



Report from the MCIRCC Collaboration Workshop

Meet Me at the Intersection: High-Value Multidisciplinary Research Opportunities to Transform Critical Care

January, 23, 2015

The U-M Center for Integrative Research on Critical Care (MCIRCC) hosted its first membership workshop to discuss its team science vision and strategy for pursuing federal research funding targets. The three specific targets discussed will each engage multidisciplinary teams at the intersection of medicine, engineering, nursing, pharmaceutical science, and behavioral science to produce critical care solutions. To view all of the slides presented at the workshop, see <https://umich.box.com/s/231zcdcyscrd1avquktbao7n3gn6qgu>.

Thirty six faculty, fellows, and staff participated in this workshop, which achieved the following outcomes:

- Catalyze formation of effective teams for MCIRCC's 2015 strategic targets—three high-value team science opportunities involving faculty at all levels;
- Launch MCIRCC's Proposal Development Unit (PDU), offering services to coach and assist faculty teams in producing more competitive proposals (see overview slides at https://umich.app.box.com/files/0/f/3032985861/1/f_25647964265).
- Preview MCIRCC's Virtual Institute, a members-only web-based portal designed to make team interaction easier and more robust and to enhance creative synergy among team members (anticipate Feb-2015 launch); and
- Foster interaction among MCIRCC members through a networking reception.

Proposal Teams

This summary report provides an outline with links to a shared folder for each of the three funding solicitations discussed. Each folder includes:

- 1) Full solicitation,
- 2) Solicitation outline,
- 3) Related overview slides from the workshop, and
- 4) Notes from the workshop discussion on possible themes, competitive resources, and interest groups for each.

The three team science funding targets discussed were:

- 1. NIH/NIBIB Quantum Program: Technological Innovation to Solve a Major Medical or Public Health Challenge Biomedical Engineering (PAR-15-031):** see documents at <https://umich.box.com/s/dnvat357908icx94s6srn16tdwmb3fp7>.

- *Make a profound (quantum) impact on prevention, diagnosis, or treatment of a major disease or national public health problem through development and implementation of biomedical technologies.*
 - *Targeted to solve a major medical problem or resolve a highly prevalent, technology-based medical challenge.*
2. **DOD/USAMRMC Extramural Medical Research (W81XWH-BAA-15-1):** see documents at <https://umich.box.com/s/ztfa7a4ktek8nyg8gxxeaf06w5zj5x9y>.
- ***Combat Casualty Program:*** *Identify/develop medical techniques, devices, drugs, and biologics for early intervention in life-threatening battle injuries, with a special focus on severe hemorrhage, vascular collapse, and resuscitation; sensors to diagnose severity of TBI and spinal cord injury.*
 - ***Medical Simulation and Information Sciences Program:*** *Improving use/sharing of health-related data for better strategic planning, process development, and software applications; technology integration to reduce implementation barriers to remote health monitoring.*
3. **NSF/NIH Smart and Connected Health Program (NSF 13-543):** see documents at <https://umich.box.com/s/bytm00iOne0hhgaghgjsok2mpqzvtfst>
- *Development of next generation health and healthcare research through high-risk, high-reward advances in understanding and applications of information science, technology, behavior, cognition, sensors, robotics, bioimaging, and engineering.*
 - *Work must relate to a key health problem and/or make a fundamental contribution to engineering, computer and information sciences, or social, behavioral and economic sciences.*

Next Steps:

1. Jaine Place, Manager of the MCIRCC Proposal Development Unit (PDU), will set up Interest Group meetings for each targeted program, inviting all those who signed up at the workshop or were suggested by other faculty.
2. Interest Groups for the NIBIB Quantum Program and the NSF/NIH Smart and Connected Health Program will meet in February, 2015.
3. Interest Groups will:
 - Review solicitation requirements, deadlines, and funding.
 - Have a deeper discussion on possible proposal themes that meet the solicitation requirements;
 - Discuss strengths and gaps in collaborators and other competitive resources for qualified theme(s);



- Make a Go/NoGo decision on whether to proceed with a proposal;
 - Identify an appropriate proposal leader (not necessarily the final PI) and collaborators who will become a Proposal Team.
4. The DOD/USAMRMC solicitation allows multiple proposals of various sizes to be submitted U-M. Three small teams have already begun to move forward and others may self-assemble. To pursue a very large-scale funded project will require further due diligence, including meeting with or hosting visits from appropriate program officers, which we hope to schedule this summer. In the meantime, if you would like to proceed with a proposal for over \$2 million from this program, please contact Jaine Place in the MCIRCC PDU at 936-2754 or jplace@umich.edu.
 5. The MCIRCC PDU will be available to provide proposal development coaching and support as requested by these teams, provided that proposals meet the following criteria:
 - Related to transforming critical care;
 - Requesting more than \$2 million over the term of the project;
 - Multidisciplinary team, preferably involving more than one college; and
 - Reasonable lead time.

For PDU assistance, please complete the **Request PDU Services** form located at:
<http://www.emailmeform.com/builder/form/1j2JNbLbw08Im9bR7u>

6. The MCIRCC **Watchlist** (see #8, below) will continuously track large opportunities related to critical care. Other team science proposal Interest Groups related to critical care will be announced by MCIRCC throughout the year with the intention of forming proposal teams months before final solicitations are published.
7. MCIRCC members may request assistance in setting up personally customized funding opportunity searches and alerts for projects *of any size* by completing the Request PDU Services form at <http://www.emailmeform.com/builder/form/1j2JNbLbw08Im9bR7u>.
8. The MCIRCC Virtual Institute, a robust members-only website portal will launch in the next few weeks, including a member directory and a comprehensive Proposal Development resource center featuring a team proposal **Watchlist**, funding opportunity search information, proposal development toolkit for faculty, training/professional development events, and much more. Stay tuned for more information!