Surgery Research Conference

Foxconn Award Winners

&

Ranjit Verma, PhD, an Introduction to TAP

ACCME Accreditation Statement: The Medical College of Wisconsin is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians. AMA Credit Designation Statement: The Medical College of Wisconsin designates this live activity for a maximum of 1.0 AMA PRA Category 1 Credit™. Physicians should claim only the credit commensurate with the extent of their participation in the activity. Hours of Participation for Allied Health Care Professionals: The Medical College of Wisconsin designates this activity for up to 1.0 hours of participation for continuing education for allied health professionals.
NIH R56 Clinical Trial Grant Awarded!

Acute Endocannabinoid activity involved in hyperarousal, memory formation, and non-remitting PTSD: A dense sampling approach

Primary Investigator: Terri deRoon-Cassini, PhD
Faculty Global Health Travel Scholarship
$1,000 travel expenses
July 1st, 2019-June 30th, 2020

- Faculty member illustrates a genuine enthusiasm and passion for global health in their career
- Faculty member provides evidence of a long-standing (≥ two years) partnership with global colleagues
- Purpose of travel correlates with one or more of the four missions of MCW: community engagement, education, patient care, research
- Faculty’s global health efforts are based on the Office of Global Health’s guiding principles of partnership: Collaboration, Credibility, Health equity, Multidisciplinary, Reciprocal, Social justice, and Sustainability

Global Health Research Seed Project Funding for Faculty
(3) $10,000 Awards
July 1st, 2019-June 30th, 2020

Scoring will be based on:

- evidence that the outcomes of the seed project will lead to an opportunity to submit for a larger funding proposal
- proof of an ongoing collaborative partnership
- faculty’s research collaboration shows evidence of the guiding principles for global research partnership.

Questions: Contact Tiffany Frazer
RFA: Call for Policy & Systems Changes for Improved Health

**Funds Available:** $1 - $1.5 million total to support three to five projects. Applicants should consider budgets between $200,000 - $400,000 per project for the award period.

**Application Deadline:** July 1, 2019 at 12 p.m. (noon) CST

**Funding Timeline:** Project funding will begin January 1, 2020. Projects should be conducted over a two- to four-year period.

**Funding Details:** Policy and systems changes look upstream from individual behaviors, asking what policies and systems are in place that either promote or inhibit healthy choices. Changing how these systems function can have a significant, long-term impact on the health of a population.

AHW's Call for Policy and Systems Changes for Improved Health seeks to support community-led, multi-sector partnerships in affecting a systems change that will lead to a population-level health improvement in the areas of heart health, healthy minds, and/or cancer.
The ICRN project was initiated by a 2017-2018 MCW Leadership Academy team to enhance visibility of MCW investigators and promote interdisciplinary collaboration to increase funding success.

Team members include:
- Marja Nevalainen, MD, PhD
- Debra Scott, PhD
- Matthew Hodges, PhD
- Jeannette Vasquez-Vivar, PhD
- Ankur Datta, MD

To request a profile, complete the online Intake Form

For inquiries, contact the Office of Research
Department of Surgery Research Ambassadors

New program from the Office of Research for the purposes of education, communications, and networking. Ambassadors are the boots-on-the-ground of research administration within their respective unit. The program is intended to build a community that understands basic regulatory procedures, navigates complex or layered resources, and stays informed of updates and improvements.

Amanda Emmrich, MS, CCRC
Clinical Research Coordinator III
Research Ambassador
Division of Research
955-1485 | aemmrich@mcw.edu

Nick Peterson
Research Program Manager
Pediatric Cardiothoracic Surgery & Cardiology
Herma Heart Institute
266-1753 | npeterson@chw.org

Research Ambassadors program, contact the Office of Research
SAVE THE DATE
7th Annual
Solid Organ Transplantation
Research Symposium
and The Fourth Mark B. Adams, MD
Memorial Lectureship in Transplantation

July 10 — July 11, 2019

On behalf of the Department of Surgery and the Solid Organ Transplantation (SOT) Joint Program at the Medical College of Wisconsin, Froedtert Hospital, Children’s Hospital of Wisconsin, and Versiti Blood Center of Wisconsin, Dr. Douglas Evans and Dr. Johnny C. Hong invite you to participate in the 7th Annual Solid Organ Transplantation Research Symposium, and to attend the 4th Mark B. Adams, MD Memorial Lectureship in Transplantation, on July 10 and July 11, 2019.

Please watch for further information in your mailbox.

