Informatics will have a faculty of the highest quality representing the core disciplines in its diverse degree programs.**

⊻ a. To market Informatics as a prestigious school providing great opportunity for faculty to develop rewarding academic careers and hire excellent faculty in areas of demand within growing academic programs.
Campus Planning Theme: Best Practices
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing.

Actions taken for 2006-2007:

The SOI hosted the summer conference of the New Media Consortium (NMC) June 6-10, 2007 attracting approximately 450 attendees. The NMC is an international not-for-profit consortium of nearly 200 member institutions from almost every state in the US, across Canada, and in Europe, Latin America, and Japan. WISH-TV 8 ran a television spot on June 7, 2007 about the conference. TV Interview: http://www.wishtv.com/Global/story.asp?S=6627451 Faculty Susan Tennant and Beth Lykins captured top honors for their poster entries. Full story: http://informatics.iupui.edu/news/story.php?id=569

Faculty Ruth Walker was interviewed on personal health records in the Indianapolis Star on August 1, 2006 (front page of Healthy Living), the Redbook handbook on April 2007, www.redbookmag.com and the Journal of AHIMA, April 2007.

SOI faculty presented at the SIGGRAPH conference in Boston, Massachusetts held July 30-August 3, 2006. John Ludwick provided insights about the impact of Flash technology on the Web. Dean Bailey joined faculty Albert William for a presentation entitled, "Stereoscopic Visualization of Scientific and Medical Content." Highlights included a description of content-research procedures, pre-visualization methods, production methods, stereoscopic creation techniques, production issues, and post-production methods. The annual SIGGRAPH gathering brings together nearly 30,000 participants from around the world who are interested in learning about the latest cutting-edge technology and procedures for creating digital art. Story at: http://informatics.iupui.edu/news/story.php?id=450.

Yaoqi Zhou, Ph.D., professor of Informatics, began August 1, 2006. Zhou has a Post-doctorate in computational biophysics from Harvard University, Boston, MA, a Post-doctorate in chemical engineering from North Carolina State University, Raleigh, NC (1999-

2000), a Ph.D. in chemical physics from the State University of New York, Stony Brook (1990), a B.S. in chemical physics from the University of Science and Technology of China, Anhui, China (1984). Dr. Zhou was a tenure-track assistant professor and tenured Associate Professor at the State University of New York at Buffalo. He brings his extensive research experience in the bioinformatics area of protein folding, structure prediction, and protein-protein and protein-ligand docking. Dr. Zhou brough five post-docs with him to complete his research as follows: Bin Xue, Ph.D., post-doc. Xue has a Ph.D. in physics from Nanjing University of China and was a research associate at State University of New York at Buffalo. His expertise includes protein folding dynamics and protein-structure prediction.

Shide Liang, Ph.D., post-doc. Dr. Liang obtained his Ph.D degree from Beijing University of China and was a research associate at UT Southwestern Medical Center at Dallas and State University of New York at Buffalo. His research involves development of methods for predicting protein-protein interaction.

Yuedong Yang, Ph.D., post-doc. Dr. Yang received a Ph.D. in computational biology from the University of Science and Technology of China. His expertise includes protein-structure prediction and structure-based ligand design.

Eshel Faraggi, Ph.D, post-doc. Dr. Faraggi obtained his PhD in statistical physics from University of Texas at Austin and was a research associate at Florida International University. His experience includes simulations and theoretical studies of biophysical models.

Beisi Xu, Student, Mr. Xu is a international student supported by Education Minister of China that encourages the collaboration between Chinese Scientists and Scientists aboard. His previous work with Professor H. Liang at University of Science and Technology of China involves simulations of polymer and protein dynamics.

Elizabeth Lykins, M.S. media arts & science from SOI, advances from a visiting research associate position to lecturer in the New Media program in July 1, 2006.

John Ludwick, has a M.F.A. in sequential art and a B.F.A. in graphic art from the Savannah College of Art and Design. He advances from visiting lecturer to clinical assistant professor on August 1, 2006.

Ricardo Laranja advances from visiting lecturer to a lecturer on August 1, 2006. Ricardo has been a visiting lecturer for three years at the SOI. He earned his master's degree in media arts and science from SOI, an undergraduate degree in applied jazz performance from Aquinas College, and a performance certificate from the Berklee College of Music in Boston.

Jennifer Stewart was hired as a part-time online coordinator and visiting academic specialist beginning August 1, 2006. She supports the School's growing online curriculum by introducing new technologies for lecture capture as well as creating supporting materials to augment student learning. Jennifer draws upon her past experience managing the department of computer and information science at IUPUI's successful distributed education program. Jennifer is completing her M.S. in media arts & science at SOI.

