On Jan. 31, 2019, the school entered a new era as the McKelvey School of Engineering thanks to a transformative, unprecedented investment by alumnus James McKelvey Jr. and his wife, Anna. The gift will be used to fund endowed scholarships and professorships, as well as the dean’s highest priorities for advancing the school and its impact on lives and communities in St. Louis and around the world. The gift will also advance educational and research programs that integrate computing and engineering with other disciplines, and it will support the school’s effort to enhance the region’s innovation and entrepreneurial ecosystem.
The NIH grant will fund a broader understanding of earlier work combining intranasal drug delivery and focused ultrasound (FUSIN). It will also combine latest research in imaging toward developing image-guided drug delivery.

McKelvey Engineers are looking at approaches that have been successful in decreasing cognitive load and using those approaches to design easier-to-understand visualizations.

Engineers from multiple departments are studying whether a nontoxic element — bismuth, lead’s neighbor on the periodic table — is a safer and equally efficient substitute for lead in perovskites.

A biomedical engineer conducted a pilot study using co-registered photoacoustic tomography with ultrasound to evaluate ovarian tumors on 16 patients at the School of Medicine and Barnes-Jewish Hospital.

A computer scientist is developing a novel user privacy protection framework that will give users full privacy control over their data. The work is funded by a four-year, collaborative, $1.2 million grant from the National Science Foundation (NSF).

Researchers in the McKelvey School of Engineering at WashU have engineered bacteria that produce a biosynthetic spider silk with performance on par with its natural counterparts in all of the important measures.

McKelvey School of Engineering Dean

Aaron Bobick, Dean and the James M. McKelvey Professor

NEW CHAIR

‘Hopeful technology’ could change detection, diagnosis of deadly ovarian cancer

Bruno Sinopoli, a renowned expert in cyber-physical systems and control systems, was named chair of the Preston M. Green Department of Electrical & Systems Engineering, effective Jan. 1, 2019.

A biomedical engineer is developing a therapeutic option that would prevent the opiates from crossing the blood-brain barrier, preventing the high abusers seek.

An engineer is leading a team developing a two-photon controlled-phase logic gate that could boost quantum information science and technology.

An engineer is developing a new material that would deliver drugs directly to the damaged part of the heart to preserve the support network, or extracellular matrix while blocking two enzymes.

A biomedical engineer conducted a pilot study using co-registered photoacoustic tomography with ultrasound to evaluate ovarian tumors on 16 patients at the School of Medicine and Barnes-Jewish Hospital.

McKelvey School of Engineering

Aaron Bobick, Dean and the James M. McKelvey Professor

NEW CHAIR

Industry: $2.5M
Other private sources: $1.5M
Other government: $1.3M
Nonprofit: $1.1M

Federal funding: $22.2M

Biomedical Engineering: 17.5
Computer Science & Engineering: 29.5
Electrical & Systems Engineering: 14.5
Energy, Environmental & Chemical Engineering: 19
Mechanical Engineering & Materials Science: 16

Grants & contracts: $29.6M
Gifs & endowment: $20.3M
Other income: $4.9M

$697,000 NET RESULTS

$148,904,000 TOTAL GROSS REVENUE

$139,524,000 TOTAL EXPENSES

$8,683,000 STRATEGIC OPERATING & CAPITAL RESERVES

$697,000 NET RESULTS

SOURCES OF INCOME (FY19)

TUITION: $94.1M
GRANTS & CONTRACTS: $29.6M
GIFTS & ENDOWMENT: $20.3M
OTHER INCOME: $4.9M

EXPENSES
Salaries & benefits: $54.3M
Gift aid: $36.1M
Central Fiscal Unit/ space: $32M
Operations: $17.1M

TOTAL RESEARCH AWARDS (FY19)

$34.3M

Federal funding: $22.2M

Grants & contracts: $29.6M
Gifs & endowment: $20.3M
Other income: $4.9M

Sources of income (FY19)
Starting Salary by Major
Bachelor of Science reported average starting salaries for 2018 graduates.

