Weil Institute Partners with Leading Health Innovation Company, AirStrip®, to Accelerate Advancement of Predictive Analytics in Healthcare

The partnership includes a strategic investment by AirStrip into the Weil Institute data science unit, as well as the translation and commercialization of early warning systems called PICTURE – the Weil Institute’s suite of analytics that leverage electronic health record (EHR) data to predict patient deterioration in general floor hospital settings.
Department of Defense (DoD) funds trio of traumatic brain injury (TBI) innovations initialized through U-M Weil Institute Grand Challenge

High-risk research enables high-impact solutions as the DoD looks to Weil Institute teams for tomorrow’s TBI therapies. Three research projects supported through the Massey Grand Challenge have been awarded funding from the DoD to propel their continued development with the goal of transforming care and outcomes for TBI patients.

READ MORE

Study shows medical device software system developed at U-M could surpass limits of traditional vital signs in identifying patient deterioration

The Analytic for Hemodynamic Instability (AHI) detected the various gold standard measures of hemodynamic deterioration with high sensitivity and specificity, paving the way for further study into AHI’s potential as a surrogate measure of clinical status in settings where continuous monitoring of vital signs would not be possible.

READ MORE

2022 Massey TBI Grand Challenge

Wolverine Den awards funding to 7 multidisciplinary research teams

On June 9, teams participating in the

Weil Institute Associate Director & team awarded grant to develop treatment strategy for central-line associated bloodstream infections (CLABSI)
Massey TBI Grand Challenge entered the “Wolverine Den” to pitch their ideas and innovations before an expert panel of clinicians, commercialization experts, and Department of Defense representatives. Up to $1 million in funding was available this year—the largest amount in Grand Challenge history! Read on to learn more about this year’s winning teams.

MEET THE WINNING TEAMS

Managing CLABSIs frequently involves removing and replacing the catheter—an invasive process that can complicate the device’s life-sustaining functions and introduce additional risks to the patient. Supported by an NHLBI grant, Dr. Scott VanEpps and the team seek to mitigate this process entirely.

READ MORE

EVENTS & FUNDING OPPORTUNITIES

Interested in pursuing these or other funding opportunities?
Let the Weil Proposal Development team support you!
Click this banner to learn more

Joint NSF/NIGMS Initiative to Support Research at the Interface of the Biological and Mathematical Sciences
NIGMS and NSF plan to support fundamental research in mathematics and statistics necessary to answer questions in the biological and biomedical sciences that are within the NIGMS mission. This program is designed to encourage new collaborations, as well as to support innovative activities by existing teams. Due in September each year.

DoD FY22 Peer-Reviewed Traumatic Brain Injury and Psychological Health Research Program (TBIPHRP)
The DoD TBIPHRP will soon open for proposals to promote a better standard of care for psychological health and traumatic brain injury in the areas of prevention, detection, diagnosis, treatment, and rehabilitation. Funding mechanisms will include the following: Clinical Trial Award, Focused Program Award, Investigator Initiated Research Award, Patient Centered Research Award, Translational Research Award.

Funding-Related Resources
Updated Grant Proposal Sampler

The Medical School Office of Research Grant Proposal Sampler has been updated (now in SharePoint) with over 50 new successful grant applications, including peer review comments, for the NIH, Department of Defense, other federal agencies, and foundation awards.

Finding Foundation Funding

U-M Foundation Relations recently launched a redesigned website housing more than 100 open foundation grant opportunities in a sortable database and offering insight on how to apply for funding from dozens of the largest U.S. foundations.

New Publications

Weil members, please remember to note your affiliations with the Weil Institute so we can help amplify your research in the newsletter and on our website!

A deep learning framework for automated detection and quantitative assessment of liver trauma. 
DOI: 10.1186/s12880-022-00759-9

AMAISE: a machine learning approach to index-free sequence enrichment.
DOI: 10.1038/s42003-022-03498-3

Antibiotics cause metabolic changes in mice primarily through microbiome modulation rather than behavioral changes.
DOI: 10.1371/journal.pone.0265023

A Review of Two Emerging Technologies for Pre-hospital Treatment of Non-compressible Abdominal Hemorrhage
DOI: 10.1111/trf.16961

Assessment of telecommunicator cardiopulmonary resuscitation performance during out-of-hospital cardiac arrest using a standardized tool for audio review.
DOI: 10.1016/j.resuscitation.2022.04.015

Association of intentional cooling, achieved temperature and hypothermia duration with in-hospital mortality in patients treated with extracorporeal cardiopulmonary resuscitation: An

...
Detection of Hemodynamic Status Using an Analytic Based on an Electrocardiogram Lead Waveform.
DOI: 10.1097/CCE.0000000000000693

DOI: 10.1016/j.resuscitation.2022.07.003

DOI: 10.1016/j.resuscitation.2022.04.016

Extracorporeal cardiopulmonary resuscitation for out-of-hospital cardiac arrest - who, when, and where?
DOI: 10.1097/MCC.0000000000000944

Initiation of a Lung Protective Ventilation Strategy in the Emergency Department: Does an Emergency Department-Based ICU Make a Difference?
DOI: 10.1097/CCE.0000000000000632

DOI: 10.1097/SHK.0000000000001944

SNIKT: sequence-independent adapter identification and removal in long-read shotgun sequencing data.
DOI: 10.1093/bioinformatics/btac389

Tandem use of Gastroesophageal Resuscitative Occlusion of the Aorta followed by REBOA in a Lethal Liver Laceration Model
DOI: 10.1097/TA.0000000000003719

The bacterial density of clinical rectal swabs is highly variable, correlates with sequencing contamination, and predicts patient risk of extraintestinal infection.
DOI: 10.1186/s40168-021-01190-y

Tips, tricks, and thoughts on the future of prehospital blood transfusions.
DOI: 10.1111/trf.16955

Tracking Peripheral Artery Motion and Vascular Resistance With a Multimodal Wearable Sensor Under Pressure Perturbations
DOI: 10.1115/1.4053399
About the Weil Institute

The Weil Institute for Critical Care Research & Innovation is named after the late Dr. Max Harry Weil—a physician and professor widely regarded as a key founder of the field of critical care.

As the Weil Institute, we are one of the world’s first comprehensive research enterprises devoted to transforming critical care medicine by accelerating science and moving it from bench to bedside. We do so by bringing together integrative teams of world-class U-M scientists, clinicians, and engineers with industry partners and funding sources to develop and deploy cutting-edge solutions that elevate the care, outcomes, and quality of life of critically ill and injured patients and their families.

Connect With Us!
You are receiving this email because you are a Weil Institute member, supporter, or industry partner.

You can update your preferences, unsubscribe from this list, or subscribe to this list.