Note: Shielly Hartanto was hired to replace Mohammed Hamdouchi who left for other outside employment on June 30, 2006. Shielly Hartanto was hired as a research associate on September 1, 2006. Ms. Hartanto received her M.S. degree in computer science (CIS) at IUPUI. While pursuing her master's studies, she conducted her research work on developing an automated system for personnel performance evaluation and management. Ms. Hartanto has published one major report about this work in CIS and a working system called, "Automated Reporting System" has been released. From 2004 - 2006, Ms. Hartanto had been employed as a visiting research associate at CIS working on bioinformatics projects. She has published one journal paper and several other papers are currently undergoing review. Her practical experience in client-server application design for Intelligent Systems is exceptional.

Evidence of Progress for 2006-2007:

Hiring of new faculty for 2007:

Shaowen Bardzell, Ph.D. is an Assistant Professor in New Media and an Adjunct Assistant Professor of Human-Computer Interaction/Design in the School of Informatics at Indiana University (Bloomington). Bardzell received her Ph.D. at Indiana University, Bloomington, IN, MA Indiana University, Bloomington and BA from Tunghai University, Taiwan, R.O.C. Her research centers on cultural computing, which fuses critical theory and human-computer interaction (HCI) and computer-supported cooperative work (CSCW) approaches to understanding the relationships among computing and emotional, intimate, and/or embodied experiences. The primary domain in which she practices this work is computer-mediated social spaces such as video games, massively multiplayer virtual worlds, and other participant-created environments. Her recent work has focused on affective interactions in Internet search behaviors, the relationship between technologies of work and play, as well as the work of virtual communities in developing and maintaining complex virtual subcultures.

Mathew A. Powers is a visiting lecturer in New Media. He received his MFA in Digital Art in 2006 concluding a four-year career as Webmaster of the SoFA website and as an Assistant Instructor at Indiana University, Bloomington. His teachings focus on 2D and 3D animation, virtual reality environment construction, and web design. He specializes in character, environment, narrative, and game creation. After graduation, Mathew continued his digital teachings as an Adjunct Instructor in the Digital Art department. He was also an Adjunct Instructor at the Columbus, Indiana Ivy Tech Community College Visual Communication department. Here he focused on Web Design and Flash Animation. Additionally, Mathew has spent that last year and a half as a Flash Media Developer at the Bloomington based company, Option Six. At Option Six, Mathew designed and created e-Learning applications and animations for clients such as Microsoft, Lilly, and Toyota. His research interests are character, environment, creature, and narrative creation and analysis. Immersive virtual reality and gaming experiences. Interactivity for animations and websites and incorporating traditional fine arts into the digital realm.

Afsina Yildiz is a visiting lecturer in New Media. Prior to joining the School of Informatics, Afsina Yildiz was a Graduate Assistant and a Teaching Assistant in the Telecommunications department at Ball State University. Freelance video producer and scriptwriter for clients in the U.S and the U.A.E (United Arab Emirates). Yildiz has received several awards from National Broadcasting Society, and scholarships from Ampers (Association of Minnesota Public Educational Radio Stations) and BEA (Broadcast Education Association). Her research interest follows the new technology being used to narrate stories, as well as promoting diversity and the understanding of global cinema. Website: www.afsinayildiz.com

Jennifer Stewart became a visiting research associate beginning July 1, 2007. She still supports the School's growing online curriculum by introducing new technologies for lecture capture as well as creating supporting materials to augment student learning. Jennifer draws upon her past experience managing the department of computer and information science at IUPUI's successful distributed education program. Jennifer is completing her M.S. in media arts & science at SOI.

Activities planned for 2007-2008:

Hire one tenure track Ph.D. faculty for Media Informatics/Human Computer Interaction to expand the Ph.D. programs in that area, one Ph.D. faculty for Health Informatics for research and thesis, and one lecturer for Health Information Administration program.

⊻ d. To support and retain current and newly hired faculty.
   Campus Planning Theme: Best Practices
   Secondary Goals:
   Sub Unit: None
   Time Frame: Ongoing.

Actions taken for 2006-2007:

A Strategic Plan was created for SOI by our new dean at IUB. Soon there will also be one specifically for the IUPUI campus. The stategic plan documents are at: http://www.informatics.indiana.edu/overview/strategicplan/

Several faculty policies have been establised through faculty committees -- those policies are listed at: http://www.iupui.edu/~facinfo/associatedean/indyinformatics.html   The most recent policies are the Statment of Salary Policy and the Criteria for Faculty Annual Performance Evaluation.

Faculty Durwin S. Talon work was included in the 49th Annual Exhibition of the Society of Illustrators. His creation of sequential art entitled, *BONDS: ADAGIO* was selected by a panel of judges for inclusion in this year's prestigious exhibition. Each year, the Society of Illustrators recognizes the top achievements within the field of illustration encompassing all genres, every medium and every range of practitioner, from students to lifetime members.

