An amazing and astonishing journey

As I look back on my academic career it is with a mixture of pride and amazement. Among the things I am proudest of is being the founding dean of Indiana University’s School of Informatics. Among the things I am most amazed by is being the founding dean of the School of Informatics.

I feel quite certain that when I started the study of philosophy as an undergraduate at Oberlin College in 1963, I had absolutely no idea that it would lead to this. In fact, I had seen a computer only once at that point, and it, of course, filled a whole room. But neither, of course, did I anticipate that people would be phoning each other on their computers. As an aside, let me mention that a colleague recently told me he was taken aback when he was using a computer in an Internet café and it rang with a phone call for him. I said in response: “I wish I had been there with my cell phone to take your picture.”

The way the technology has evolved, and converged, is remarkable, and I think it was largely unpredictable. I do not mean just the well-known underestimates such as that (apocryphally?) attributed to the chairman of IBM, Thomas Watson: “I think there is a world market for maybe five computers.” Or perhaps the 1949 Popular Mechanics: “Computers in the future may weigh no more than 1.5 tons.” I am talking about the fact that “computers” no longer just compute and that they have become part of our daily lives in ways that many take for granted.

Consider the common uses of “personal computers”: word processing, e-mail, calendar, notes, address book, games, digital photos/video, CD/DVD player, etc. And we now have new applications such as VOIP (the Voice Over Internet Protocol technology that surprised my colleague). Spreadsheets are the only tool in “office suites” that actually are used to compute in something like the original meaning of the word, and even they have become user friendly and integrated in a way that bunches of punched cards never were.

Other computers that are not used for computation in any usual sense include: digital cameras, digital thermostats, cell phones, PDAs, digital music editors, slot machines, trains, planes, and automobiles, etc. Pervasive or ubiquitous computing envisages computers, or at least network nodes, in more or less everything that we use in our daily lives. With RFID (radio-frequency identification) tags, this can even include the clothes we purchase and wear. So, yes, I am amazed by the developments in information technology over the last century. But there is even more to come.

The IT century

Many say that our new century is the century of biology, and that the last century was the century of information technology. But as Richard Dawkins said: “Biology has become a sort of branch of computer science. … Genes are just a long computer tape.” This is an exaggeration, but it did require computers for humans to begin to learn how to read that tape. It is no accident that in IU’s Strategic Plan for the Life Sciences informatics is mentioned dozens of times.

Another way in which I am amazed — even astonished — is that I became so involved with academic administration at all. Adding up two terms as a department chair, one term as executive associate dean of the College of Arts and Sciences, and, of course, my extended term as dean of the School of Informatics, I come up with the staggering total of nearly 20 years. I confess that in my youth, I viewed administration as a kind of abandonment of research and everything that was good and pure. The first time it looked like I might be chosen as a department chair, I ended up going on a Fulbright to Australia for a year to be certain to avoid it. But I have come to appreciate certain aspects of administration, particularly those having to do with improving quality and with helping colleagues and students.

And I have been fortunate to keep my involvement with research. I am very glad that my research in logic demands only pencil, paper, and, now, a computer. I think I could not have kept up my research so well if it demanded time in labs or libraries.

Risky business

But it is not merely my time in administration that astonishes me. In retrospect, it is the risks I took, particularly in forming our School of Informatics. I have a former PhD student who was creating a company at about the same time, and we compared notes. Our paths were remarkably similar. He had an angel investor, and so did I. It was our then-IU President Myles Brand and his Strategic Directions Fund. My former student had bridge funding and so did I. It came from the Lilly Endowment as a significant component of its award to Michael McRobbie (now IU’s president-elect) for the IU Pervasive Technology Labs. Unfortunately, my former student never got to a public offering, but I, in a sense, did. It was the funding we received from the state, actually two rounds of funding at a time when the dot-com bubble was bursting.

I recently gave a presentation about our school at the University of Michigan, and, in the blurb announcing it, they talked of my “going around the state with my magical PowerPoint.” I remember many a road trip with Don Weaver, Kathy Smith-Andrew, Kurt White, Darrell Bailey, and others to meet with alumni, legislators, and other key people to build sup-

(continued on page 20)
Dean J. Michael Dunn
Lucky us

Reflections on the man who charted the course for the School of Informatics

by Susan Emmerson Quinn

“My first maxim is, ‘Be lucky.’” So said our beloved, late Indiana University chancellor, Herman B. Wells. In two words, he described a spirit of anticipation, active optimism, teamwork, and vision that still marks the Indiana attitude today.

That same spirit marks the success IU now enjoys as the founder of the nation’s first School of Informatics. And one of the luckiest twists in the story is how the university happened to have just the right person with the interdisciplinary vision to bring the new school to national prominence. It’s a lucky moment that J. Michael Dunn prepared for his whole career.

As founding dean of the School of Informatics, Mike Dunn’s historic contribution to IU extends well beyond the creation of a new-breed technology school. A gifted scholar and administrator, Mike’s impact on IU reaches back to 1969 when he returned to his home state from Yale University to teach in the IU Department of Philosophy. He served twice as chair of the Department of Philosophy, and he was acknowledged for his cross-disciplinary interests with appointments in computer science and informatics. He was a founding faculty member in the Cognitive Science Program and in 1989 was named Oscar Ewing Professor of Philosophy. Today, he enjoys an international reputation in his research area of information-based logics, having authored four books and more than 70 articles and having chaired 16 PhD dissertation committees. By traditional measures, these accomplishments alone would define a successful career, but Mike is more than traditional.

Mike’s career included exceptional and visionary service to the university as an early champion of technology at IU. He wrote one of the campus’s first computer plans for the Department of Philosophy, a document that he jokingly described as the most widely read item he has authored because it was copied and used as a model by so many other departments. Always looking to build interdisciplinary connections, Mike created a combined philosophy and computer science major and served on many campus and university committees related to computing.

A Department of Philosophy newsletter once dubbed Mike the “official visionary” for the College of Arts and Sciences, describing his appointment as associate dean for planning there. In 1998, Mike chaired the University Information Technology Committee and was a leader in the formation of the Information Technology Strategic Plan that established a framework for making IU a leader in absolute terms in the application and use of information technology, a goal that many believe we have achieved.

Bootstrapping 101

Only someone of Mike’s stature, wisdom, and good-natured optimism could pull off something as daunting as the creation of a new school. After all, the last school was created some 20 years prior, when the School of Public and Environmental Affairs was founded. If a new school was to come into being, it wouldn’t be easy.

The school’s first computer purchase foreshadowed the many challenges ahead. When the school established its first Bloomington office, there was no equipment, so Mike and I used a borrowed workstation to submit a purchase order. We were surprised and amused when the electronic purchase order was rejected because we didn’t submit the order on our own computer. Never mind that we didn’t have our own computer yet! We did find a way around the problem when a colleague at University Information Technology Services gifted our first machine to us. It was the beginning of many novel challenges and many instances where the good will of friends and colleagues made a difference.

In the same way, Mike relied on (and inspired) the good will of colleagues, corporate friends, and legislators to campaign for permanent state funding for a school that didn’t exist yet. He coordinated the efforts of a massive planning
committee to develop a suite of undergraduate and graduate degrees for both Bloomington and IUPUI, and he saw them approved by the state commission for higher education within a year — with unprecedented speed. He patiently shepherded the school through a political maze of committee approvals and review boards, gently moving forward despite a small but determined movement to keep informatics a “virtual” (read: non-existent) school. As a result, the school twice received permanent state funding and an approved suite of informatics degrees, including the nation’s first PhD in informatics.

Growing the faculty

Mike’s affable nature and stellar scholarly reputation played a major role in helping to recruit many brilliant minds to IU, even before the School of Informatics came into being. In 1987, he served on a search committee for dean of academic computing, which brought his friend and former student — a young Michael McRobbie — to IU. Mike played a central role in recruiting key faculty to the IU Department of Philosophy, a factor that contributed to the department’s top national ranking. He recruited faculty with many cross-disciplinary ties, including a logic faculty that spanned mathematics, computer science, philosophy, cognitive science, and history and philosophy of science. It goes without saying that as dean, Mike has assembled a world-class informatics faculty with amazing breadth and depth of expertise, now numbering more than 100 researchers on five campuses.

