

IUPUI SCHOOL
OF SCIENCE



FOR ALL

The Indiana University Bicentennial Campaign

FOR ALL WHO PURSUE UNIVERSAL TRUTHS

The School of Science at IUPUI is bringing great minds together in research, technology, health, and the community as we bridge STEM education with research. Entrepreneurial in spirit, we are ready and able to anticipate the newest trends in science. Our culture encourages the pursuit of cutting-edge research and innovative collaboration. Our faculty and future scientists are passionate about making an impact in their fields of study and the areas in which they live.

The School of Science teaches the most credit hours on the IUPUI campus. We recruit internationally renowned faculty members every year. Forty percent of our undergraduate students come from the top ten percent of their high school classes. Our graduates are prepared for an ever-changing future.

Our reputation is strong, but to achieve the next level of prominence, it will take you. You have the power to help us move from our reputation as a leader in Indiana to a national leader with significant resources.

With the launch of ***For All: The Indiana University Bicentennial Campaign***, we invite you to join us in support of the IUPUI School of Science and our mission to improve technology, health, and the community for generations to come.

Together, we can fulfill the promise of a stronger Indiana, and a better world for all.



FOR ALL WHO SHAPE THE FUTURE

GOAL # 1: ENHANCE STUDENT SUCCESS

Our top priority is to increase undergraduate scholarships and graduate fellowships. Because 90 percent of our students come from Indiana and 90 percent of our graduates stay in Indiana, an investment in their education is also an investment in a stronger future for our state.

Today, there is an overwhelming need for professionals in science, technology, engineering, and mathematics (STEM) occupations. STEM jobs are growing three times as fast as any other field, and account for four out of five of the highest-earning jobs in Indiana. Since 2004 more than 220 life science start-ups have emerged—the largest growth industry in the state. Indiana life science amounts to more than \$4 billion in annual payroll, with starting wages twice the state average.

We have the unique responsibility of providing hands-on research experience and producing well-rounded and adaptable scientists. By preparing them to solve problems, regardless of the field, we have a direct impact on our communities and the economy.

But first, we must open doors for the many qualified, deserving individuals who might not have access to a School of Science education, simply due to lack

of funding. Merit- and need-based financial assistance ensures that we can attract and sustain top talent, regardless of means.

Join us in supporting students through endowed scholarships and fellowships. Together, we can create life-changing, world-altering opportunities for aspiring scholars. With your help, they can gain an education that will fuel successful careers and help them advance their field and the state of Indiana.

A SURE RETURN ON INVESTMENT

The return on investment for supporting students is evident in the impressive and varied achievements of our alumni; for example, Kevin T. Kabat '81, who received his master of science in industrial/organizational (I/O) psychology. While in school, he got his start in the banking industry, working on an employee turnover project at Old Kent Bank, which was acquired by Fifth Third Bank. During his time there, Kabat rose through the ranks to become Fifth Third Bank's vice chairman and CEO, managing over \$121 billion in assets and 21,000 employees.

Kabat is mindful of the difference the I/O master's program made in his life. To show his gratitude, Kabat established a fellowship at the School of Science that he hopes will inspire and positively influence the lives of future I/O graduate students.

The Kabat Family Graduate Fellowship in Industrial/Organizational Psychology and Leadership will be awarded annually to a graduate student accepted into the I/O program and will fully fund the individual's studies.

“Our I/O psychology program promotes the scientist-practitioner model, and Kabat has drawn on several of its features to excel in the workplace over his career. He has clearly demonstrated analytical thinking, problem solving, and innovative leadership to rise to the top of his profession.”

—John T. Hazer, PhD
Professor emeritus, psychology

IT STARTS
WITH YOU

Undergraduate scholarships open new opportunities for students from all backgrounds, so they can take on today's greatest challenges and create a stronger future.

Graduate fellowships attract the brightest scholars, who in turn enhance innovative thinking, assist faculty in teaching and research, and participate in the discovery of new knowledge.



GIVING BACK: Kevin Kabat speaks on campus with students and faculty.