Faculty Susan Tennant and John B. Ludwick were named recipients of the Trustee's Teaching Award (TTA) for 2007.

During the 2006-07 school year, we instituted a Research Day, where faculty could showcase their own research and build collaborations with others with similar interests. The Center for Teaching and Learning, the Office for Professional Development and the Faculty Colloquium for Excellence in Teaching (FACET) inform faculty about campus-specific offerings including programs, teaching assistance and mentoring. As a result of the overall school's strategic planning process, a structure for regular faculty mentoring is being developed as well.

Our faculty members have taken advantage of numerous opportunities on campus. Several faculty members have participated in Faculty Learning Communities and Communities of Practice. We have had faculty members receive small teaching grants from the campus, such as Program Review and Assessment Committee (PRAC) and JumpStart. During 2006, seven of our faculty members gave presentations at the prestigious Assessment Institute and in spring of 2007, three faculty presented at the New Media Consortium's annual conference. Among our faculty members who participated in IUPUI's E.C. Moore Symposium, two have taken top prizes at the poster session. Likewise, many faculty members have received internal grant support, including funding from the New Frontiers in the Arts and Humanities, Research Support Funds Grants, Overseas Conference Fund grants, National Institutes of Health Roadmap Seed Fund Grants and, most recently, two proposals by our faculty for Signature Centers of excellence were funded. Our faculty development support also includes a travel policy which provides each faculty member with up to $1500 annually for conference attendance. Policy details are at http://www.iupui.edu/~facinfo/associatedean/Travel%20Policy%20final.doc. Because we have faculty members in varied academic appointments - tenure, tenure-track, clinical, lecturer, research associate and academic specialist – we try to identify opportunities that are appropriate for everyone, not just those who are engaged in research in the traditional sense.

Keith Dunker was promoted in the fall of 2006 to director of bioinformatics to oversee both the Bloomington and IUPUI bioinformatics programs. His major goal will be to increase communication and interaction among the bioinformaticists in SOI, the SOM, the School of Science, and with the SOI in Bloomington. To this end, we organized a retreat in Bradford Woods that was held on February 3, 2007. About 45 faculty members and others attended this retreat. These participants included faculty from the Schools of Informatics, Medicine, and Science in Indianapolis, and from the School of Informatics and the College of Arts and Sciences in Bloomington. Other participants included scientists from Eli Lilly and from Dow Agro Sciences. The presentations and discussions were outstanding and provided a good start for building collaborative interactions. With regard to Dr. Dunker's personal research activities, he continues his bioinformatics studies on intrinsically disordered proteins, with more than 30 published papers since the start of 2005. Dr. Dunker's work is continuing to gain attention. In this regard, two of his papers ranked high in Biochemistry's most cited articles in 2005: one paper is currently ranked number 1 and the other number 9. On both of these papers, the first author is Christopher J. Oldfield, a graduate student in the School of Informatics

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Evidence of Progress for 2006-2007:

We have had four faculty members go through the promotion and tenure process, with the following results:

Promotion to full rank, based on excellence in teaching - one
Promotion to full rank, based on excellence in service - one
Tenure, based on excellence in teaching - one
Promotion to Clinical Associate Professor, based on excellence in teaching - one

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Activities planned for 2007-2008:

Continue to promote faculty self-governance.

Mentor new faculty on working with students: Grad and undergrad curriculum requirements

One of the New Frontiers in the Arts & Humanities grants we garnered was to support a Media Arts & Science visiting lecture series. During 2007-2008, a number of key figures in the new media world are spending several days with us, giving public presentations, interacting with faculty and meeting with students. We also started an Informatics visiting lecturer series; these two lecture series create a wealth of opportunities for students and faculty to hear from – and interact with – experts in many different facets of these disciplines. In order to better manage this, we have added a Colloquium Committee to our faculty governance structure.

▶ **3. The School of Informatics will have an active and robust research program focused upon human need that builds upon existing strengths of the university, state, and beyond.**

⊗ a. To institutionalize the Informatics Research Institute as a place of synergy to develop and explore new ideas in Informatics and related fields.

    Campus Planning Theme: Research, Scholarship and Creative Activity

Secondary Goals:
Sub Unit: None
Time Frame: Ongoing.

Actions taken for 2006-2007:

For the 06-07 fiscal year, the total number of grant and contract proposals processed through the Informatics Research Institute (IRI) was 66, with a dollar value of $15,263,634. Of those, 20 have been funded, representing a dollar value of $1,672,637. External contract and grant expenditures for the School of Informatics as of June 30, 2007 totaled $1,177,996.