In 1990, Mike was instrumental in bringing Jon Barwise to IU. A groundbreaking logician from Stanford University, Barwise’s impact at IU is far-reaching. He came to IU to build on his vision for an interdisciplinary approach to logic, a vision that complemented Mike’s own. Mike and Jon became close friends, and, together with Dennis Gannon, Richard Shiffrin, and many others, they began to formulate the idea of an interdisciplinary entity that would become the School of Informatics.

An open-door dean

You might think it hyperbole to talk of Mike’s door always being open, but it’s no exaggeration. In Bloomington, the first informatics dean’s office was located in historic Memorial Hall, a castle-like building complete with a tower and an antique elevator. Despite the intimidating, obscure location, students and parents sought us out as soon as the informatics degree was announced.

More often than not, visitors stepped off the elevator, down the cramped hall, and into the first open door they could see, which happened to be the dean’s office. In the first years, Mike was interrupted on a daily basis, but he was always welcoming, patient, and interested in why these students were drawn to a new and untried major. Many of these students became our first graduating class, and all were on first-name basis with the dean.

The same generosity of spirit that welcomed prospective students into a dean’s office has motivated many others to advocate, give, teach, and volunteer on behalf of the university. Because of their respect and friendship for Mike, Nancy and Clemens Moss honored their fathers by funding a scholarship in philosophy, the James F. Fields and Anthony J. Moss Fellowship. The gift was designated for philosophy, where Nancy Moss had worked as administrative assistant for Mike when he served as department chair. In the same way, John Gibbs, co-founder of Interactive Intelligence and former chair of the School of Informatics Dean’s Advisory Council, honored Mike in his retirement by establishing the John R. Gibbs Scholarship for Innovation, to be awarded annually to informatics students (see related story, page 17). As Mike hands over the reigns of leadership to a successor and moves into a new role at IU, he’ll be free to pursue other interests. Even so, I am certain that Mike will continue to be an active contributor to scholarship, to IU, and to the Bloomington community.

For me, one image captures who Mike is as a man, educator, and friend. Each December, Mike and his wife, Sally, open their home for what they call the “last-minute-sometimes-annual-holiday-party.” Their historic Bloomington home glows with cheer as it fills with friends and colleagues from all around the university. The fireplace glows, and the table is filled with holiday fare; children shake glitter and dab glue at the craft table; and Mike, among faculty, staff, and their families — is laughing, listening, sharing — and doing what he is so good at: elevating Indiana University while creating a community of colleagues and friends.

Thank you, Dean Mike Dunn. Indeed, we are the lucky ones.

Susan Emmerson Quinn is assistant dean at the School of Informatics and the founding editor of this magazine. She first met Mike Dunn in 1987 when he was editing the Journal of Philosophical Logic and just beginning to experience life as associate dean for planning in the College of Arts and Sciences.

IU University Division Dean Sally Dunn, left, and her husband, Mike, chat with informatics alumnus Brad Gessler, BS’04.
‘Googlearchy’ theory challenged

Search engines are not biased toward well-known Web sites. In fact, they actually produce an egalitarian effect as to where traffic is directed, concludes a team of School of Informatics researchers in Bloomington. Their study, “Topical Interests and the Mitigation of Search Engine Bias,” challenges the “Googlearchy” theory — the perception that search engines push Web traffic toward popular sites, thus creating a monopoly over lesser-known sites.

As the Web becomes larger and more complex, search engines have taken on an increased role in guiding Internet users to their destinations. Yet, some are concerned that search engines, by means of their ranking algorithms, create a vicious cycle where popular sites receive more and more hits.

“Empirical data do not support the idea of a vicious cycle amplifying the rich-get-richer dynamic of the Web,” says Filippo Menczer, associate professor of informatics and of computer science. “Our study demonstrates that popular sites receive on average far less traffic than predicted by the Googlearchy theory and that the playing field is more even.”

The IU researchers’ model finds a striking application in understanding the evolution and social impact of search engines.

A search engine is a complex system designed to find information stored on the Web, allowing users to look for content meeting specific criteria, typically a word or phrase. The engine then retrieves a set of references closely matching the criteria, returning a list of “hits” ranked by page relevance.

The IU team pooled their expertise in Web mining, networks, and complex systems to collect empirical data from various search engines. In one scenario, users browsed the Web using only random links. In another, users visited only pages returned by the search engines.

Menczer was joined in the study by Alessandro Flammini, assistant professor of informatics; postdoctoral fellow Santo Fortunato; and Alessandro Vespignani, professor of informatics. Their work appeared in the Aug. 7–11 issue of the Proceedings of the National Academy of Sciences.

The researchers also have studied the critical role of search engines in shaping the evolution of the Web.

“A simple ranking mechanism provides an elegant model to understand the genesis of a broad class of complex systems, including social and technological networks, such as the Internet and the World Wide Web,” Fortunato says. “These networks possess a peculiar ‘long-tail’ structure in which a few nodes attract a great majority of connections.”

The long-tail structure of the Web is commonly explained through rich-get-richer models that require knowledge of the prestige of each node in the network. However, those who create and link Web pages may not know the prestige values of target pages.

An earlier study conducted by the researchers showed that all that is necessary to give rise to a long-tail network is to have the nodes sorted according to any prestige measure, even if the exact values are unknown. If new nodes are linked to old ones according to their ranking order, a long tail emerges.

The IU researchers’ model finds a striking application in understanding the evolution and social impact of search engines. “By sorting results, search engines give us a simple mechanism to interpret how the Web grows and how traffic is distributed among Web sites,” says Menczer.

The ranking model can help understand the dynamics of other complex networks besides the Web. For example, in a social system, one may be able to tell which of two people is richer without knowing their bank account balance. Such a criterion might explain the frequency and robustness of the complex structure observed in many real networks.
As more Americans are eating better, exercising more, and taking steps to improve their overall lifestyles, it’s vital they also maintain up-to-date accurate personal health records. That’s the advice Ruth Walker wants to share with all Hoosier adults.

Walker, an instructor with the school’s Health Information Administration Program at IUPUI, is leading a statewide initiative to encourage people to develop and maintain their health histories and records.

“We keep records of other aspects of our lives, such as finances, travel, home maintenance — you name it — but we often neglect to take that kind of interest in our health and those we care for,” says Walker, who also coordinates education activities for the Indiana Health Information Management Association. “A personal health record can help reduce duplicate tests and may allow you to receive safer and more effective treatments.

“Equally important,” she adds, “it helps you take a more active role in your health-care management.”

A survey conducted by the Markle Foundation in coordination with Harris Interactive reports that 42 percent of U.S. adults keep some form of a PHR — but usually the information is related to medical billing. The same report reveals that 84 percent of those who don’t keep records believe it would be a good idea.

The American Health Information Management Association recommends that personal health records should include information such as a person’s full name, address, and contacts (family and medical), blood type, allergies, prescribed medications, immunizations, exercise regimen, dietary supplements, medical procedures, diagnostic test results, and surgeries. Record-keepers also should include personal observations about their general health and other relevant anecdotal material.

Certainly, computers and the Internet are important tools in creating a personal health record, and there are many online services available. To get started, Walker suggests that patients go to the AHIMA Web site www.myPHR.com, which gives users a step-by-step process to create their own records and other helpful tips. Users should complete the forms with as much information they can provide, download the forms, and then review them with their doctors.

“Medical histories and information are found in doctors’ offices, hospitals, and with other health-care providers,” Walker says. “A personal health record brings most, if not all, of that information into what perhaps is the most important place — a person’s own hands.”

A PHR also is a boon for medical professionals. For example, a family doctor might not be aware that her patient has sought treatment from, say, a dermatologist or another specialist. Such information also should be recorded by the primary caregiver.

