

[Subscribe](#)

[Past Issues](#)

[Translate](#) ▼

[View this email in your browser](#)



[About Us](#)

[Member Services](#)

[Our Programs](#)

[Our Products](#)

[Latest News](#)



[A "PICTURE"-perfect response to patient deterioration](#)

Developed by the Weil Institute Data Science Team, PICTURE is a suite of machine learning algorithms that passively and accurately predicts patient deterioration in hospital settings.

In July, the Adult General Floor model of PICTURE deployed with the U-M Health Rapid Response Team (RRT), a task force of acute care specialists who quickly bring lifesaving interventions to patients' bedsides. While it has only been a few months since launch, the RRT is already reporting improved response times thanks, in part, to PICTURE's predictions.

Read Full Story



[Weil Institute team seeks insight into the injured brain through exhaled breath](#)

Team led by Dr. Hakam Tiba, Director of the Weil Institute Preclinical Critical Care Laboratory, receives \$80k grant to study exhaled breath signatures in a setting of traumatic brain injury (TBI).

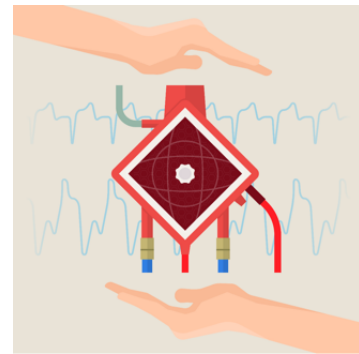
[READ MORE](#)



[Clinical study of ECG-based analytic shows average three-hour advance prediction of hemodynamic instability](#)

The Analytic for Hemodynamic Instability (AHI) from Weil Institute spin-off Fifth Eye, Inc. provides clinically significant lead time in predicting instability onset before vital signs

[READ MORE](#)



[Extended reality could enhance efficiency, improve accessibility of ECMO training](#)

Michigan Medicine researchers look to extended reality (XR) technologies to deliver high-quality, just-in-time training in extracorporeal membrane oxygenation (ECMO) cannulation.

[READ MORE](#)

EVENTS & FUNDING
OPPORTUNITIES

Weil Institute Events

Weil Institute Visiting Scholar Seminar Series



Saying "Yes": How DARPA Creates Capabilities

October 10, 2023
11:00 AM – 12:00 PM
Networking Lunch: 12:00 PM – 1:00 PM
Michigan Union | Kuenzel Ballroom

Presented by Geoffrey Ling, MD, PhD, DSci(Hon)
Professor of Neurology,
Attending Physician in Neuro Critical Care
Johns Hopkins Medical Institution



[Weil Institute Visiting Scholar Seminar: "Saying 'Yes'" | Presented by Geoffrey Ling, MD, PhD, DSci \(Hon\)](#)

The Weil Institute is thrilled to welcome Dr. Geoffrey Ling as part of our Visiting Scholar seminar series!

On October 10, Dr. Ling will take us through DARPA's unique approach to funding novel research by looking for ways of "Saying 'Yes'" and the remarkable technological advances that have resulted from it.

Please register by October 3 if you would like to be included in the final lunch count.

[Learn More & Register](#)



**Uniting TBI experts
from across the Midwest.**

October 19, 2023 | 8 AM – 3 PM ET
Junge Family Champions Center

Register Today

[The 2023 Massey Traumatic Brain Injury \(TBI\) Regional Conference: October 19](#)

Previously held in virtual format due to the pandemic, this year's Massey TBI Regional Conference marks a return to form as we are joined at Michigan Stadium by thought leaders and experts from across the Midwest. Register to reserve your spot today!

Learn More & Register for the Conference

External Events



M INNOVATION PARTNERSHIPS
UNIVERSITY OF MICHIGAN

SOFTWARE & CONTENT
THOUGHT-LEADERSHIP SERIES

Human Factors Engineering in Clinical Decision Support (CDS) and Software as a Medical Device (SaMD)

Tuesday, Oct 10, 2023 | 3:30pm EST

 Shannon Hoste
President,
Agilis Consulting
by Kymanox

[Human Factors Engineering in Clinical Decision Support \(CDS\) and Software as a Medical Device \(SaMD\): October 10](#)

Join Innovation Partnerships on Tuesday, October 10 at 3:30pm for the next installment of our Software Thought-Leadership Webinar Series, “Human Factors Engineering in Clinical Decision Support (CDS) and Software as a Medical Device (SaMD).”

This webinar will be led by Shannon Hoste, Vice President of Agilis by Kymanox, and will focus on: The Regulatory Landscape for Clinical Software Solutions · Using a Human Factors Approach in clinical software development · Challenges and Considerations · Case Studies

Register for the Webinar



bbc

From The Sources' Mouth
SBIR/STTR Training led by federal program managers

[From the Sources' Mouth: SBIR/STTR Training Led by Federal Program Managers: October 17 & 18](#)

Don't miss this virtual, 2-day SBIR/STTR training event featuring SBIR/STTR program managers across all 11 participating agencies. Attendees can join in on agency-focused presentations, panel discussions, open Q&A, and be able to sign up for one-on-one meetings with select agencies. One registration link provides access to both days.