- Biomedical Engineering: $64,850
- Chemical Engineering: $75,866
- Computer Engineering: $71,000
- Computer Science: $87,930
- Mechanical Engineering: $70,125
- Systems Science & Engineering: $65,126
- Electrical Engineering: $73,541

Outcomes for Graduate Students
95% of BS graduates secured opportunities within six months of graduation.

- Master’s students
- PhD students
- Postdoc or academia
- Industry
- Doctoral degree
- Internship
- Military
- Startup

Outcomes
- Accenture
- Amazon
- Anheuser-Busch
- AT&T
- Bain & Company Inc.
- bioMerieux
- Boeing
- Capital One
- Cerner Corp.
- Citigroup
- Deloitte Consulting LLP
- Epic
- Environmental Systems Design Inc.
- Exxon Mobil Corp.
- FactSet Research System
- Garmin International
- Google
- L’Oreal USA Inc.
- McMaster-Carr
- Microsoft Corp.
- PricewaterhouseCoopers
- Sense Corp.
- Square
- ZS Associates

Top Graduate Schools & Postdoc Fellowships
- Boston University
- California Institute of Technology
- Carnegie Mellon University
- Case Western Reserve University
- Columbia University
- Cornell University
- Duke University
- Georgia Institute of Technology
- Harvard University
- Johns Hopkins University
- Massachusetts Institute of Technology
- Northwestern University
- Stanford Law School
- University of California, Berkeley
- University of Wisconsin – Madison

Top Companies
- Accenture
- Amazon
- Anheuser-Busch
- AT&T
- Bain & Company Inc.
- bioMerieux
- Boeing
- Capital One
- Cerner Corp.
- Citigroup
- Deloitte Consulting LLP
- Epic
- Environmental Systems Design Inc.
- Exxon Mobil Corp.
- FactSet Research System
- Garmin International
- Google
- L’Oreal USA Inc.
- McMaster-Carr
- Microsoft Corp.
- PricewaterhouseCoopers
- Sense Corp.
- Square
- ZS Associates

Energy, Environmental & Chemical Engineering
Undergraduate programs:
- Chemical Engineering
- Environmental Engineering
- Energy Engineering (minor)

Graduate programs:
- PhD in Energy, Environmental & Chemical Engineering
- MS in Energy, Environmental & Chemical Engineering
- MS in Energy, Environmental & Chemical Engineering
- MS in Materials Science & Engineering

Mechanical Engineering & Materials Science
Undergraduate programs:
- Mechanical Engineering
- Applied Science
- Nanoscale Science & Engineering (minor)

Graduate programs:
- PhD in Aerospace Engineering
- PhD in Mechanical Engineering
- MS in Aerospace Engineering
- MS in Mechanical Engineering
- MS in Materials Science & Engineering
- MS in Materials Science & Engineering

Henry Edwin Sever Institute
Graduate programs:
- Master’s in Construction Management
- Master’s in Engineering Management
- Master’s in Cybersecurity Management
- Master’s in Health Care Operational Excellence
- Master’s in Information Systems Management
- Master’s In Project Management

UMSL/WashU Joint Engineering Undergraduate Program
Undergraduate programs:
- Civil Engineering
- Electrical Engineering
- Mechanical Engineering

Interdisciplinary programs
Graduate programs:
- PhD in Computational & Data Sciences
- PhD in Imaging Science
- PhD in Materials Science & Engineering
2018-19 highlights

New era in engineering:

Renamed McKelvey School of Engineering will take innovation, technology and academics to new heights

Pratim Biswas, a pioneer in aerosol science and technology, elected to the National Academy of Engineering

Jubel Hall, the new home to the department of Mechanical Engineering & Materials Science, opens

868 Degrees awarded

Biomedical Engineering No. 14 U.S. News ranking for graduate program

$161.2M Raised for Engineering during the Leading Together Capital Campaign