There’s another reason to have a PHR handy — a grim reminder is the aftermath of disasters such as 2005’s Hurricane Katrina along the Gulf Coast. Countless paper and electronic medical documents and records were destroyed or lost in the storm.

Getting the message out to all Hoosiers is Walker’s immediate goal. Last year, Walker began training others to meet with community, civic, faith groups, and other organizations to show the benefits and how individuals can develop personal health records.
Math models advance life-sciences research

Imagine being able to take a fantastic voyage into the human body and see how life evolves in a single cell, observe what triggers and sustains a beating heart — or perhaps journey into a tumor to witness how cancer destroys life and how doctors can halt cancer’s spread.

Such a possibility is not the stuff of overactive imaginations or sci-fi films; it’s the domain of Assistant Professor Santiago Schnell, who heads the Systems Biology Laboratory at the school’s Bloomington campus. The program offers a multidisciplinary approach to study biological phenomena by integrating research techniques and methodologies from biology, chemistry, physics, engineering, mathematics, and computer science.

This collaborative endeavor uses mathematical modeling to better understand the origin and progression of life systems. And that approach is explained in large part in “Multiscale Modeling in Biology,” featured this spring in American Scientist. Schnell, the principal author, is joined by Ramon Grima, of London’s Imperial College, and Philip K. Mani, of the University of Oxford.

“Firmly rooted in observation and experiment, biology for decades had little use for mathematical modeling, which was, in any event, a slow business until computers made it possible to simulate large complex systems of non-linear equations,” says Schnell, assistant professor of informatics, who holds adjunct appointments in physics and biology. “Today,” Schnell adds, “biologists and mathematicians desperately need one another — not just to find structure in the vast quantities of data flowing from experiments, but also to integrate this information into models that explain at multiple scales of time and of space how life works.”

Schnell and his colleagues have numerous ongoing research projects using multiscale modeling. One endeavor, funded by the National Institutes of Health, studies how early embryo segments work to form blocks of cells that are precursors of the spine. Failures in segmentation can be fatal or can cause developmental abnormalities such as scoliosis and spina bifida.

Schnell has been working on a modeling project based on genetic and molecular features of the evolution of colorectal cancer and the effectiveness of treatments. The study appeared in Theoretical Biology and Medical Modeling a year ago and has garnered much attention from cancer researchers and scientists; the study is ranked first among the most viewed articles of all time in the journal.

“We now have a good deal of information about the genetic mutations underlying colon cancer and how activation of the mutated genes is affected by oxygen starvation and overcrowding,” Schnell says, who is associate director at IU Bloomington’s Biocomplexity Institute at IU. “We can model the life cycle of a cell in its various stages and how it is influenced by environmental changes.”

The team is constructing a model to predict what proportion of cells would be sensitive to radiation therapy at different stages of tumor evolution. Currently, radiation is administered to cancer patients using extensions of a 20-year-old model that assumes tumor sensitivity and population growth are constant during radiotherapy. “We found that radiation doses administered to stressed cells is effective, but radiation administered after the tumor reaches an oxygen-starved condition has little effect because most of the cells have become inactive,” Schnell says.

Mathematical modeling of biological systems, including cancer, poses challenges on several fronts. The first is to ensure the collection of qualitative and quantitative experimental observations, and that requires closer collaborations with scientists from several disciplines. A second task is to construct a model that has a reasonable amount of precise parameters to simplify a problem without losing its essentials.

“The use of mathematical ideas, models, and techniques is rapidly growing and increasingly important throughout life sciences,” Schnell observes. “The development of new programs has eliminated the well-demarcated divisions between theory and experiment.” As Schnell notes, the culture of biology is changing. “There’s a growing awareness that, as a colleague recently told me, ‘to think is to model.’”

One of Santiago Schnell’s modeling projects focuses on colorectal cancer and the effectiveness of treatments.
New institute bolsters IU, region as major IT resource

Whether scientific or business, structured or unstructured, streaming or static, the need to effectively search for and use data is paramount. That need will be fulfilled at the recently established Data and Search Institute at the school’s Bloomington campus.

Funded by a planning grant from the National Science Foundation Industry/University Cooperation Center program, the institute will speed the flow of data and search into industry and provide a framework where scientists can engage in industry-relevant research.

“The future will be dominated by those who can most effectively search for data, use it — and create value from it,” says DSI Director Beth Plale, associate professor of computer science. “Our mission is to partner with industry to increase innovation and competitiveness in the United States.”

Indeed, the DSI took a major step to forge partnerships last March, when several industry representatives visited Bloomington to learn more about the institute and how they can benefit from what it has to offer.

IU is partnering with Florida International University on the project. Joining Plale in leading the institute is Dennis Gannon, professor of computer science, and Naphali Rishe, director of the High Performance Database Research Center at FIU.

“The grant is a big step forward for us because the NSF sets up distinct, non-overlapping centers around the country,” Gannon says. “The planning grant acknowledges the IU School of Informatics as the nation’s leader in data and search research.”

DSI promises to be a boon to its many users in different ways. Industry executives and their technical staffs are expected to use the Bloomington-based facilities, bolstering the region’s status as a burgeoning high-technology location. Students will have the chance to use the latest equipment and search tools, exposing them to problems and challenges faced in private industry.

The institute has more than a dozen nationally recognized researchers in all aspects of data and search. Their expertise spans from communication protocols and service architectures, to databases, artificial intelligence, theory, human-computer interaction, complex networks, bioinformatics, and social informatics.

Among the School of Informatics and its Department of Computer Science researchers involved in DSI are: Randall Bramley, Dennis Groth, Sun Kim, David Leake, Andrew Lumsdaine, Filippo Menczer, Kalpana Shankar, Eric Stolerman, and Dirk Van Gucht.

The DSI also has strong ties to IU’s Pervasive Technologies Labs and the National Institutes of Health-sponsored Chemical Informatics and Cyber-infrastructure Collaboratory.

More information about the Data and Search Institute is at www.dataandsenach.org.

Blogging system would improve disaster response

Timely and accurate information used by emergency responders often is lost in the helter skelter of massive natural disasters — and IU information technology experts are looking at ways to improve communications.

A team of School of Informatics and the Pervasive Technology Labs scientists has created the Bloomington Emergency Collaborative Information System, a research project in which bloggers monitor communication sources such as the Internet, television, and two-way radio traffic and then contact authorities.

“In the wake of recent disasters, such as Hurricane Katrina, it was clear a lot of useful information was generated in blogs and other social computing sites, but there was no systematic way to use the information and help responders and others get a real sense of what was happening,” says David J. Wild, assistant professor of informatics.

Wild is joined in the project by Kalpana Shankar, assistant professor of informatics; Rick McMullen, director and principal scientist of the PTL’s Knowledge Acquisition and Projection Lab; and Jaesoon An, a research scientist who works with McMullen.

The BECIS team recently unveiled its developing project to Bloomington leaders and Monroe County officials. As a result of that meeting, several people in the community volunteered to become “trusted reporters” for the BECIS blogging system.

BECIS has potential to be expanded statewide. The IU scientists will soon meet with officials at the Indiana Department of Homeland Security, which combines the state’s emergency management and homeland security efforts.

McRobbie to assume helm as IU’s 18th president

Michael A. McRobbie has been selected president of Indiana University, effective July 1.

McRobbie, who currently serves as interim provost and vice president for academic affairs at IU Bloomington, follows Adam W. Herbert, who came to IU in 2003.

The president-elect holds academic appointments in the School of Informatics, the School of Library and Information Science, and the Department of Philosophy.
Massive online database resonates well for musicians

Please take note: Donald A. Byrd is leading efforts to develop technology for large-scale online databases that will benefit music scholars and musicians.

Byrd, visiting associate professor at Bloomington, and two British colleagues have been awarded a $395,000 grant from the Andrew W. Mellon Foundation to fund the first phase of McTAMuSE (Methodologies and Technologies for Advanced Musical Score Encoding). Byrd will work with Tim Crawford and Geraint Wiggins, both affiliated with the Department of Computing, Goldsmiths University, in London.