Location:
Medical College of Wisconsin | HRC Auditorium
8701 W. Watertown Plank Road | Milwaukee, WI 53226

For additional information:
Visit www.mcw.edu/surgery, or contact Heidi Brittnacher at 414-955-1831, surgeryevents@mcw.edu

DEPARTMENT OF SURGERY
Division of Research
Publications April 2019

Pediatric Surgery


Cardiothoracic Surgery


Commentary: See 1-simulate 10,000-do 1; teach 1. *Journal of Thoracic & Cardiovascular Surgery* (D. Joyce)

Commentary: Hybrid graft to the rescue of the bilateral internal thoracic artery debate-Is it time for new technology or new techniques? *Journal of Thoracic & Cardiovascular Surgery.* 2019 Apr 04. (Wyler von Ballmoos MC and Almassi GH)

General Surgery


Surgical Oncology

Temporal trends and regional variation in the utilization of low-value breast cancer care: has the Choosing Wisely campaign made a difference? *Breast Cancer & Research Treatment* (Neuner JM, Nattinger AB, Yen T, McGinley E, Nattinger M, Pezzin LE)

Research

"The Word on Medicine: where Knowledge is changing life"

Inflammatory Bowel Disease - May 18, 2019 at 4:00pm

The next show will air Saturday, May 18, at 4:00 pm when "The Word on Medicine" replays our show focused on Inflammatory Bowel Disease: a discussion with medical experts and patients on the diagnosis and treatment of Crohn’s Disease and Ulcerative Colitis. The show will also feature the stories of grateful patients who were willing to share their stories.

Panelists for this show include:
Dr. Mary Otterson
Dr. Daniel Stein
Dr. Andres Yarur
Mandi Stayner, RD
Janice Erbe, RN

Sun Exposure - May 25, 2019 at 4:00pm
Next Month:

2018-2020 Research Residents

Kelly Boyle, MD
Marc de Moya, MD I Trauma & Critical Care Surgery

Nina Bence, MD
Amy Wagner, MD I Pediatric Surgery

Ashley Krepline, MD
Susan Tsai, MD I Surgical Oncology

Erin Strong, MD, MPH
T. Clark Gamblin, MD I Surgical Oncology

June 12th, 2019
HUB A1015/1035
5:00-6:00pm
Implementing Virtual Reality in Medical Education and Training

Foxconn Smart Cities-Smart Futures Competition

Adhit Ramamurthi, Devashish Joshi, Michelle Botts
First Year of Three:

1st Round:
325 entries, 88 winners $500
300 words, brief business plan or two-minute video

2nd Round:
30 winners $1500
500-1000 words, a two-minute pitch video

Final Round:
12 winners $5000
1500+ word business plan, a five-minute pitch video
Our Idea:
Create immersive virtual reality modules to help healthcare professionals provide better care for our communities.

Target Modules:
- Medical School Education & Exposure
- Clinical/Surgical Training
- Hospital/Emergency Protocols
- Patient Education
- Continuing Medical Education credits
Final Video Submission

https://www.youtube.com/watch?v=Jrvn4VZ0uDs
Acknowledgements

Dr. David Joyce and Research Group
Barbara Alivo, Division of Cardiothoracic Surgery
Joey Alivo
Emily Neumann, Division of Cardiothoracic Surgery
Alex Boyes, MCW Media Services
David Chao, Inception Health
Discovery vs Development

Discovery is exploratory in nature and results in new knowledge.

Therapeutic development takes new knowledge from scientists to develop therapeutics to treat human diseases.
TAP Mission: To facilitate and accelerate therapeutics and drug discovery by translation of new basic discoveries into therapies

Services for Investigators

- Providing project based funding opportunities
- Independent scientific review & guidance
- I.P. disclosure assistance
- Facilitating collaborations
- Project executions
- Consultancy
TAP’s Perspective for Effective & Functional program

Flexible approach

Make use of existing resources
- Going virtual

Getting things done – Minimum viable product

Innovation and Therapeutic driven

We believe in Collaborative Team Work
Therapeutic Development: Three main stages

Discover
- Great idea
- Carry through
- Different aspects
- IND enabling studies

TAP Project Focus

Clinical

Approval

TAP Consultation

We help to identify **The Next Critical Step**
MCW Investigators Operate in Discovery Stage

TAP Approach

• Critical analysis of therapeutic discovery
• Identify challenges in development
• Finding answers to critical challenges

TAP is providing for the unmet need of assistance/guidance to advance therapeutic development at MCW
Flexibility in starting points
Efficient use of resources and funds
Utilizes existing MCW’s and local resources, capabilities and expertise
Our Partners

MEDICAL COLLEGE OF WISCONSIN
THERAPEUTIC ACCELERATOR PROGRAM

DDRI

CTSI

MSOE

pico
postdoc industry consultants

BIOforward
Wisconsin's independent voice for bioscience

Center for Technology Commercialization
from feasibility to funding

Our Partners
External Funding Support

- Funding from CVC Smith Precision Medicine Initiative ($250 K)
- Falk Trust Grant – TAP personnel support
- Letter of Support for AHW REP Grant – Funded for compound library