Anna McDaniel, principal investigator
Title: "The Indiana Cancer TRAIN (Translating Research – the Answers and Information Network): A Web Portal for Linking IUCC Patients, Clinicians and Researchers"
Sponsor: Walther Cancer Institute
Award: $250,000 01/01/07 – 12/30/09

Mathew Palakal, principal investigator
Title: "A User-Centric Bioinformatics Tool for Biomedical Research"
Sponsor: Research Support Funds Grant (IUPUI)
Award: $30,000 01/01/07-12/30/07

Sara Hook, John Ludwick, Susan Tennant, principal investigators
Title: "From Tradition to Innovation: New Media Lecture Series"
Sponsor: New Perspectives in the Arts & Humanities (a component of the New Frontiers in the Arts & Humanities Program at IU)
Award: $18,000 04/01/07-03/31/08 (approx.)

Tony Faiola, principal investigator
Title: "Medical Information Visualization Assistant (MIVA)"
Sponsor: The Solution Center at IUPUI
Award: $7,952 Spring Semester 2007

The android science research of faculty Karl MacDorman has attracted international media attention. In the past year alone, it has been featured on the Science Channel, National Public Radio, WISH TV 8, WLW Cincinnati, 2CC Canberra, WIBC syndicated radio, the New Scientist, Detroit Free Press, Edmonton Journal, Inside Indiana Business, St. Louis Post-Dispatch, and the front page of the Indianapolis Star on June 19, 2007: http://www.indystar.com/apps/pbcs.dll/article?AID=/20070619/LOCAL18/706190366). Since joining IUPUI in November 2005, his research has also been featured on the Discovery Channel, the Economist, Japan´s NHK Planet Zero, and Scientific American. News stories are listed under "Press" at http://www.macdorman.com. Dr. MacDorman was a key presenter at the International Robots & Vision Show and Conference http://www.robots-vision-show.info/robots_vision_show_info.html in Chicago on June 12-14, 2007, and has been invited to present at SIGGRAPH 2007. In the past year, he has organized several journal issues on the External Symbol Grounding Problem, Psychological Benchmarks of Human-Robot Interaction, and Android Science and has served on a European Union Science and Technology Commission.

Faculty Tony Faiola and Joe DeFazio are working with Dr. Donald Orr to create "Computerized Education to Prevent Hypoglycemia When Driving." Their goal is to make adolescent drivers who are diabetic are fully aware of the dangers of hypoglycemia when operating a motor vehicle. New technology is also at the core of a research project undertaken by faculty Skip Comer, Jolene Kernick, Xiaoqiu Bao and Shielly Hartanto under the direction of Drs. Syed-Adeel Zaidi and Virginia Thurston on "Preparing Residents for the Next Revolution in Medicine – Genetics and the Promise of Personalized Medicine." These two above research projects are funded by Clarian Values Fund Grants: http://pulse.clarian.org/portal/intranet/home/content?defaultXml=/depts/grants/fundgrants.xml. Full story: http://informatics.iupui.edu/news/story.php?id=553

Using high-speed computer networks and IU's supercomputer, a team of researchers from IU and Purdue University will be contributing to an open-source bioinformatics software platform development project in proteomics, thanks to a $25,000 bioinformatics research award from the Canary Foundation. The San Jose-based foundation´s slogan is "stopping cancer early", and it awards funding for cancer-related research to accelerate realization of that goal. Canary, and the LabKey Software Foundation designated five grant recipients from around the world for their Bioinformatics Platform Dissemination Award, and among the 50 contenders was the Indiana bioinformatics group, led by faculty Jake Chen. Co-PI of the award is Dr. Xiang Zhang, principle bioinformatics scientist at Bindley Bioscience Center, Purdue University, West Lafayette.

Faculty Yaoqi Zhou brought two NIH grants with him when he was hired at SOI from State University of New York at Buffalo to IUPUI

on Aug. 2006. He hired six postdoctoral fellows. One successfully found a high-pay industry position. He purchased two computer clusters with a total of 220 CPUs for his research. His research involves prediction of protein structures and investigation of energy functions responsible for protein folding and protein-protein and protein-ligand interactions. Dr. Zhou submitted a R01 renewal last March and is in the process of submitting another R01.

Faculty Jake Chen is the co-principal investigator for a $7 million grant from the National Cancer Institute, studying proteins and their relationship to certain cancers. From Indianapolis Star Story: http://informatics.iupui.edu/news/story.php?id=478

SOI faculty will make computing more accessible to blind students. An award of $115,000 Nina Mason Pulliam Charitable Trust grant to help faculty advance their design of an acoustic user interface (AUI) that replaces text or number-based titles and file names with easily memorized "sound symbols." Such a system would help blind students more quickly access contents and files stored on their computers. Faculty Steve Mannheimer is leading the project along with Dean Mathew J. Palakal. Full story: http://informatics.iupui.edu/news/story.php?id=525

SOI faculty produced a dental education program with Andrea Zandona for the Dental School. The program is titled "Clinical Features of Dental Caries," and used as a pilot study for a grant proposal. It utilized interactivity with dental photos to give students experience with identifying dental caries (cavities) at various stages of development.