Ultimately, McTAMuSE will provide a scholarly knowledge base of music for academic and practicing musicians, musicologists, music theorists, analysts, and others interested in music and its related fields of study. In the initial phase, they will develop improved optical music-recognition technology to transfer paper-based scores to computer-based encodings, a new encoding, and techniques for managing musical data, and they will test the use and effectiveness with select colleagues.

In later phases of McTAMuSE, the team plans to develop a method to crosslink score- and audio-based computer representations to enable the processing and analysis of musical data within a single work and across collections of work. They also will construct security, access, and validation measures for users.

“The basic source material for musicology and for most musical performances, at least in classical music, exists primarily as notated scores,” says Byrd, who is affiliated with the IU Jacobs School of Music’s Department of Music Theory. “Historically, these have been produced over a 500-year period, and a great amount of scholarly and editorial effort has been applied over the last two centuries to produce editions of this material.”

Byrd says that a vast quantity of musical scores are stored in the world’s libraries — the Library of Congress alone has more than 6 million scores — yet only a fraction of these resources are available in digital form. He said those in digital form are usually only image files: an even smaller amount can be found as encoded scores that incorporate the structural and semantic knowledge in written music. Finally, even the encoded scores that exist are rarely high quality.

“With the advent of recording technology at the end of the 19th century, including today’s digital capabilities, performances have become available in large quantities,” Byrd says. “The discipline of musicology is now beginning to recognize this audio legacy as an important resource not only as a means to preserve and manage recordings but for written scores as well.”

Byrd has worked extensively both in academia and the music industry. He was one of the main sound designers and sound-design software developers for the first Kurzweil synthesizers and was the principal designer of the influential music-notation program Nightingale.

Informatics signs aboard IU–Kenya partnership

The IUPUI campus is half a world away from Kenya’s Moi University, but it is building a bridge that links what has been described as one of the most significant international partnerships in the IU system.

The School of Informatics at IUPUI now is part of that campuswide effort that began in 1990, when the IU School of Medicine and Moi Teaching and Referral Hospital forged an innovative exchange program of medical faculty, residents, and students.

“This is an exciting way for the School of Informatics to extend international learning opportunities to our students and to those in Kenya who might come to our campus to study,” says Darrell Bailey, executive associate dean of the School of Informatics.

Bailey journeyed to Kenya and met with Moi officials last summer to discuss ways the School of Informatics could assist with the university’s information technology needs. Last fall, a School of Informatics technology envoy visited Eldoret and installed computers and wireless network systems. They also videotaped a ceremonial signing agreement involving IUPUI and Moi officials, an event that further cemented the partnership between the two campuses.

Linguistic diversity on Web may be on decline

While worldwide Internet usage may be climbing, linguistic diversity on the Web is having a hard time keeping up, a Bloomington social informatics researcher warns. “The concentration of Internet hosts is in countries with the lowest linguistic diversity worldwide, primarily in North America and Europe,” says Associate Professor John C. Paolillo. “Moreover, if global Internet user projections are accurate, Internet linguistic diversity is tapering off to a level close to what is experienced in daily life by a typical country in Southeast Asia or Oceania, and it’s not likely to increase anytime soon.”

Paolillo is the author of the study Linguistic Diversity in the Digital World, which he recently presented at the Internet Governance Forum in Athens, Greece. The study largely was funded by the United Nations Educational, Scientific, and Cultural Organization.

“The results are significant because they contradict the popular notion that linguistics diversity on the net is on the rise,” Paolillo says, “and they point out the technical and institutional challenges that many nations face as they strive to adopt Internet technologies for many purposes.”

Most previous studies about Internet linguistic neutrality have been conducted by private marketing firms (often pitching their own services and products) or government telecommunications monopolies that have vested interests in hawking certain outcomes. Paolillo’s investigation is said to be the first to critically evaluate those studies and compare online diversity with diversity experienced by people in their daily lives in countries around the world.

Many popular online services — Google, MySpace, and OhMyNews, to name but a few — serve speakers of many different languages from many different countries. Internet usage is on the rise in regions such as East Asia, South America, and the Indian subcontinent.

While the English language has an international communication role in many of these places, the reality is that people overwhelmingly speak hundreds of other languages in their daily lives.

Comics guru packs house at informatics-hosted event

Scott McCloud has some serious commentary about the role of comic books in our culture. On the other hand, the Boston-born cartoonist has some lighthearted, offbeat observations he’s sharing with audiences as he crosses America’s highways with his family in their minivan.

McCloud — an acclaimed comics theorist and scholar — took a detour from his travels to the School of Informatics at IUPUI this spring to celebrate the release of his book, Making Comics: Storytelling Secrets of Comics, Manga, and Graphic Novels (HarperCollins).

His presentation drew more than 400 people, followed by a book-signing session (Photos from the event appear on the back cover, courtesy of Susan Tennant and Debra DeSpain).

“Comics are changing fast, both in the kinds of stories that are being told and how their creators tell them,” McCloud says. “Thanks to the graphic novel movement, the Manga (Japanese-style comics) invasion, and the growth of Web comics, the story of comics in America is more exciting and unpredictable than ever.”

McCloud puts these and other trends into perspective in a machine-gun presentation of up to 700 images of cartoon images depicting their similarities and differences in various cultures and how they change over, or as he describes it, “mutate,” over time.

“I also encourage a lively Q-and-A with folks who attend because ideas interest me so much,” said McCloud, who was one of the pioneers and earliest promoters of Web-based comics and cartoons.

McCloud is the creator of cult science fiction comic book Zot!, Superman Adventures, Destroy! and the graphic novel The New Adventures of Abraham Lincoln, a quirky tale about a couple of youngsters trying to expose an impostor president.

“Yeah — the Lincoln book,” said McCloud of his first attempt at computer-generated artwork. “People hated it when it first came out. I like to think of it as a noble failure, though the consensus of comics fans at the time seemed to be that ‘failure’ was description enough. Happy to say I moved on from that.”
Hoop dreams, history assist in honoring NBA legend

Steve Mannheimer is a big fan of both basketball and history. That combination has resulted in a treasure trove of Indiana basketball memorabilia that Mannheimer was responsible for saving on behalf of a Hoosier hard-court hero: Oscar Robertson.

Joining with the IUPUI Solution Center, Mannheimer, professor of new media, assisted in developing a scrapbook of Robertson’s career highlights, including Robertson’s years as a prep star for Crispus Attucks High School, the University of Cincinnati, and the National Basketball Association.

“I was made aware of a scattering of Robertson memorabilia from newspapers and magazines that needed to be indexed and saved in a permanent fashion,” Mannheimer says. “It was a great honor and thrill to be able to provide Robertson with the stories of his legendary career.”

The IUPUI Solution Center late last year hosted its 1,000 Solutions Celebration, an opportunity to acknowledge the many community and campus partnerships created through the center over the past three years. And Robertson and Mannheimer were on hand with IUPUI faculty, staff, and community partners for a daylong series of events.

“The scrapbook was an exciting project that partnered the Indiana Pacers, the School of Informatics, and the Solution Center to preserve Robertson’s personal scrapbooks for donation to the Crispus Attucks Museum,” Solution Center director Teresa Bennett says.

Taking aim at cancer

The casualty list paints a grim picture: lung cancer is the leading cause of cancer deaths for men and women in the United States, claiming about 160,000 lives annually. Jake Y. Chen has enlisted in the battle against lung cancer, and his weapon of choice is bioinformatics.

Chen, an assistant professor at the school’s IUPUI campus, has joined a team of IU scientists who seek to develop more effective chemotherapy treatments for lung-cancer patients. He recently was awarded a $174,000 grant to conduct bioinformatics research for the project “Predictive Lung Cancer Systems Biology.” The two-year grant comes from the IU Cancer Center-based Lung Cancer Working Group.

“This collaborative research is an example, if successful, of how to translate basic research into clinical application to patients,” Chen says. “I am excited that the prospect of this research will have the direct impact of providing improved chemotherapy treatment plans for patients, thereby saving lives.”

