"The secret of change is to focus all your energy, not fighting the old, but on building the new.”

- Socrates
RESEARCH FUNDING UPDATES

Please join us in congratulating the following faculty who have received research grant awards between January and June 2020!

ADVANCED MATERIALS AND MANUFACTURING

PI: Yinlun Huang, ChE
Title: Development of a Sustainability Metrics System and a Technical Solution Method for Sustainable Surface Finishing | Sponsor: American Electroplates & Surface Finisher | 4/01/2020 - 3/31/2023 | $75,000

PI: Guru Prasad Dinda, ME
Title: Direct Laser Metal Deposition of GRCop-42 and Inconel 625 | Sponsor: Sierra Lobo, Inc. | 1/31/2020 - 7/15/2020 | $26,475
Title: Design and Development of New Aluminum Alloys via Laser Metal Deposition | Sponsor: Novelis | 2/20/2020 - 2/09/2021 | $130,000

EDUCATION AND WORKFORCE DEVELOPMENT

PI: Steve Lavrenz, CEE
Title: RSP Refresher Course for Saudi Arabia Transportation Professionals | Sponsor: Institute of Transportation Engineers | 6/01/2020 - 12/31/2020 | $10,000

PI: Jeremy Rickli, ISE, Co-PI: Yinlun Huang, ChE

HEALTH ENGINEERING AND INFORMATICS

PI: Cynthia Bir, BME
Title: United States Body Armor Fit and Coverage Competing Terrorism Technical Support Office Task PP-IP-4206 | Sponsor: University of Southern California | 1/01/2020 - 9/04/2020 | $260,146

PI: Carol Miller, CEE
Title: Biodiversity and ecosystem services of water mites from the Laurentian Great Lakes | Sponsor: University of Michigan | 5/01/2020 - 4/30/2021 | $70,000

PI: Suzan Arslanturk, CS
Title: CRII: III: Learning to Integrate Heterogeneous Data from Disparate Sources for Disease Subtyping | Sponsor: NSF | 8/01/2020 - 7/31/2022 | $174,987

PI: Angulique Outlaw, School of Medicine, Co-PI: Alexander Kotov, CS
Title: Scale it up Effectiveness Implementation Main | Sponsor: Florida State University | 6/01/2020 - 5/31/2021 | $539,034

PI: Celestine Aguwa, ISE
Title: Performance Evaluation of Hospital Emergency Departments During a Medical Surge | Sponsor: Henry Ford Health Systems | 5/08/2020 - 4/30/2021 | $9,000
MOBILITY
PI: Steven Lavrenz, CEE
Title: Safety Enhancements at Short-Storage-Space Railroad Crossings | Sponsor: Texas Transportation Institute | 1/01/2020 - 12/31/2022 | $20,746

PI: Marco Brocanelli, CS
Title: CRII: CSR: Energy-Aware Coordination and Management of Multi-Purpose Autonomous Robots for Maintained Continuity of Operations and Long Battery Lifetime | Sponsor: NSF | 2/01/2020 - 1/30/2022 | $175,000

PI: Wen Chen, ET
Title: Development and Integration of Software and Hardware for Embedded Control Systems | Sponsor: Magna Seating Systems Engineering | 3/12/2020 - 4/30/2020 | $18,000

PI: Yanchao Liu, ISE
Title: Optimization-driven high-density air traffic management software for large-scale drone operations | Sponsor: NSF | 5/01/2020 - 10/31/2020 | $50,000
Title: CAREER: Toward Establishing An Integrative Resource Optimization Framework for Large-scale Drone Delivery Systems | Sponsor: NSF | 7/01/2020 - 6/30/2025 | $500,000

PI: Jerry Ku, ME
Title: Model Based Design, Validation and Testing for Commercial Truck ADAS | Sponsor: Stoneridge, Inc. | 1/31/2020 - 12/31/2021 | $227,014

SMART AND CONNECTED COMMUNITIES
PI: Carol Miller, CEE
Title: Biodiversity and ecosystem services of water mites from the Laurentian Great Lakes | Sponsor: University of Michigan | 5/01/2020 - 4/30/2021 | $70,000

PI: Yaoxian Huang, CEE
Title: Timeseries of column density of nitrogen dioxide and methane over Detroit using OMI and TROPOMI satellite observations | Sponsor: Michigan Space Grant Consortium | 5/01/2020 - 4/30/2021 | $5,000

PI: Masoud Nazari, ECE
Title: Internet of Things and Ubiquitous Sensing in University Building Energy Management: Design Optimization and Technology Demonstration | Sponsor: California State University, Long Beach | 1/10/2020 - 2/22/2021 | $249,000

SUBMITTED PROPOSALS
For a list of research proposals submitted between January and September 2020, you can view this document.
**EXTERNAL FUNDING OPPORTUNITIES**
The Office of Research and Graduate Studies has compiled a list of research funding opportunities open to engineering faculty. Most of these opportunities are from external organizations and have varying deadlines. This list is updated weekly and can be found [here](#).

**INTERNAL FACULTY FUNDING/AWARD OPPORTUNITIES**
- **Tenured Faculty/ESS Academic Staff Professional Development Program** - Fall Deadline: October 15, 2020 | Winter Deadline: February 1, 2021
- **University Research Grant** - Deadline: November 20, 2020
- **Board of Governors Faculty Recognition Award** - Deadline: December 4, 2020
- **Career Development Chairs** - Deadline: December 4, 2020
- **Distinguished Faculty Fellowships** - Deadline: January 8, 2021
- **President's Awards for Excellence in Teaching** - Deadline: January 8, 2021
- **Educational Development Grant** - Deadline: February 1, 2021

**INTERNAL STUDENT FUNDING/AWARD OPPORTUNITIES**
- **Dean's Conference Presentation Awards** - Deadline: 1st of the month (October-April)
- **Research Opportunities for Engineering Undergraduates** - Deadline: October 11, 2020
- **Three-Minute Thesis Competition and Award** - Nomination Deadline: November 15
- **Ralph H. Kummler Award for Distinguished Achievement in Graduate Student Research** - Deadline: February 7, 2021 (Application opens January 1, 2021)

*Applications for these awards will require significant involvement from faculty and departments.

Additional undergraduate and graduate student funding and award opportunities can be found [here](#). Please share with your students.

If you become aware of a funding opportunity, please let us know by sending an email to OADR@eng.wayne.edu with subject line "New Funding Opportunity."
**HUMBLE BRAGS**

- **Prof. Qingyu Yang** (ISE), **Prof. Xin Wu** (ME), and the former **ISE PhD student Wujun Si** won the 2020 Wilcoxon Award for best application paper in *Technometrics*.

- Together with Dr. Sudarsan Rachuri (U.S. Dept. of Energy), Chemical Engineering professor **Yinlun Huang** has been appointed as co-Editor-in-Chief of the ASTM journal, *Smart and Sustainable Manufacturing Systems*.


- Computer Science professor **Weisong Shi** was selected as the recipient of the 2020 IEEE Computer Society Technical Committee on the Internet (TCI) Distinguished Service Award.

**SHARE YOUR STORIES**

We would like to hear the exciting news and achievements from our faculty, e.g., being elected as a fellow to your professional society. Use this [link](#) to submit your story!

**CONTACT US**

The best way to reach us is via email at OADR@eng.wayne.edu

For more information about research in the College of Engineering, please visit [engineering.wayne.edu/research](http://engineering.wayne.edu/research)

Look for us on social media using @WayneStateEng