Evidence of Progress for 2006-2007:

SOI faculty continue to submit and obtain grant funding.

Activities planned for 2007-2008:

Continue to encourage faculty research and submit proposals for Signature Centers.

c. To create laboratories and administrative space for the research efforts of faculty and research staff.
  Campus Planning Theme: Campus Climate for Diversity
  Secondary Goals:
  Sub Unit: None
  Time Frame: Ongoing.

Actions taken for 2006-2007:

SOI dean followed up with a meeting October 30, 2006 with the architects office and Ratio Architects about IT 360 being an audio production room and IT 358 as a video production room. We are now in the design phase and hope to have the room finished in time for the new media consortium conference in June 2007.   Anticipate needing to complete construction of room IT 360/360A; anticipate needing to install complete audio and video editing suite of hardware in the Audio Production room (room 360/360a) in IT building.

Six post-docs, which are the research team for our new senior bioinformatics faculty, will be houses on the first floor of the Walker Plaza building in fall of 2006.

Technology staff plan to install 26 iMAC computers in 265 and 21 iMACs in IT 256 and they will make them dual boot for fall of 2006 http://informatics.iupui.edu/news/story.php?id=455.

Anticipate continuing to upgrade and expand the above listed software applications to keep current with industry trends and the needs of our researchers and students.

Evidence of Progress for 2006-2007:

The new computers and software, as well as the new facilities, help us attract and retain students. The new, expanded facilities and expanding programs and research opportunities help us attract and retain faculty.

Activities planned for 2007-2008:

▶ **4. The School of Informatics will have active and dynamic collaborations with business, education and industry to cultivate mutual opportunities for students**

⊻ a. To establish a working group of business leaders committed to furthering the goals of Informatics and its contributions to the economy of the state.
Campus Planning Theme: Civic Engagement
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing.

Actions taken for 2006-2007:

Mid-summer brought a significant change to the IU School of Informatics with the retirement of founding dean J. Michael Dunn. Stepping into the leadership role was Robert B. "Bobby" Schnabel, effective July 1. Professor Schnabel comes to IU from the University of Colorado at Boulder, where he served most recently as vice provost/associate vice chancellor for academic and campus technology, and professor of computer science. Also, long-time executive associate dean Darrell Bailey announced his decision to step aside, as two long-time IUPUI informatics professors assumed the role of co-leaders of the School. Mathew Palakal and Sara Hook were appointed to the dual role by Dean Schnabel. Marketing activities focused significantly on making various constituencies aware of the leadership changes. Additional changes were made regarding community relations as this activity was shifted to the development office. There was also a strong cadre of stories submitted to the news media and both the IUB and IUPUI informatics Web sites about faculty appointments, research grants, and student honors.

The School of Informatics seeks to serve Indiana through education, community and collaborative research partnerships, thereby participating in the growth of an IT culture in the State, and encouraging continued economic development. Each of these goals has been and continues to be enhanced by the School's numerous industrial relationships. Faculty have conducted research projects funded by Eli Lilly & Co., Biomet, Inc., LabKey Software, Logical Semantics and Dow Elanco. Since the school's inception, students have undertaken 248 internships; 435 organizations currently work the the school's Career Services office to fill internship (and job) openings.

Private industry representatives have made presentations to students and faculty as part of the school's colloquium series and in connection with numerous, school-hosted events.

The efforts of the working committees of the Informatics Dean's Advisory Council are to develop lines of communication and establish new contacts in the Indiana state government. http://informatics.iupui.edu/people/deans_council.php

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Evidence of Progress for 2006-2007:

Media Arts and Science Board members eager to become involved in SOI activites and hire student interns.

Activities planned for 2007-2008:

Established a Media Arts and Sciences Program advisory board and pilot scholarship program for MAS students (roster attached).

☒ b. To identify and enhance fundraising and development opportunities.
Campus Planning Theme: Civic Engagement
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing.

Actions taken for 2006-2007:

Brent Pieper, CFRE, is Director of Development for the Indiana University Foundation. He is currently assisting with the development of a structured major gift program for the School of Informatics and special projects for the IU Foundation in southeast Indiana, Louisville, Kentucky and Atlanta, Georgia. Between the years 2003 and 2006, Brent was Executive Director of Development for Indiana University East where he organized a record-setting campaign for the campus. Prior to returning to Indiana he spent four years with United Way of Atlanta as Director of Resource Development as part of a campaign team that raised more than $70 million annually between 1999-2002.