The overall project aims to improve the survivability of lung-cancer patients after the surgical removal of tumors, Chen says. He is joined by co-investigator Steve Valentine, a researcher at Predictive Physiology & Medicine Inc. in Bloomington, Ind.

Chen’s focus will be to collect proteomics profiles of patients, analyze lung-cancer relevant proteins, and apply data-mining techniques — the process of automatically searching large volumes of data — to predict which chemotherapy provides the most benefits to an individual patient. Proteomics is the study of proteins’ structures and functions, including the way they work and interact with each other inside cells. Indiana University is well regarded for its proteomics research at the School of Medicine in Indianapolis and at its Bloomington campus.

Chen and Valentine will work closely with researchers and clinicians at the IU Cancer Center. Science directors of the project are cancer clinicians/researchers Lawrence Einhorn, IUPUI Distinguished Professor and professor of medicine; and Nasser Hanna, assistant professor of medicine.

Einhorn is a recognized authority on the treatment of lung cancer, but perhaps is best known for his work in testicular cancer. In 1974, he and IU urologist John Donohue developed a chemotherapy regimen and surgical technique for testicular-cancer patients that now boasts a 95 percent cure rate. Einhorn was the principal physician who successfully treated Tour de France champion Lance Armstrong for testicular cancer.

Chen also is a co-principal investigator of a National Cancer Institute-funded study that pools the talents of scientists at IU and Purdue.

ACM honors Dybvig as Distinguished Engineer

R. Kent Dybvig, professor of computer science, was named Distinguished Engineer by the Association of Computing Machinery.

He was among 49 members recently inducted into ACM’s new program, which recognizes outstanding achievements in both the practical and theoretical aspects of computing and information technology. The recipients hail from some of the world’s leading universities, industries, and laboratories.

The ACM specifically cited Dybvig’s design and development of Chez Scheme, a super-fast, high-performance implementation of the Scheme programming language.

Dybvig, who earned a doctorate in computer science at the University of North Carolina at Chapel Hill, has written numerous articles for professional journals and is the author of The Scheme Programming Language (MIT Press, third edition). His research interests at IU include programming-language design and implementation, compilers, and code optimization.
Connelly, Gupta garner research, teaching accolades

Kay Connelly and Minaxi Gupta, assistant professors in computer science, are the 2006–07 recipients of the Outstanding Junior Faculty Award at IU Bloomington. The award, presented annually by the Office of the Vice Chancellor for Academic Affairs and Dean of Faculties and the Office of the Vice Provost for Research, is designed to enable tenure-track faculty to enhance their research programs and to recognize junior faculty who have devoted considerable time to IU’s research, teaching, and service missions.

Each of the five recipients receives $14,500 to support his or her research and creative activity.

Connelly and Gupta are assistant professors in the Department of Computer Science in the School of Informatics on the Bloomington campus. “Kay and Minaxi are excellent teachers and researchers and are well-respected by their colleagues and students,” says Andrew J. Hanson, chairman of the Department of Computer Science. “This recognition is a tremendous honor not only for them but for all of the School of Informatics family.”

Connelly’s research on pervasive computing deals with computational devices that are integrated into the fabric of human life. Her interests focus on advanced methods for modeling, evaluating, and understanding acceptance of ubiquitous technologies, including health-care management and the effective exploitation of mobile devices.

Gupta’s research deals with security and performance issues in modern computer networks and focuses on the need to improve the structure of the Internet architecture to address network security at the most fundamental levels of design.

Faculty from the School of Informatics have been honored twice before with the Outstanding Junior Faculty Award. Mu-Hyun “Mookie” Baik, assistant professor of chemistry and informatics, was a recipient (2005–06), as was Sun Kim, assistant professor of informatics (2004–05).

Connelly’s research uses computing to help patients monitor their own health, while Gupta’s work focuses on helping people monitor their own computer networks — by design.

Mything in action: Computing only for geeks

For the record, the Women in Computing at Indiana University Bloomington group wants you to know that computing education and careers are not for geeks only.

That’s the message WIC@IU, a School of Informatics-sponsored organization, took earlier this year to the Indiana Computer Educators conference in Indianapolis. The annual event drew more than 2,000 educators and technology experts from around the state to learn about the latest trends and how they can be adapted.

WIC@IU members demonstrated their interactive Just Be K–12 program, which the group often has presented to middle- and high-school students throughout Indiana. Participants use remote control clickers to vote on polls addressing stereotypes commonly held about computing and related careers.

“They usually conjure up images of a male, socially challenged nerd working in isolation at a computer,” says Suzanne Menzel, senior lecturer in computer science. “We show them pictures of real computer people — they can just be themselves and still be computing professionals.”

Joining Menzel in the presentation at ICE were Laura Hopkins of the Department of Computer Science, graduate student Tonya Stroman, and undergraduate Jennifer Trueblood.

The workshop defined the ever-evolving computing disciplines, identified what students and teachers need to know about IT-related careers and research, and described the need for racial and gender diversity.

Just Be student volunteers have presented to thousands of students throughout the Midwest, as well as at local and national conferences. The program was inspired by the Roadshow, created at Carnegie Mellon University by women in computing who similarly promote that academic discipline.
Shed that ugly e-mail fat ... and eat chocolate

So the New Year’s resolution to lose weight and hit the gym is now just a failed memory to good intentions? Now you can tackle a new diet that eliminates excess e-mail pounds and a training program that can turn you into the Schwarzenegger of cyberspace.

Martin A. Siegel, executive associate dean at the school’s Bloomington campus, and Steve E. Clapp of Fort Wayne, Ind., have a recipe to help computer users keep their in-boxes toned and empower them to use e-mail to achieve personal and professional goals. The E-Mail Diet Book (LifeQuest) is a slim 121-page book that gives weighty and practical tips.

“The book began over a Sunday brunch conversation with Steve and his wife,” Siegel says. “We realized that we were overwhelmed, as were many of our friends, with the sheer volume of e-mail we deal with in our daily lives. We came to the conclusion that we would develop some strategies that would benefit ourselves and others.”

Among the healthy servings of advice Clapp and Siegel offer in their book are ways to help users avoid becoming victims of spamming, identity theft, and discourteous messages. They also explore ways to use e-mail to streamline work and improve productivity, discuss approaches to use e-mail to better connect users with their families and the world at large; and deliberate the future of electronic mail as it becomes more a part of global communications.

The authors use comparisons, strategies, and the successes and failures of nutritional dieting to illustrate to readers how they can achieve and maintain a healthy balance in the e-mails they send and receive. Most chapters of the book end with recipes using chocolate.

“Our intention was to have fun using the diet analogy but at the same time make it clear we are serious about the importance of the strategies we suggest,” Siegel says.

For more information about The E-Mail Diet Book, go to http://emaildietbook.com.

Talon draws high praise from illustrators

Durwin S. Talon has new admirers from the Society of Illustrators. His creation of sequential artwork, BONDS: ADAGIO, has been selected for inclusion in the society’s 49th annual 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 professionals. This marks the fourth year for this relatively new component of the annual exhibition.

“I just feel honored knowing that my work will be hanging on the same walls where the works of Norman Rockwell, N.C. Wyeth, Maxfield Parrish, and Montgomery Flagg are also displayed,” says Talon, associate professor of new media at IUPUI. “I got into illustration because of these giants, so this is all rather overwhelming.”

Sequential art is a multi-image project for which a sequence of images is necessary to fully convey an idea or story. Examples include work that has been produced or published, such as comic books, art journalism, graphic novels, pre-production art, and animation (including television, film, Web, or video games).

Talon incorporated a wide range of skills and various applications in creating the award-winning work, including 3-D, vector, raster, layout, video, and paint programs.

“My project BONDS exemplifies another kind of story that can be told with new media. This project is the culmination of support from friends and family, without which I could not realize this lifelong dream.”

Image Comics, the third largest publisher of comics in the United States, will publish BONDS: ADAGIO in July.
‘Your Name Is Miracle’

They were asked to tell a story from the heart, a tale perhaps involving the human heart.

