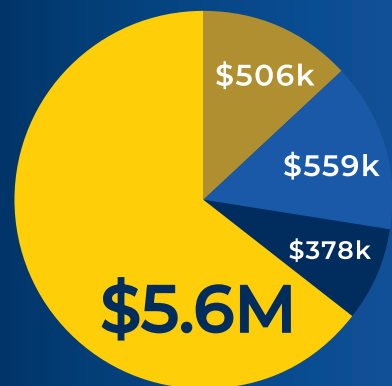# 2023 YEAR in REVIEW

This year, the Weil Institute brought in a combined total of

$7,125,706

in research support to our members through resources such as our Proposal Development team and Grand Challenge events.

Pie chart:
- $506k
- $559k
- $378k
- $5.6M

- **External Funding Sources** *(NIH, DoD, Gerber etc.)*
- **U-M Funding Sources** *(OVPR, CVC, etc.)*
- **Massey Grand Challenge**
- **Kahn Grand Challenge**

Celebrating Research Support Success

2023's Highest Funded Awards for Weil-Empowered Projects

$3.3M
NIH (NHLBI/NIGMS)

Great Lakes Consortium
Robert Hyzy, MD
Hallie Prescott, MD, M.Sc
Robert Dickson, MD

$1.2M
NIH (NIBIB)

ACCE Training Program
Kenn Oldham, PhD;
Katsuo Kurabayashi, PhD
Kevin Ward, MD

More than Grants: Supporting Tomorrow's Scientists

This year, the Weil Institute also supported:

MiSciWriters: U-M Graduate Student organization that trains fellow grad students & post-doctoral fellows in science writing.

BrainsRule! An annual event that teaches middle school students about the brain.

Proposal Development

$6,059,953
in Proposal Development -supported grants funded

30%
Total Funding Success Rate

Compared to 10-20% NIH success rate

Clinical Research Team

10
Weil member studies supported

500+
Patients Screened

200+
Patients Enrolled & Tested

Large Animal Laboratory

8 Projects Supported
6 New Published Papers
3 New Models Developed

- Multicenter Swine Cardiac Arrest Registry
- Post-TBI Breath Analysis Using Portable Gas Chromatography
- Ultrasound-based Flow-pressure Index for Assessing Cerebral Autoregulation

Data Science

PICTURE Deployed at U-M Health

The Weil Institute-developed predictive analytic PICTURE deployed with the U-M Health Rapid Response Team, helping care teams stop the spark of patient deterioration before it starts.

Product Development & Commercialization

Model Performance Diagnostics (MPD) Suite Debuts!

MTRAC Awarded!

Our MPD software fills a key niche in the FDA's call for post-market surveillance of Software-as-a-Medical-Device for AI and Machine Learning models. We engaged industry and research partners in the design and build-out of MPD and have already integrated it with PICTURE. We will continue to expand MPD's features and will conduct usability testing on its web interface in partnership with the University of Michigan School of Information.
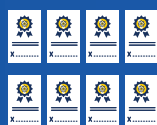
MPD was a Featured Innovation at:
- **Investing in Innovation Webinar** *(Yale/UCLA)*
- **Celebrate Invention** *(U-M Office of Innovation Partnerships)*

8
Products Available for Licensing

6
Licenses Issued

Weil Institute Programs & Events

Massey Regional Conference

Weil Institute announced its plans to form a Massey TBI Research Network that will unite Midwest institutions to enable rapid translation of TBI research and innovations.

Visiting Scholar Seminars

FEB 3 — **Michael Puskarich, MD, MSCR**
Associate Professor, Director of Research, Emergency Medicine, University of Minnesota

OCT 10 — **Geoffrey Ling, MD, PhD, DSci (Hon)**
Professor, Neurology; Attending Physician, Neuro Critical Care, Johns Hopkins; DARPA

Wolf Creek XVII

122 Attendees — FROM — **13** Countries

Connections

28k New Visitors to Website
11k Social Media Impressions
872 Newsletter Subscribers
274 Institute Members

A Year in News Stories

JANUARY
Weil Institute deputy director's study on the gut microbiome covered in *Newsweek*.

FEBRUARY
AHI, GROA, GC device selected as "Michigan Answers" that could change the world.

MARCH
PICTURE predictive analytic is externally validated at Hurley Medical Center.

APRIL
Weil partner Precision Trauma donates over 800 Turn-i-Kits to the front lines of Ukraine.

MAY
Weil Institute hosts the inaugural Kahn Pediatric Critical Care Grand Challenge.

JUNE
Weil and U-M COE launch Acute Care Engineering Training Program.

JULY
PICTURE deploys with Rapid Response Team at the U-M Health main hospital.

AUGUST
The Weil Institute and Turn-i-Kit device are featured on Detroit's Local 4 News.

SEPTEMBER
A new study finds AHI predicts instability before vital signs with clinically significant lead time.

OCTOBER
Weil Institute joins the National Football League's expanded Smart Heart Sports Coalition.

NOVEMBER
Weil research covered in Dept. of Biomedical Engineering annual magazine: *BME Innovations*.

DECEMBER
Kevin Ward, executive director of the Weil Institute, named National Academy of Inventors fellow.