



UNIVERSITY
of VIRGINIA

ENGINEERING

THE CENTER FOR ENGINEERING IN MEDICINE



The Center leadership team from left to right: Director Jeff Holmes, M.D., Ph.D., Professor of Biomedical Engineering; Senior Research Program Officer Julie Radlinski, MPH; Associate Director Mark Sochor, M.D., Associate Professor of Mechanical & Aerospace Engineering and Emergency Medicine

SPRING 2018 EIM NEWSLETTER

In this issue:

- News Article: *Tapping the Insight of Engineering to Drive Innovation in Medicine*
 - Funded Research Projects: Fall 2017 Cohort
 - Call For Proposals: Spring 2018 - RFP and proposal submission info
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-

JUMPSTARTING MEDICAL INNOVATION

Engineering has always been an integral part of medicine. Walk into a hospital or a clinic, and every aspect of care — from the devices physicians use to diagnose and treat disease to the vaccines and pharmaceuticals they prescribe — bears the imprint of engineers. The University of Virginia’s new Engineering in Medicine initiative is designed to jumpstart medical innovation by explicitly fostering partnerships between engineers and clinicians.

The seed funding that the Center for Engineering in Medicine provides is critical because of the novelty inherent in interdisciplinary projects. Traditional funding agencies generally won’t support these projects without preliminary data. EIM funding gives researchers the opportunity to gather this evidence.

Read the whole article: [UVA's Center for Engineering in Medicine Aims to Jumpstart Medical Innovation](#)

From the article:

“ The example of these teams and the level of innovation they represent is setting in motion a virtuous cycle, inspiring new teams to coalesce around audacious ideas — and in the process positioning UVA as a paradigm shifter in healthcare. ”

John Lach
Professor of Electrical and Computer Engineering
Fall 2018 EIM Seed Grant Recipient

FUNDED EIM RESEARCH PROJECTS

Fall 2017 Cohort

Fast and Automatic Reconstruction of High Frame-Rate Cardiac Magnetic Resonance

Daniel Weller, Asst. Prof. Electrical and Computer Engineering (SEAS)

Christopher Kramer, Prof. Medicine – Cardiovascular Medicine and Radiology (SOM)

Michael Salerno, Assoc. Prof., Medicine – Cardiovascular Medicine (SOM)

In situ Bioengineering of Scar Formation after Myocardial Infarction

Brent French, Prof. Biomedical Engineering (SEAS)

Jeff Saucerman, Assoc. Prof. Biomedical Engineering (SEAS)

Matthew Wolf, Assoc. Prof., Medicine – Cardiovascular Medicine (SOM)

Airflow-powered Implantables for Batteryless Monitoring of Respiratory Health

Daniel Quinn, Asst. Prof. Mechanical and Aerospace Engineering (SEAS)

John Lach, Prof. Electrical and Computer Engineering (SEAS)

Larry Borish, Prof., Medicine – Asthma, Allergy & Immunology (SOM)

Leveraging mHealth and Wireless Sensing to Empower Patients and Family Caregivers in the Safe and Effective Management of Cancer Pain

Virginia LeBaron, Asst. Prof. Nursing (SON)

John Lach, Prof. Electrical and Computer Engineering (SEAS)

Leslie Blackhall, Prof., Medicine – General, Geriatric, Palliative & Hospital Medicine (SOM)

Computational Imaging to Predict Intestinal Mucosal Alterations in Children in Virginia

Sana Syed, Asst. Prof. Pediatrics (SOM)

Don Brown, Prof. Systems and Information Engineering (SEAS)

Using Mobile Technology to Monitor and Treat Depression and Anxiety Symptoms in Caregivers of Cancer Patients

Philip Chow, Asst. Prof. Psychiatry and Neurobehavioral Sciences (SOM)

Matt Gerber, Asst. Prof. Systems and Information Engineering (SEAS)

Shayna Showalter, Asst. Prof., Surgery (SOM)

Wendy Cohn, Assoc. Prof., Public Health Sciences (SOM)

A Novel Analgesic Device for Pain Management

Xudong (Josh) Li, Assoc. Prof. Orthopaedic Surgery (SOM)

Baoxing Xu, Asst. Prof. Mechanical and Aerospace Engineering (SEAS)

[FIND OUT MORE](#)

SEED GRANTS: CALL FOR PROPOSALS

The call for EIM Seed Grants is now open.

Deadline

For the spring 2018 grant cycle, all proposals are due **February 15, 2018**. The next cycle will be in the fall of 2018.

Objective

The objective of the Engineering-in-Medicine (EIM) Seed Grant Program is to foster sustained, high-impact collaborations at the interface of Engineering and Medicine.

Evaluation Criteria

EIM Seed Grant proposals will be evaluated on three criteria:

1. How effectively will the project foster collaboration at the engineering-medicine interface?
2. How likely is the project to lead to external funding to sustain the proposed research and/or support translation of an innovation into practice?
3. What is the potential scientific and clinical impact of the project?

[FIND OUT MORE](#)

FOR QUESTIONS OR HELP FINDING A PARTNER

For questions or help finding a partner for a project idea, please contact us at engineering-in-medicine@virginia.edu or stop by during Office Hours at the following locations, days, and times:

- Mondays 1/22, 1/29, 2/5, 2/12, 2-5 pm: Health Sciences Library, Main Floor Group Study Room 2402
- Tuesdays 1/23, 1/30, 2/6, 2/13, noon-5 pm: Wilsdorf Hall, Room 201 (nanoSTAR offices)
- Thursdays 1/25, 2/1, 2/8, 2/15, 7-10 am: Health Sciences Library, Main Floor Group Study Room 2402



[Website](#)

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Contact Us

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