That’s what Edgar Huang, JaJuan Shirley, Chris Francis, and Matt Turner set out to do more than a year ago when they were approached by the Indiana Organ Procurement Organization to produce a video about organ donations, told from the perspectives of donors’ families, recipients, and the nurses at Clarian Health Partners’ Methodist Hospital.

It became an all-hands effort for Shirley, Francis, and Turner, media arts and science students at the School of Informatics at Indiana University–Purdue University Indianapolis. They pooled their skills under the supervision of Associate Professor Huang to produce Your Name Is Miracle.

Their work has garnered the 2007 American Association of Critical-Care Nurses Circle of Excellence Award, a program recognizing Web-based, print, and broadcast media excellence in the portrayal of healthcare providers, especially acute and critical care nurses and their contributions to patients and their families.

The School of Informatics team is scheduled to be recognized in May 2007 at the AACN’s annual National Teaching Institute and Critical Care Exposition in Atlanta.

“It started as a class project in advanced video,” Huang says. “But it became immediately clear that what they were creating was more than a video project—it was a rare opportunity to learn of the great need for organ donations and to share the stories of those whose lives have been affected by these life-giving gifts. I am proud of what our students have produced.”

Shirley and Francis are seniors at the School of Informatics; Turner earned his undergraduate degree more than a year ago. The 16-minute video includes poignant interviews with donors’ families and IOPO and transplant coordinators and nurses. One segment focuses on a Methodist Hospital nurse whose husband was critically injured in a motorcycle accident; long before the wreck, they had agreed they would be organ donors if such a situation arose. In another vignette, a transplant nurse recalls his encounter with an organ recipient whose last name is “Miracle.”

“The enthusiasm and creativity of the students energized us all,” says Cassie Latta, the IOPO in-house donation coordinator for Methodist Hospital. “Their skills and experience with creating communication tools brought the personal stories to life, and you can feel that when you watch the video. Personal stories like these help people connect to real-life experiences of others and help to motivate them to become donors.”

IOPO (www.iopo.org) is the not-for-profit health service dedicated to advancing organ, tissue, and eye donation throughout Indiana. Last year, more than 25,000 Americans were saved through organ transplants. However, more than 90,000 people, including more than 600 Indiana residents, are currently waiting for life-saving organ transplants.

Your Name Is Miracle can be viewed at www.iupui.edu/~j21099/miracle/miracle.html.

Informatics senior attends Microsoft global summit

A Bloomington School of Informatics senior was among only 15 college students around the world chosen to participate in the Microsoft Most Valuable Professional Global Summit in Seattle last March.

Jeff Gehlhausen was one of three students from the United States to attend the March 10–14 summit. Microsoft MVPs are developers who have strong ties to Microsoft and demonstrate their commitment and excellence on projects and online technical sites.

Gehlhausen is a Microsoft Student Partner technical representative to IU. In that role, he supports Microsoft products, events, and promotions on the Bloomington campus, and he also encourages IU students and faculty to become involved in information technology activities.

“I was surprised when I learned I was selected to attend the summit, and it was truly an honor,” says Gehlhausen, a native of Dale, Ind. “It also is a tremendous opportunity to meet with peers around the globe and learn about their work and activities.”

Gehlhausen will earn a bachelor’s degree in informatics this summer. He plans to pursue informatics graduate work at Bloomington.

New media students snare publishing contracts

A trip to ComicCon 2006 in San Diego paid off nicely for two IUPUI informatics students. Guin Thompson and James Vining pitched their creative works to publishers at the prestigious gathering and came away with contracts to publish within the upcoming year.

Vining, a new media graduate student, is the author and artist for First in Space, to be published by ONI Press. The work is a graphic novel that follows the true story of Ham, the first monkey shot into space by NASA. Vining is currently in negotiations to develop this title for the Comics in the Classroom educational program with ONI Press.

Thompson, a new media undergraduate student, is the co-author and artist for Scars: Stories of a Life
Students warm to career fair despite winter storm

Students journeying to the School of Informatics-sponsored Spring IT Career Fair last February in Bloomington saw little evidence of spring as they braved ice-covered streets and snow, but they warmed to the prospects of opportunities awaiting them.

More than 250 students attended the event at the Indiana Memorial Union to meet with representatives from 30 firms seeking to add new talent to their companies. In fact, many of the would-be employers conducted on-site interviews for jobs and internships.

The fair was open to all students, particularly those majoring in informatics, computer science, computer information systems, instructional systems technology, graphic arts, telecommunications, cognitive science, and mathematics.

“One of the recruiters who was here for the first time said that he was very impressed and found our students were equal or better in qualifications to the best schools, such as Carnegie Mellon, that he had visited previously,” says Dick McGarvey, director of career services at the School of Informatics.

This is the first time the school has hosted a career fair during IU’s spring semester. A similar event also is held in September each year. The number of employers participating in the fall career fairs has increased markedly in recent years, a trend McGarvey attributes to the quality of IT education and training students receive at the School of Informatics and elsewhere at IU.

The U.S. Bureau of Labor Statistics reported last year that one in four jobs created between now and 2012 will be related to information technology. However, there has been a declining number of students seeking degrees in IT, and the increasing demands of employers could lead to a significant worker shortage, industry officials warn.

Participating students also had an up-front demonstration of Vista, Microsoft’s newly launched operating system. A Microsoft representative was on hand to explain and demonstrate the system, which is expected to be in wider use at IU sometime in 2008.

Well-Lived. It’s the first of a three-part series that chronicles a grandfather’s life history (as told by his body scars) to his granddaughter. This series served as the basis of her senior capstone project and will be published by Archaia Press.

Two informatics doctoral students honored by ACS

Two School of Informatics doctoral students whose research could advance significant pharmaceutical discoveries in areas such as cancer therapy were recognized for their work by the American Chemical Society.

Xiao Dong and Huijun Wang are the recipients of ACS’s Division of Chemical Information-MDL Elsevier scholarships. They were presented with their awards as invited guests to the 233rd National Meeting of ACS in Chicago last March.

“This is quite an honor for the school to have two graduate students recognized for the creativity and time they have invested in their respective areas of research,” says School of Informatics Dean J. Michael Dunn. “Their ongoing work will have great value for future cancer research and clinicians.”

Dong, who was awarded a CINF-IO Informatics Inc. scholarship at last year’s ACS annual meeting, joins a team pioneering the use of Web service and intelligence-based systems for possible use by pharmaceutical companies. These tools enable scientists to more rapidly gather the information needed to make decisions about which chemical compounds are most likely to be safe and effective drugs.

Wang is part of a research group that gathers, researches, and analyzes the data of chemical compounds that potentially could be used as anti-cancer agents in human tumor cell lines.

The two doctoral students conduct their research under the direction of David Wild, assistant professor of informatics.

The American Chemical Society supports scientific inquiry in the field of chemistry. The organization has more than 160,000 members at all degree levels and in all fields of chemistry, chemical engineering, and related fields.
Speaking about informatics

The School of Informatics at IUPUI has launched a new outreach campaign aimed at local service clubs and other organizations interested in learning more about the school. The Informatics Speakers Bureau is designed to provide a guest speaker for luncheons, meetings, and other public gatherings where a discussion about informatics would be of interest.

“We recognize that the term ‘informatics’ is unfamiliar to many people,” says Neal G. Moore, director of community relations for the school. “Scheduling a School of Informatics speaker will be a good way for us to tell our story and to answer your questions about informatics.”

Talks typically range from 20 to 30 minutes and usually include a related visual presentation. The Informatics Speakers Bureau is available, at no charge, in exchange for opportunities to meet influential community leaders and organizations to tell our story.

More information about the Informatics Speakers Bureau is available at http://informatics.iupui.edu/contact/speakers_bureau.php.

Elsevier MDL leader joins science board

Trevor Heritage, senior vice president and chief scientific officer of Elsevier MDL, has joined the Science Informatics Advisory Board at the Indiana University School of Informatics. Heritage is among 12 leaders from the business, research, and industry fields in science and discovery informatics. SIAB members advise the directors of the school’s graduate programs in bioinformatics, chemical informatics, and laboratory informatics at its Bloomington and IUPUI campuses.