October 17: Civilian SBIR/STTR Agencies

NIH, NSF, DOE, USDA, ARPA-H, CDMPR, DOT, NASA DOEd and more!

October 18: The Department of Defense

DoD, DARPA, DHS, ARMY, DHA and more!

Register for SBIR/STTR Training Event

Upcoming Funding Opportunities

A banner with a blue background and a yellow curved border on the right side. On the left, there is a photograph of several people in white lab coats or business attire leaning over a table, looking at documents and using blue markers. On the right, there is white text on a blue background and a yellow button.

Interested in pursuing these or other funding opportunities?

Let the Weil Proposal Development team support you!

Click this banner to learn more

MTRAC for Life Sciences Innovation Hub

- [MTRAC Mid-Stage Funding](#) (**Deadline: October 12, 2023**): Supports research for late-stage translational studies, regulatory guidance, and limited customer discovery, as well as mentorship from industry and investment experts; focused on 4 specific market segments: medical devices, diagnostics, therapeutics, and digital health/IT. (**\$100,000 - \$250,000 | Requires cost share**)
- [Kickstart Early Stage Funding](#) (**Deadline: November 1, 2023**): Early-stage funding to biomedical researchers to enhance the commercial potential of a

technology owned by any Michigan-based non-profit to the point of demonstration of utility. **(\$42,500 | Requires cost share)**

American Heart Association

- [2024 Collaborative Sciences Award](#) (Pre-proposals due October 4, 2023): Fosters innovative collaborative approaches to research projects that propose novel pairings of investigators from at least two broadly disparate disciplines. **(\$750,000 total for 3 years)**
- [2024 Established Investigator Award](#) (Pre-proposals due October 5, 2023): Supports established investigators in rapid career growth phase, with records of accomplishments and showing extraordinary promise. Candidates will have a demonstrated commitment to cardiovascular or cerebrovascular science disciplines that support the AHA's mission. **(\$400,000 total for 5 years)**
- [2024 Innovative Project Award](#) (Pre-proposals due December 1, 2023): Supports highly innovative, high-impact research that could ultimately lead to critical discoveries or major advancements that will accelerate the field of cardiovascular and/or cerebrovascular research. **(\$200,000 total for 2 years)**
- [2024 Research Supplement to Promote Diversity in Science](#) (Deadline: December 5, 2023): Under the mentorship of current AHA awardees, this mechanism supports research experiences for predoctoral and postdoctoral fellows from underrepresented racial and ethnic groups in science.
- [2024 Career Development Award](#) (Deadline: December 6, 2023): Supports highly promising healthcare and academic professionals in the early years of first professional appointment to assure the applicant's future success as a research scientist in the field of cardiovascular and/or cerebrovascular disease research. **(\$231,000 for 3 years)**
- [2024 Transformational Project Award](#) (Deadline: February 15, 2024): Supports highly innovative, high-impact projects that build on work in progress that could ultimately lead to critical discoveries or major advancements that will accelerate the field of cardiovascular and/or cerebrovascular research. **(\$300,000 for 3 years)**

Emergency Medicine Foundation

- The [Emergency Medicine Foundation](#) will be releasing their 2024 Request for Proposals (RFPs) in October, and proposals will be due in **February 2024**. [Check here for details.](#)

New Publications

Weil members, please remember to note your affiliations with the Weil Institute so we can help amplify your research!

[A Cross-stakeholder Approach to Improving Out-of-Hospital Cardiac Arrest Survival](#)

DOI: 10.1016/j.ahj.2023.09.004

[Haemodynamic impact of aortic balloon occlusion combined with percutaneous left ventricular assist device during cardiopulmonary resuscitation in a swine model of cardiac arrest](#)

DOI: 10.1016/j.resuscitation.2023.109885

[Miniaturized microarray-format digital ELISA enabled by lithographic protein patterning](#)

DOI: 10.1016/j.bios.2023.115536

[Prediction of episode of hemodynamic instability using an electrocardiogram based analytic: a retrospective cohort study](#)

DOI: 10.1186/s12871-023-02283-x

[Retention Time Trajectory Matching for Peak Identification in Chromatographic Analysis](#)

DOI: 10.3390/s23136029

[Transcranial Color-Coded Sonography With Angle Correction As a Screening Tool for Raised Intracranial Pressure](#)

DOI: 10.1097/CCE.0000000000000953

See all member publications from 2023

**CLICK HERE TO BECOME A
MEMBER**

**CLICK HERE TO SUBMIT A
STORY**

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.



*"When you
save one life..."*

*...it is as if you
saved the
entire world."*

Connect With Us!

The Max Harry
Weil Institute
FOR CRITICAL CARE RESEARCH & INNOVATION

M | MICHIGAN MEDICINE
UNIVERSITY OF MICHIGAN



*Copyright © 2023 The Weil Institute for Critical Care Research and Innovation
All rights reserved.*

Our mailing address is:

The Max Harry Weil Institute for Critical Care Research and Innovation
2800 Plymouth Rd Rm 106
NCRC Building 10

Ann Arbor, MI 48109-2800

You are receiving this email because you are a Weil Institute member, supporter, or industry partner and/or attended a Weil Institute event.

You can [update your preferences](#), [unsubscribe from this list](#), or [subscribe to this list](#).