Your support of the

SCHOOL OF SCIENCE AT IUPUI

ENABLES US TO RECRUIT THE
**BRIGHTEST
LEARNERS**

LIKE
JOHN KUPFERSCHMID '78
MATH MAJOR



LIKE
DEB PETERS '87
GEOLOGY MAJOR



WHO BECAME
**FOUNDER,
PRESIDENT AND CEO**
AT QUALITY ENVIRONMENTAL
PROFESSIONALS, INC.

WHERE SHE IS
**BUILDING
A BETTER
INDIANAPOLIS**
THROUGH ENVIRONMENTAL
CONSULTING SERVICES

WHO BECAME A
**PEDIATRIC
CARDIAC
SURGEON**

AND NOW ANNUALLY
**SAVES
HUNDREDS**
OF NEWBORNS WITH
HEART DEFECTS

**AND CREATING
A HEALTHIER
WORLD FOR ALL**



FOR ALL WHO ENVISION A MORE PROSPEROUS WORLD

IT STARTS WITH YOU

Endowed chairs and research infrastructure are critical tools for elevating specific departments and areas of research, ultimately strengthening our national standing and advancing STEM fields around the world.



GOAL # 2: SUSTAIN FACULTY EXCELLENCE

School of Science faculty are cutting-edge research scientists who advance knowledge across disciplines and industries. They are nationally recognized professors leading interactive, interdisciplinary programs that engage those they teach. They are true mentors and advocates, helping students define and pursue their goals.

Our faculty are at the heart of our mission—to conduct fundamental and applied scientific research and provide the highest-quality undergraduate education and graduate training. Our ultimate goal is to provide the state of Indiana and beyond with graduates who possess deep knowledge of modern science and who are fully equipped to be future leaders.

But to improve science, industry, and the world, we must expand support for our outstanding faculty. Endowed chairs and professorships are critical in securing the very best teachers and mentors. And with your gift, we can foster exceptional teaching, innovative research, and the relentless pursuit of academic excellence.

SUPPORTING THE WORK OF FUTURE FACULTY

No one understands the importance of higher education quite like our faculty. That's why Alexander Its, distinguished professor, and Elizabeth Its, associate research professor, have promised a **\$1 million gift** to endow an undergraduate scholarship and a professorship for the Department of Mathematical Sciences.

Since joining the school in 1993, Alexander and Elizabeth Its have had a storied career in research and teaching.

"This is just a small portion of what we'd like to do to express our appreciation for all these years at this great school," Alexander said. "We're very fortunate to witness and be a part of the growth of this institution."

Faculty support also involves supplementing research dollars, collaborative scholarly exchange, and new salary lines provided by donors in the form of endowed chairs.

While Alexander and Elizabeth Its are leading by example, they are but one example of our many faculty who have built and sustained our prestigious reputation. To retain top educators and further their renowned work, we must invest significant funding—far beyond the limitations of our operating budget. Together, we will expand achievement as our faculty continue to lead at the cutting edge of their fields.



FOR ALL WHO DRIVE NEW THINKING

GOAL #3: DRIVE EDUCATIONAL PROGRAM INNOVATION AND RESEARCH OPPORTUNITIES

The depth and diversity of our programs and opportunities directly affect the kinds of meaningful contributions our students will make. Not many scholars can claim that their efforts in the classroom and lab lead to therapies for diseases that devastate millions of people worldwide—but chemistry students in the School of Science at IUPUI can.

Today, we're combining learning, research, and internships in unprecedented ways. Our undergraduates are co-authoring research papers, presenting at national conferences, and leading their own projects. Through integrated research and work experiences, our scholars develop thinking and professional skills that will serve them—and their employers—very well.

We are located in Indiana's thriving capital city, with the potential for advances in scientific research at our fingertips. The School of Science at IUPUI is located on a campus with five hospitals, a School of Engineering and Technology, and the only medical and dental schools in the state—as well as schools of nursing,

law, and health and rehabilitation sciences. Compared to many public institutions, we offer a far greater abundance of opportunities for interdisciplinary research and education. We can work across campus and with organizations in central Indiana's life and health sciences, and pharmaceutical, insurance, and biotechnology industries.