“Heritage’s leadership skills and life-sciences research experience will add depth to our board,” says School of Informatics Dean J. Michael Dunn. “This board provides guidance in areas such as curriculum and program development, public and private sector funding, external relations, long-range planning, research support, and building strategic alliances.”

Heritage brings extensive scientific and pharmaceutical research experience to the SIAB as well as knowledge of biopharma workflows and computational modeling. Heritage says, “The interdisciplinary approach of the School of Informatics at Indiana University, focusing on both state-of-the-art information technology and chemistry/life-science discovery, is thoroughly aligned with Elsevier MDL’s research integration strategy, and I’m delighted to be a member of the Science Informatics Advisory Board.”

Heritage holds a doctorate in organic chemistry from the University of Reading, England. He began his career with Shell Research Ltd. in the United Kingdom.

In 2002, Elsevier MDL and the School of Informatics established the Elsevier MDL Excellence in Informatics Fellowship, which provides funding support to deserving incoming or second-year graduate students pursuing degrees in chemical informatics or bioinformatics.

IT, business leaders named to Dean’s Advisory Council

David T. Pfenninger and Scott Dorsey have accepted appointments to the Dean’s Advisory Council at the School of Informatics. In doing so, they join a group of business, community, and industry leaders who advise the school on curriculum and program development, public and private sector funding, research support, long-range planning, student guidance, external relations, and institutional advancement.

Pfenninger is the founder and former chief executive officer of Performance Assessment Network Inc. (pan®). Dorsey is the co-founder and chief executive officer of ExactTarget Inc.

Pfenninger launched pan® in 2000, a company that provides state-of-the-art, secure automated systems for the administration and delivery of professional assessment, human resources, and testing instruments. The Carmel, Ind.-based company has more than 5,000 registered test and assessment administrator customers in 22 countries, with many Fortune 100 and major government clients.

Currently, Pfenninger serves on the board of directors for Houston-based BubbleUp, an online music and marketing company he co-founded in 2005, and Vinculum, a San Diego-based provider of Voice Over Internet Protocol solutions for business.

“Being an Indiana University graduate and former faculty member, this appointment to the Dean’s Ad-
Endowment honors Dunn, invests in innovation

Some investments result in short-term profits, but an Indianapolis businessman envisions lifelong dividends with his establishment of a new scholarship at the School of Informatics.

The $100,000 endowment for the “John R. Gibbs Scholarship for Innovation” bears the name of its benefactor. It awards a scholarship of $2,500 annually to an informatics student at IUPUI. It also funds a four-year $2,500 annual scholarship in Bloomington, an amount that will be boosted to $5,000 with a matching grant from IU Bloomington’s Matching the Promise campaign.

“It’s been on my mind to endow a scholarship, and I wanted to get it done before Dean Michael Dunn retired to honor him and all he has done for the School of Informatics,” says Gibbs, chairman and CEO of Qtrac Software LLC, a life-sciences software company for the long-term care industry.

Dunn, who has been at the helm of the school since its founding in 2000, is scheduled to retire July 2007.

“Since the School of Informatics is so new, the pool of scholarships is very small,” says Gibbs, co-founder of Interactive Intelligence Inc. “I hope this endowment encourages and motivates others to provide scholarship support to this exciting and worthy new school. For the average cost of sending a student through college today, I can provide two scholarships in perpetuity. Specifically, the $100,000 endowment will provide $7,500 in scholarships each year — forever.”

While the new scholarship recognizes the school’s brief and successful history, it also emphasizes its future.

Innovation can be found or created in any endeavor, area of interest, or occupation,” says Gibbs, a Carmel, Ind., resident. “It does not have to be in the information technology or high-tech arenas. That’s why the scholarship requirements are very open to a wide variety of applicants.”

The new scholarship was announced at a recent meeting of the School of Informatics Dean’s Advisory Council, of which Gibbs is a founding chairman and continuing member.

Following the establishment of the scholarship at the School of Informatics, Gibbs endowed a $100,000 scholarship at the IU Kelley School of Business. It will be used to attract outstanding students who have demonstrated or expressed a stated interest in innovation and entrepreneurship.

Gibbs is active in various businesses, civic, and academic activities in Indianapolis and throughout the state and has received numerous awards for his public and private contributions. He received his undergraduate degree in 1972 at IU Bloomington, where he later pursued graduate work in business economics and finance.

John R. Gibbs, BS’72, also recently endowed a scholarship at the IU Kelley School of Business.

Pfenninger. “We employed graduates and interns from the IU School of Informatics at pan® to great benefit, so I know first hand that the school is producing top talent. I look forward to collaborating with Dean Dunn and the other council colleagues to facilitate the ongoing progress and excellence of the school.”

Pfenninger is the co-owner of four U.S. patents, including “Test Administration System Using the Internet” and the Web-based “System and Method for Evaluating Talent and Performance.”

A 1983 graduate of Indiana University, Pfenninger earned his doctorate in clinical psychology from Miami University of Ohio and served as an assistant professor in clinical psychology at the IU School of Medicine and at the Roudebush Veterans Affairs hospital from 1990 to 1996.

Dorsey is responsible for the overall leadership and direction of the Indianapolis-based ExactTarget, a leader in on-demand e-mail software solutions for permission-based e-mail marketing. ExactTarget serves more than 5,500 businesses and other organizations worldwide, including clients such as The Home Depot, Scotts Miracle-Gro Co., Delta Faucet, CareerBuilder.com, and Encyclopædia Britannica.

“At ExactTarget, our team strives to display excellence and leadership in every aspect of our business,” says Dorsey. “The IU School of Informatics is dedicated to achieving parallel goals in the educational space. The potential of Indiana’s business and technology environment are directly tied to the quality of our educational investment, and I look forward to contributing to a group so clearly focused on the success of IU students and future leaders.”

Dorsey earned his undergraduate marketing degree from IU and a master’s of business administration from the Kellogg Graduate School of Management at Northwestern University. At Kellogg, he focused his work on entrepreneurship and e-commerce and technology.
Robert E. Kinicki, MS’75, is a professor of computer science at Worcester Polytechnic Institute in Massachusetts. A member of the WPI faculty since 1978, he served as interim head of the Computer Science Department in 1986–87 and as department head from 1988 to 1998. Active in faculty governance, he now serves as secretary of the WPI faculty. Kinicki has published more than 30 peer-reviewed papers and nearly 30 technical reports based on his research in the areas of electronic commerce, computer network performance, network management, and multicast routing.

Ted Goshorn Lojewski, BS’78, and her husband of 25 years live in Colorado Springs, Colo. They have four sons. Lojewski has left hospital medical records to work as a compliance auditor for CHAN Healthcare Auditors. She has served as secretary of the board of the Colorado Health Information Management Association for four years.

Rex Dwyer, AB’79, MS’81, never took intermediate Spanish, but was recruited to teach it at the University of North Carolina at Chapel Hill last fall. All of his students passed the common final exam. He will receive a master’s in economics and Latin American studies this May.

Donald A. Aker, BS’83, is a technical operations manager at the Naval Undersea Warfare Center Division Newport (R.I.). The Society of Women Engineers recognized Aker with a 2006 Rodney D. Chipp Memorial Award for his efforts to enhance opportunities for women pursuing engineering and technical careers.

Kevin R. Erdman, BS’84, is a partner at the Indianapolis law office of Baker & Daniels, where he practices in information, Internet, and intellectual-property law. He presented “Data Privacy Concerns in the Mobility Supply Chain” at the 2006 Global Workforce Symposium in Dallas. He lives in Indianapolis.

Paul A. Horan, BS’84, is a principal architect with the federal solutions group of Sybase Inc. He recently moved from Buffalo, N.Y., to the Washington, D.C., area.