- Anthem Foundation- Fellowship support toward Ph.D student work in Health Informatics in partership with the Rengestrief Foundation
- Eli Lilly and Company- Fellowship supprt toward Ph.D work in Chemical Informatics
- Symyx Technologies, Inc.- Fellowship support toward Ph.D work in Chemical and Bioinformatics Established a Media Arts and Sciences Program advisory board and pilot scholarship program for MAS students (roster attached)
- Established a Media Arts and Sciences Program advisory board and pilot scholarship program for MAS students (roster attached)

Recognized the following at the IUPUI Spirit on Philanthropy for outstanding fundraising and volunteer service:

- 2007 Anthem Blue Cross and Blue Shield - Anthem Foundation
- 2006 Carol L. Lewis
- 2006 LabWare, Inc.

Evidence of Progress for 2006-2007:

Advisory boards continue to be created for the School and awareness for the School of Informatics is growing among business leaders in community.

SOI undergraduate and graduate students continue to receive new scholarship sponsorship from various businesses, foundations and the university.

Media Arts and Science Board members eager to become involved in SOI activites and hire interns.

Activities planned for 2007-2008:

Continue to build relationships with the Media Arts and Science Board members and other business in the community and nationally.

5. The School of Informatics will actively engage with the community in mutually beneficial projects to enrich the larger community and its people.

c. To work with diverse populations in the community.
Campus Planning Theme: Civic Engagement
Secondary Goals:
Sub Unit: None
Time Frame: Ongoing.

Actions taken for 2006-2007:

A Memorandum of Agreement was signed by Dean Bailey for SOI on April 13, 2007 with the Indianapolis Public School's Crispus Attucks Medical Magnet High School and Early College (IPS CAMMHS) to establish formal relationship collaboration. Crispus Attucks Medical Magnet High School 8th grade class visited March 23, 2007 to hear about undergraduate Informatics programs and freshman from Crispus Attucks visited New Media senior undergraduate capstone final presentations on April 27, 2007.

Continue collaboration with the Indianapolis Urban League in their recruitment of minority girl teens to the use of technology.

Continue the collaboration with the RLHEC that reaches all races of children K-5 through - Grades 12.

Black Expo 2006 organizers met with the Office of Community Relations, IUB and IUPUI External Affairs and IUB Informatics Communications Office to discuss Informatics' presence at Black Expo 2006. The gallery was set up with the green screen studio and John-E-Box to demonstrate the technology Informatics and New Media offers. As a result of this meeting, the SOI will facilitate a booth in the Indianapolis Convention Center.

Continue scholarships for minority students.

Evidence of Progress for 2006-2007:

Activities as specified above.

Activities planned for 2007-2008:

See attached SOI Diversity Plan and Committee members.

Action items of the SOI Diversity Committee include: training for faculty and staff, mentoring program for undergraduates, and a diversity day in the spring 2008.

Continue activities as in 2006-2007.

Fiscal Health

Overall health
We finished FY06/07 with higher income than originally budgeted. This was mainly due to the fact that ICR was grossly underestimated. Grant income and therefore F&A recovery was over $200k, mainly due to the fact that a faculty member who started in August brought with him two NIH grants which carried with them F&A.

Credit hours and student fees

Credit hours increased 2.8% over 2005/2006. This accounted for an increase in student fees over 2005/2006, from $2,059,221 to $2,273,218, a 10% increase. In the 2005/2006 academic year, we adjusted the plans of study for all majors, requiring more courses, and we are reaping the benefits of that modification. Student fees are anticipated to increase by anywhere from 6-8% in 2007/2008.

Student support and giving

The School of Informatics awarded 22 IUPUI admission-based student scholarships in AY06/07. Six were awarded to HIA student, seven to Informatics students and nine to Media Arts and Science students. A new IU Foundation account was set up for a scholarship in memory of a New Media student who passed away in January 2007. The first Tyler R. Stull Memorial Scholarship was awarded in Fall 2007.

One TA in New Media and seven FAs (two in Informatics and five in New Media) were supported in FY06/07.

Fourteen research assistantships were awarded in F06/07: seven for doctoral students, three for HCI, three for Bioinformatics, and one for Chemical Informatics.

The Anthem Foundation awarded a grant to SOI to establish a fellowship to support doctoral students in HI, for $35,000. Timothy Carney was the first recipient of this Anthem fellowship in FY06/07.

Facilities

There were no major changes to the facilities arrangements of the School of Informatics. However, we did some reshuffling and re-settling. We have since moved our Health Informatics Graduate program to the ICTC building and consolidated our Bioinformatics faculty members' offices as well as their research laboratories in the Walker Plaza building. This allows for greater collaboration between bioinformatics faculty members, as well as gives graduate students access to their independent study mentors and their peers in one location.

