

MCIRCC

YEAR IN REVIEW

2021

COMMERCIALIZATION & ENTREPRENEURSHIP

7 PATENTS ISSUED IN 2021 = **34** TOTAL PATENTS SINCE 2014

2 SPIN-OFF COMPANIES FORMED

4 NEW PRODUCTS Ready to be Licensed in 2021

Electrocardiomatrix

Therapeutic Vibration Device

DETECT-ARDS

PICTURE-General Deterioration for Adults & Pediatrics

10 NEW INVENTION DISCLOSURES

12 PATENT APPLICATIONS FILED

PRECLINICAL LABORATORY

\$300k RESEARCH FUNDING RECEIVED
(In addition to current DoD & NIH funds)

10 MANUSCRIPTS PUBLISHED

7 GRANTS SUBMITTED
Including DoD, NIH and Industry grants



PROPOSAL DEVELOPMENT

\$1.2M IN GRANTS AWARDED THIS YEAR

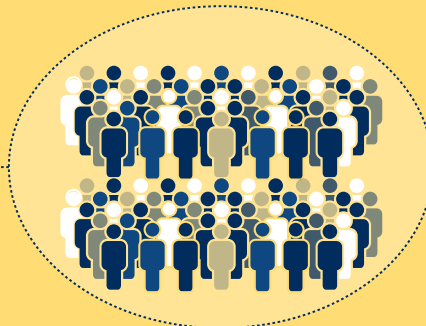
To more effectively help our members collaboratively design their grants, the **Proposal Development team revised its support services**, including:

- A New Project Intake Form and Process
- Collaborative Proposal Design Worksheet
- Updated Project Support Service Packages



CLINICAL RESEARCH

ENROLLED **73** PATIENTS FOR A COVID study funded by the Department of Defense



DATA SCIENCE

OBTAINED **\$817k + \$100k** NIH Funding Foundational Funding

PICTURE



PICTURE was integrated into the Epic Cloud Platform. The model's performance was externally validated at an outside hospital.

MEMBERSHIP

247 MEMBERS FROM **43** U-M DEPTS. & **7** SCHOOLS & COLLEGES

NEW MCIRCC STAFF

- Joseph Blackmer, Senior Software Developer
- Yuxuan Chen, Data Scientist
- Traci Cramer, Research Laboratory Technician
- Wes Cummings, Programmer Analyst
- Negar Farzaneh, Postdoctoral Data Scientist
- Shelby Unsworth, Research Admin. Fellow

MARKETING & OUTREACH

711 FOLLOWERS (210 New) **45,652** UNIQUE IMPRESSIONS

Between March and September, an MCIRCC article about PICTURE was the **second most engaged blog post in the Department of Emergency Medicine.**

"New Technology Predicts ICU Need for COVID-19 and General Ward Patients"

MASSEY FOUNDATION FUNDED TBI RESEARCH



3 Teams Awarded Funding by the 2021 Massey TBI Grand Challenge

- Regulatory Testing for LUCID-TTM: A Dual Therapeutic Device for Non-Invasive Mitochondrial Modulation and Targeted Temperature Management in TBI Patients
PI's: Thomas H. Sanderson, PhD; Joseph M. Wider, PhD; Samuel Tuck, MSE
- A Blood Brain Barrier (BBB) Shuttle-Assisted Insulin Receptor Antibody for Neuroprotection in TBI
PI's: Colin Greineder, MD, PhD; Peter Tessier, PhD
- The Michigan Algorithm for Acute Evaluation of TBI
PI's: Frederick Korley, MD, PhD; Jacob Joseph, MD

NCRC



SOMETHING NEW IS ON THE HORIZON!

In the fall of 2021, MCIRCC received a **\$10M** gift from the family of **Dr. Max Harry Weil**—the physician and professor regarded worldwide as the “father of critical care.” As a result of this generous gift, MCIRCC is becoming **The Max Harry Weil Institute for Critical Care Research and Innovation.**

While our name and logo will change, our goal remains the same: **transforming critical care through innovation, integration and entrepreneurship.** We can't wait to see what the future will bring as we launch into 2022 at the new Weil Institute.

The Max Harry
Weil Institute
FOR CRITICAL CARE RESEARCH & INNOVATION