Our Collaborations

- Collaborating on 5 grants (3 NIH Grants)
- Participated in NIH SBIR Conference
- Establishing collaborations - MCW Centers, CTSI, and Industry
- Actively involving PICO consultants in our program

TAP Consulting Services

- Provided consulting services to 103 MCW & CTSI investigators
- Assisted 7 investigators to move a therapeutic project forward
2017 TAP Proposal Cycle

11 proposals received

6 advanced

3 awards

11 Proposals in the first year
2017 TAP Project Accomplishments

Three TAP Projects - 2017

A₃ Adenosine Receptor Positive Allosteric Modulators for Chronic Pain
- 2 Milestones Achieved (No/Go Decision)

Dendrimer-Resveratrol Formulation for Effective Anti-inflammatory and Antioxidant Activities via Dermal Application
- 3 Milestones Achieved
- IP disclosure
- Licensing negotiations
- Continue funding - 2018

Harnessing Telomerase: A New Approach to Cancer and Cardiovascular Disease
- 3 Milestones Achieved
- Continue limited funding - 2018
The investigator did not bill the program for personnel support.

TAP investments reinvested locally and in MCW labs & cores.
2018 TAP Proposal Cycle

Distribution of proposals received (TAP-I-2018)

- Proposals received: 19
- 72% increase from last year

19 proposals received
10 advanced
4 awards
Development of Novel Schistocidal Chemotherapies Targeting Parasite Body Wall Muscle
Dr. John Chan

Anti-CCR9 Monoclonal Antibodies for Treatment of Therapy-Resistant Tumors
Dr. Michael James

Targeting CB1 Positive Allosteric Modulators (PAMs) for the Treatment of Anxiety and Depression
Dr. Qing-Song Liu

Percutaneous Distal Embolic Protection for LVAD Thrombolysis
Drs. David & Lyle Joyce
Distribution Comparison

Distribution of proposals received (TAP-I-2017)

- 11 Proposals in the first year

Distribution of proposals received (TAP-I-2018)

- Proposals received 19
- 72% increase from last year

2017

2018
<table>
<thead>
<tr>
<th>Reviewer and Department</th>
<th>Reviewer and Department</th>
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</thead>
<tbody>
<tr>
<td><strong>Dr. Blake Hill</strong>, Biochemistry</td>
<td><strong>Dr. Margaret Samyn</strong>, Pediatrics, Cardiology</td>
</tr>
<tr>
<td><strong>Dr. Cheryl Stucky</strong>, Cell Biology, Anatomy</td>
<td><strong>Dr. Nashat Gerges</strong>, School of Pharmacy</td>
</tr>
<tr>
<td><strong>Dr. Christopher Olsen</strong>, Pharmacology</td>
<td><strong>Dr. Marja Nevalainen</strong>, Pathology</td>
</tr>
<tr>
<td><strong>Dr. Daisy Sahoo</strong>, Medicine, Endocrinology</td>
<td><strong>Dr. Ramani Ramchandran</strong>, Neonatology</td>
</tr>
<tr>
<td><strong>Dr. Elizabeth Jacobs</strong>, Medicine, Pulmonary</td>
<td><strong>Dr. Scott Terhune</strong>, Microbiology and Immunology</td>
</tr>
<tr>
<td><strong>Dr. Jillian Theobald</strong>, Emergency Medicine</td>
<td><strong>Dr. William Drobyski</strong>, Medicine, Hematology &amp; Oncology</td>
</tr>
</tbody>
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TAP Advisory Committee

Dr. William Clarke
Professor Anesthesiology, Office of Technology Development

Dr. Ivor Benjamin
CVC Director, Professor, Medicine

Dr. Jeannie Baker
Quarles & Brady, MCW OTD Technology Innovation Council

Dr. Daniel S. Sem
Concordia University, CTSI AMPD Module Director

Dr. Christopher Chitambar
Department of Medicine, Cancer Center

Dr. David Gutterman
Department of Medicine, Cardiovascular Center
TAP’s Application Process

Simple One Page Proposal

Two step review process
1. Review of the proposals by eminent review panel from MCW
2. Presentation and discussion round with the Advisory Committee

Opportunity to present and discuss with experts

A fast and short process:
Application through execution of project (2-6 months)
TAP Mission: To facilitate and accelerate therapeutics and drug discovery by translation of new basic discoveries into therapies

Services for Investigators

- Providing project based funding opportunities
- Independent scientific review & guidance
- I.P. disclosure assistance
- Facilitating collaborations
- Project Execution
- Consultancy

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