Completion of the audio and video production and post-production rooms will be completed in Fall 2007.

Reallocation Plan

Other Question(s)

1) *Diversity.* **In the past year (July 1, 2006-June 30, 2007) what actions have you taken and what results have you achieved in retaining and graduating a diverse student body; enhancing diversity in research, scholarship, and creative activity; and recruiting, developing, and supporting diverse faculty and staff?**

See attached SOI Diversity Plan and Committee members.

Action items of the SOI Diversity Committee include: training for faculty and staff, mentoring program for undergraduates, and a diversity day in the spring 2008.

2) *International activities.* **Over the past year, in what international projects and activities have your faculty, staff, and students engaged? What new efforts have been undertaken to internationalize the curriculum?**

- In November of 2007, staff Kim Melluck traveled with Chancellor Bantz and a group of IUPUI faculty and staff to MOI University in Kenya. Kim set up a computer lab there. SOI faculty produced an interactive medical education program for medical students in Kenya, using Kenyan materials and faculty Albert William's HIV virus visualization animations. Dean Mathew Palakal and faculty Susan Tennant met with officials at MOI to discuss the memorandum of understanding and future research topics.
- Continued collaboration for Operation Walk in Guatemala City, Guatemala, at the hospital Centro Medico Military in March 2007. The participants from SOI were faculty Anna McDaniel Dean Darrell Bailey, undergraduate journalism

student Marcos Dominguez, Dean Jim Brown of the School of Journalism and faculty Skip Comer. SOI faculty set up and operated a wireless data collection network using handheld units. The data was used to document the surgeries and patient records. The surgical team from Mooresville did over 50 knee/hip replacement surgeries, and several foot/ankle surgeries. Each patient was given a documentation package that included before-after x-rays, and full documentation about their surgery, which was produced from the data collection project. SOI faculty built a web site that provided daily updates of photos and videos during the trip: http://www.operationwalk-mooresville.org

- Partnership with Sun Yat-Sen University (China)
- Faculty Y. Zhou published papers together: Z. Luo, J. Ding, and Y. Zhou, ``Temperature-Dependent Folding Pathways of Pin1 WW Domain: An All-Atom Molecular Dynamics Simulation of a Go Model.'', Biophys. J.93, 2152--2161 (2007) Y. Chen, Y. Zhou and J. Ding, ``The helix-coil transition revisited.'', Proteins 69, 58--68 (2007). With Professor Liang, we are co-advising the student Beisi Xu who is a visiting student at my group.With Professor Liu, we are working to co-advise one of his students.
- Professor Jake Chen has a research collaboration with Prof. Xiaoyan Zhu's group at the Department of Computer Science and Technology, Tsinghua University, China.
- Faculty Gunther Schadow has a Signature Center for Computational Diagnostics in collaboration with the German Heart Center in Munich on a study of proteomics in cardiovascular disease. They have had a featured abstract in 2007 scientific sessions of the American Heart Association about this. Ragg S, Fokin V, Podgorski K, Schadow G, Vitek O, Kastrati A, Schömig A, Lorenz-Braun S, Ott I. Proteomic Profiling of Plasma Samples in Coronary Artery Disease. American Heart Association Scientific Sessions 2007. Dr. Shadow also works with six developers in Pune, India on two different projects.
- In May 2007, faculty Edgar Huang gave a lecture in Indianapolis on the state of media convergence in the United States to a group of 30 foreign government officers who work in the United States. The event was sponsored by the Indianapolis International Center under the auspice of the U.S. State Department.
- Faculty Josette Jones was elected a Fellow of the Institute for Action Research in Community Health (IARCH) at IU School of Nursing (IUSON). IARCH is organizationally housed within the IUSON Center for Community and International Affairs, along with the World Health Organization (WHO) Collaborating Center for Healthy Cities. IARCH fellows meet during the academic year to conduct business, share their works in progress and discuss existing and potential opportunities for community involvement.
- A new award honoring individuals or organizations providing outstanding leadership in international education was established by the IU School of Informatics, June of 2007. The first recipient of the Atlas Award was Dr. Juergen Friedrich, University of Bremen, Germany, "in recognition of outstanding contributions to the international development of media informatics." Dr. Friedrich was presented with the initial Atlas Award by J. Michael Dunn, dean, IU School of Informatics, and Darrell L. Bailey, executive associate dean, during the New Media Consortium's Summer Symposium, held on the campus of IUPUI. http://informatics.iupui.edu/news/story.php?id=571
- The School of Informatics continues to teach lab automation to the University of Applied Sciences graduate students in Wiesbaden, Germany through video conferencing.

