

2018 - 2019 | History: the MSE PhD and MS programs launched in 2008.

FACULTY Superstars

- + 2 new fellows elected to national academies
- + 9 new fellows elected to professional societies
- + 6 new faculty appointments | 86 faculty in total

ENROLLMENT Growth

- + The masters population doubled in 5 years, as did the percentage of female students.
- + Incoming PhD cohort is half domestic and half international students.

MSE CONNECTS RESEARCH FROM 3 COLLEGES UNITED IN DISCOVERY

Biomaterials

+ More

- + Alleviating burn pain with a hydrogel dressing
- + Acquisition of FDA-approved brain sealant technology for \$220 million
- + PharamaChk, a tool that tests medicine purity, gets a boost from Merck Global Health



Nanomaterials

- + Assisting in surgery with flexible, spider-like robots
- + Improving MRI image quality and cutting scan time with a magnetic metamaterial
- + Eliminating sound and maintaining airflow with a ringlike structure - Stay tuned for more on this! + More



Photonics & Electronic Materials

- + Stimulating brain function with ultrasounds
- + Killing MRSA with blue light and hydrogen peroxide
- + Pinpointing the position of a tumor in cadaver tests + More



Energy & Environment Materials

- + Alumnus propelling next generation battery technologies at Samsung Electronics
- + Hosting important green tech conferences
- + Launching the Center for Semiconductor Materials and Devices Modeling

+ More



\$30 million in research expenditures this year!



September Surprises

- + Zhang's 7th Fellowship: Xin Zhang was Elected Fellow of the American Physical Society in September. Her work is also referenced above - Zhang contributed the MRI and sound silencing advancements. $\underline{\textbf{More}}$
- + Cited: Science designates Siddharth Ramachandran's paper on tornado light beams as a 'highly cited paper." He was recently elected $\mbox{\sc Vannevar}$ Bush Faculty Fellow and received a \$3 million grant.