Together, we can draw on our strengths in research to make a greater impact that creates stronger science, a more vibrant state, and a better world.

CAPITALIZING ON A NATURAL ADVANTAGE

As an undergraduate majoring in physics and mathematics, Qurat-ul-Ann "Anna" Mirza aspires to be the first female in her family to earn a PhD. She dreams of becoming a research scientist looking for dark matter, investigating the high-energy end of the spectrum, and studying quantum information. She has presented widely and has received multiple awards for her work.

Mirza started at the School of Science at IUPUI through the Louis Stokes Alliances for Minority Participation program, and has also served as a research assistant in a position funded by the Institute for Mathematical Modeling and Computational Science in the School of Science. But her work has largely been supported by the IUPUI Center for Research and Learning.

Student research of this caliber is essential for strengthening our already strong reputation. It relies on significant investment from our friends and innumerable successful alumni. However, if we are to maintain our presence as an international leader in research, it will take more than our current level of funding. **It will take you.**

Together, we can enable the exceptional work of even more talented and deserving young scholars who will advance their fields and benefit our state, our nation, and our world.

IT STARTS WITH YOU

A gift to the School of Science means you are part of **innovation and research** that will continue to fuel initiatives that expand our legacy as a prestigious research institution.



"Anna's continuous dedication and tenacity in the face of challenging research questions and her overarching desire to put her results in broader context show that she has internalized the essence of life in research."

—Yogesh N. Joglekar, PhD
Associate professor, physics, and Mirza's mentor



**FOR ALL
WHO IGNITE
THE SPARK**

STUDENT STORY
JARED THOMAS | UNDERGRADUATE |
BIOTECHNOLOGY

Jared Thomas embodies the spirit of the School of Science—hardworking, innovative, and truly passionate about making a difference. His contributions to the student body and the scientific community illustrate how important the school's research programs are to students.

A recent publication by undergraduate student Jared Thomas and other researchers in Associate Professor Randall J. Roper's laboratory at IUPUI indicates that a substance found in green tea may have therapeutic properties for treating osteoporosis in individuals with Down syndrome.

Thomas, a first author on the publication, began his biotechnology education at Ivy Tech and transferred to IUPUI through the Bridges to the Baccalaureate program. As a participant in the Diversity Scholars Research Program he joined Roper's laboratory in 2012.

"When I first started at IUPUI I knew I wanted to do research but wasn't really sure where to start," Thomas said. "Dr. Roper helped me learn all the basics like writing abstracts, presenting findings, writing papers—I probably wouldn't be where I am today without his help."

Being the first author on a publication in a peer-reviewed journal is an exciting achievement for an undergraduate. Thomas says the opportunities and mentors he's had at IUPUI helped him to succeed—igniting a spark that turned into a passion for research. He hopes to continue his career as a researcher and promises to never stop asking big questions in his pursuit to solve scientific problems.

**IT STARTS
WITH YOU**

Undergraduate research programs enable us to support bright students as they gain real-world experience—inspiring tomorrow's STEM professionals.



"It's been great to see Jared grow as a researcher as he learns how to ask the right questions to solve problems. His drive to succeed and collaborate has been an asset in my lab."

—Randall J. Roper, PhD
Associate Professor, biology

FOR ALL WHO WILL ANSWER TOMORROW'S QUESTIONS

Together, we can build a stronger Indiana. We can shape the next generation of scholars, scientists, and professionals who will discover new ideas, develop different solutions, and propel our state to greater prosperity for decades to come.

To do this, we must become known in the state of Indiana and nationally as the destination of choice for a diverse population of students seeking the highest-quality science education. We also must continue to build our reputation worldwide as a major contributor of the distinct fundamental and applied scientific research.

Your support for the School of Science will enable us to recruit the most competitive undergraduate and graduate students. It will expand our ability to attract the best faculty members to teach future generations, conduct transformational research in our labs, and enhance our outreach efforts and collaborations with local school systems.

Join us, and help fulfill the promise of a stronger Indiana, and a better world for all.



FULFILLING *the* **PROMISE**

IUPUI SCHOOL OF SCIENCE

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