Exchange Students for the New Media Program:

Fall 2006:
National Chengchi University--China: 2 undergraduate students
Bremen University - 3 graduate students
Spring 2007:
National Chengchi University--China: 2 undergraduate students
Fall 2007:
Bremen University—Germany – 2 undergraduate students
Spring 2008:
National Chengchi University—China – 3 undergraduate students

Faculty Karl Macdorman's international publications:

With Osaka University, Japan:

- MacDorman, K. F., Nobuta, H., Koizumi, S. & Ishiguro, H. (April 2007). Memory-based attention control in a distributed vision system that recognizes group activity at a subway station. IEEE Multimedia, 14(2), 38-49.
- MacDorman, K. F. & Ishiguro, H. (2006). The uncanny advantage of using androids in social and cognitive science research. Interaction Studies, 7(3), pp. 297-337.
- MacDorman, K. F. & Ishiguro, H. (2006). Opening Pandora's uncanny box: Reply to commentaries on "The uncanny advantage of using androids in social and cognitive science research." Interaction Studies, 7(3), 361-368.
- MacDorman, K. F. & Ishiguro, H. (2006). Toward social mechanisms of android science: A CogSci 2005 workshop. Interaction Studies, 7(2), 289–296.

 With National Neuroscience Institute, Singapore:

- Wee, K. B., Pramono, Z. A. D., Wang, J. L., MacDorman, K. F., Yee, W. C., & Lai, P. S. (2007). Accounting for pre-mRNA co-transcriptional folding in selection of antisense oligonucleotide targets for induction of exon skipping in DMD. Neuromuscular Disorders, 17(9-10), 782-783. MacDorman, K. F. & Kahn, P. H., Jr. (2007). Introduction to special issue on psychological benchmarks of human-robot interaction. Interaction Studies, 8(3), 359-362
- Wee, K. B., Pramono, Z. A. D., Wang, J. L., MacDorman, K. F., Yee, W. C., & Lai, P. S. (2007). Accounting for pre-mRNA co-transcriptional folding in selection of antisense oligonucleotide targets for induction of exon skipping in DMD. Proceedings of the 12th International Congress of the World Muscle Society.

 With the University of Hertfordshire, United Kingdom:

- Cowley, S. J. & MacDorman, K. F. (2006). What baboons, babies, and Tetris players tell us about interaction: A biosocial view of norm-based social learning. Connection Science, 18(4), 363-378.
- MacDorman, K. F. & Cowley, S. J. (2006). Long-term relationships as a benchmark for robot personhood. Proceedings of the 15th IEEE International Symposium on Robot and Human Interactive Communication. September 6-9, 2006. University of Hertfordshire, Hatfield, UK.

 Karl MacDorman's international journal special issues, conferences, and collaborating on research:

CogSci-2006 Workshop: Toward Social Mechanisms of Android Science	Co-organizer	Vancouver, Canada	July 26, 2006 - July 29, 2006
Program Committee, The Fifth International Conference on Development and Learning	Reviewer	Bloomington, Indiana	May 31, 2006 - June 3, 2006
Special Session "Toward Psychological Benchmarks of Human-Robot Interaction" of RO-MAN 2006: The 15th IEEE International Symposium on Robot and Human Interactive Communication	Co-organizer	Hertfordshire, UK	Sept. 6, 2006 - Sept. 8, 2006
Program Committee, RO-MAN 2006: The 15th IEEE International Symposium on Robot and Human Interactive Communication	Reviewer	Hertfordshire, UK	Sept. 6, 2006 - Sept. 8, 2006
External Symbol Grounding Workshop of the Distributed Language Group	Co-organizer	Plymouth, UK	July 4, 2006 - July 5, 2006

Hiroshi Ishiguro, Ph.D., Professor - Research collaboration, co-authored

journal papers - Collaboration organizing workshops and conferences - Collaboration organizing researcher and student exchanges Takashi Minato, Ph.D., Assistant Professor - Research collaboration	Graduate School of Engineering, Osaka University	2-1 Yamada-oka, Suita Osaka, Japan IN 565-0871
Shoji Itakura, Ph.D., Professor - Research collaborator	Department of Psychology, Kyoto University	Yoshida-honmachi, Sakyo-ku Kyoto, Japan IN 606-8501
Peter H. Kahn, Ph.D., Associate Professor - Collaborator in organizing conference special sessions - Collaborator in organizing journal special issues	Department of Psychology, University of Washington	Box 351525 Seattle WA 98105
Stephen J. Cowley, Ph.D., Senior Lecturer - Research collaboration, co-authored journal papers - Collaboration organizing workshops and conferences - Collaboration organizing researcher and student exchanges	School of Psychology, University of Hertfordshire	College Lane Hatfield, Hertfordshire, UK IN AL10 9AB