Manjit Singh, MS’93, has been promoted to chief information officer of Chiquita Brands International, headquartered in Cincinnati. In this role, he serves on the company’s management committee. Singh is responsible for all facets of Chiquita’s global commercial and innovations systems, infrastructure and application services, master planning and architecture, Web applications, and information delivery.

Felisa Hurd Tennant, BS’97, MIS’01, is an assistant clinical professor in the School of Informatics at IUPUI. The Bargersville, Ind., resident is a member of the School of Informatics Alumni Board.

Hans-Joerg Tiede, MS/PhD’99, writes, “I was granted tenure in the Department of Mathematics and Computer Science and promoted to associate professor of computer science at Illinois Wesleyan University in Bloomington, Ill. I live with my wife, Moreena (Bond), MA’98, and our daughters, Annika and Franciska, in Normal, Ill. My most recent publication, a survey of applications of modal logic in linguistics, is to appear in the Handbook of Modal Logic. The chapter was co-authored with my IU PhD adviser, Larry Moss.”

David J. Kohne, BS’03, started an affiliate marketing company, www.stealdeals.net. “I maintain a database of coupons, deals, and discounts from more than 200 vendors,” he writes. “The idea behind the Web site is to create a more informed Internet shopper. We strive to save people time and money by posting the best deals on what people want.” Kohne lives and works in Indianapolis.

Aaron M. Sutter, BS’04, married Kelly (Whitaker), BS’04, on Aug. 20, 2005, in Beck Chapel at IU Bloomington. Their reception was held in the Indiana Memorial Union’s Frangipani Room. Aaron is a regional account manager for Cornerstone Communications, a document-management hardware/software solutions provider in Indianapolis. The Sutters live in Fishers, Ind.

Steven J. Thompson, MS’04, teaches graphic design and interactive Web courses at Platt College in San Diego.

Harlon J. Wilson, BS’04, MS’05, is the president of Medical Animatics Inc. in Indianapolis. The company is a media arts firm that provides animation, video, and interactive training products. A Christine Jakacky Mentor of the Year Award winner from IUPUI, Wilson continues to work with students and interns as a mentor and career coach.

Vasudha Chandrasekaran, MS’05, has been part of a Microsoft project team gauging the experiences of Windows operating system users, particularly the design of the company’s new Windows Vista system. She reports that three other IU alumni are involved in the project.

Indiana native Patricia A. Ellison-Soper, MS’05, exhibited her paintings for the first time in Indiana at the Artifacts Gallery in Broad Ripple Village. Patricia Ellison: Skyscrapers, reflecting her time spent in Chicago, opened Sept. 15. A painter and sculptor for 38 years, Ellison-Soper is also a consultant to advertising firms, a writer, a graphic designer, a video artist, and a consultant to advertising firms.

Adam B. Shaul, BS’05, is a solutions delivery consultant for Cerner Corp. He is responsible for the building, installation, and troubleshooting of information technology at health care sites. Shaul lives and works in Kansas City, Mo.
Scott A. Jones, BS’84: Inventor, engineer, entrepreneur

S cott A. Jones has an uncanny ability to predict the future. It’s because he has invented so much of it. As a result, countless folks around the globe use his inventions on a daily basis.

Jones, who earned his bachelor’s degree in computer science from Indiana University in 1984, has forged a heady reputation as a technological trailblazer, energetic entrepreneur, and passionate philanthropist. The Carmel, Ind., businessman doesn’t merely think outside the box when considering how to turn an idea into reality; he often takes the box apart completely and assembles an entirely new package unique, useful, and marketable.

“At heart, I’m really an engineer with an entrepreneurial spirit,” Jones says. “I’m constantly thinking of new inventions.”

Considered one of his best-known ideas is the voicemail system most of us use today. Jones developed that idea a mere two years after receiving his IU diploma. Jones, who was working at MIT’s Artificial Intelligence Lab at the time, during his “spare” time invented and patented an industry-changing voicemail system and co-founded Boston Technology. The firm later merged with Converse Technologies, producing a multi-billion dollar company whose products today are used by the majority of telephone companies, and their customers, worldwide.

In the mid-1990s, Jones created Gracenote, one of the first companies to develop special music recognition software. Gracenote’s groundbreaking technology is now at the heart of several Internet music products, such as Apple’s iPod and iTunes; music services from Yahoo, AOL, Real Networks, and others; mobile-phone music services; and Sony’s VAIO computer line. Gracenote also is one of the first companies to offer legal downloads of millions of song lyrics.

Jones switched gears in 2005 when he founded IndyRobotics LLC (which has now evolved into Precise Path Robotics). He led a team that created Indiana’s Robotic Vehicle (IRV), one of the world’s premier self-driving vehicles. As a result, several new products are in development to follow in IRV’s footsteps, including a robotic lawn mower.

“With IRV, we qualified for the 2005 DARPA Grand Challenge, which was a field test of advanced autonomous ground vehicles,” Jones says. “Congress has mandated that one-third of all military vehicles must be autonomous by 2015. This is something that has never been accomplished in the history of mankind, and we are on the bleeding edge of an emerging industry. While there will be bumps in the road, this is the beginning of a journey to create the future automobile.”

His newest venture took flight in September 2006. Jones wanted to solve a problem search engine users were experiencing, namely the massive volume of search results they often must sift through online when looking for information. His solution was ChaCha, which offers two ways to search: One way is with human guides who connect with users, via real-time chat to deliver personal and targeted results for users’ searches. The other is an instant search that provides the “best” results offered by similar search engines and the “best” of indexed results from searches on a similar subject. Essentially, ChaCha gets smarter with every search.

If all that weren’t enough to keep an entrepreneur busy, Jones is also chairman of Gazelle TechVentures and GrowIndiana Media Ventures.

Active in civic affairs, he serves on the advisory boards of the Indianapolis Zoo and the Children’s Museum of Indianapolis. His philanthropic initiative — the Scott A. Jones Foundation — makes significant contributions to worthy causes that include local schools and technology efforts.

“My degree from IU and many years spent there have proven to be invaluable,” says Jones, who was awarded an honorary doctorate in science from IU in 2002. “I held leadership roles in several student government and honorary organizations, which helped me prepare for the challenges of co-founding and leading my first company soon after I graduated from IU.”

He says he was inspired by luminaries such as IU Pulitzer Prize-winning professor Douglas Hofstadter, whom he followed to MIT during his sabbatical.

“There is no question that my rich and diverse Hoosier experiences led me to become an inventor and entrepreneur,” Jones says.
From the dean

(port for our school. And I confess — I did give my Power-
Point presentation on many of these occasions. I didn’t think
it was magical, but maybe it was, given the effect that it had.
So I didn’t realize what a risk-taker I had become. And the
risk was not simply that of the school’s not being properly
financed. There were risks in finding the right faculty and
staff, in recruiting students to a new school, and in building
attractive and respectable academic programs. And I hate to
mention this, but there were risks of personal reputation as
a number of faculty members from traditional disciplines,
many of them old friends, shook their heads, wondering
whether I had lost my senses in trying to build a new multi-
disciplinary school that focused on information technology.

I can now point with pride at our having over 100 faculty
and approximately 1,500 undergraduate and graduate stu-
dents on five different campuses of IU. But perhaps I take the
most immediate pleasure in the fact that if you Google the
word “informatics” (as I often do) the IU School of Informat-
ics comes up typically as the first or second hit, with the other
hit being on the Wikipedia definition of “informatics” (where
again our school features very prominently).

Yes — now I can look back, with pride and confidence,
and see what has been built, not just by me, of course, but by
the joint efforts of a lot of wonderful people. And our new
dean, Bobby Schnabel, will take our school to the next stage
of excellence. I have worked with Bobby in a variety of cir-
cumstances, including his being the chair of the Computing
Research Association’s IT Deans Group when I was the vice
chair, and I have great confidence in his leadership.

A well-known Chinese proverb reminds us that a journey
of 1,000 miles begins with the first step. Little did I know
—or could I ever imagine — where my journey would take
me when I took that first step at Indiana University nearly
four decades ago. But what an adventure it has been. Best
wishes to all of you who have been part of that journey!

J. Michael Dunn

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