Welcome from the Director

Welcome to the Summer quarterly research update from the Department of Family and Community Medicine. In this issue we highlight our newest Research Division faculty member Bain Butcher, MD and his innovative and forward thinking work with the College of Design, Architecture, Art and Planning and across discipline. If an entry touches on a common interest, please reach out to discuss potential collaborations.

-Chris White, MD, JD, MHA
Director of DFCM Research Division

Students complete summer experience with Research Division

Ten future and current medical students, including two ROSE Program members, joined the Research Division this summer for a fellowship opportunity. Students had the chance to assist on active research projects with staff and faculty including development, execution, and analysis of a PhotoVoice project, writing a manuscript and building a learning module for Screening, Brief Intervention, and Referral to Treatment (SBIRT), and building a resource map for underserved and homeless patients in the Cincinnati area. Students also had the chance to shadow faculty in a variety of primary care settings including geriatrics, homeless healthcare, and UC Health primary care offices. Often, students have the opportunity to stay connected to the projects after their fellowship is over to continue to contribute to manuscripts and presentations.

Students also participated in a pilot research program developed internally by staff and faculty. Here, students were led through all aspects of the research process from formulating a research idea and question to disseminating results. The program featured Research Division staff leading weekly sessions on conducting literature searches, IRB protocols, quantitative and qualitative methods and analysis, and interpreting and reporting results. The program featured an actual de-identified study from which the students could access and analyze data and end with a poster presentation and abstract for publication.

ROSE Student Adam Butler (3rd from right) participates in the HRSA PCTE PFAC panel at The Christ Hospital. Butler worked with Research Assistant Keesh Goodnow BAE in building foundational research skills and tools this summer.

L-R: Neelab Abdullah, Emily Moss, Adam Butler, Ilana Bergelson

L-R: Caitlin Mammolenti, Brendan Andres, Anthony DeMarco, Rachel Frederick, Katherine Makaroff, Tyler Waid
Charles Doarn, MBA Presents Text to OSU’s John Glenn School

On Friday, May 12, Doarn, as one of the contributing authors, presented the text book, the 4th Edition of Space Physiology and Medicine: From Evidence to Practice, to Dr. Trevor Brown, Dean of the John Glenn School of Public Affairs at The Ohio State University (OSU). He was joined by Dr. John Horack, Professor and Neil Armstrong Chair in Aerospace Policy at OSU. The presentation was in John Glenn’s office. Senator Glenn also wrote the Foreword for the book.

The book was also presented to the Wright State University, where NASA’s Aerospace Medicine Residency has resided since 1978. It was also presented to the Franzello Aeromedical Library, USAF School of Aerospace Medicine, Wright Patterson Air Force Base, Dayton, OH. Doarn also donated one to the Donald C. Harrison Health Sciences Library at UC’s College Of Medicine.

Department of Family and Community Medicine Continues Scholarship Development Fund

To encourage and support scholarship for faculty, the Scholarship Development Fund offers a competitive funding program for planning, performing, and presenting research projects and investigating clinical questions. Projects will also engage learners in the research process. Individual project funds of up to $10,000 will be available for faculty to spend over a two-year period. The applications are peer reviewed from a pool of faculty in the DFCM. In 2016, four projects were funded with each continuing and producing encouraging results.

The Department encourages all faculty to pursue this opportunity. All interested applicants should contact Mary Beth Vonder Meulen, RN for more application and Scholarship Development Fund information:

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Wellness Corner

Safe Gardening

By Mary Beth Vonder Meulen, RN

Gardening is a popular pastime, whether you want to plant an edible Victory Garden or a beautiful floral display. Unfortunately, some beautiful plants can have deadly consequences if ingested by children or pets. Here are some of them:

Wolfsbane (aka Monkshood, Leopard’s bane or Blue Rocket)
Can cause muscle weakness, heart arrhythmias and even death. Its lovely purple flowers even inspired fictional murder in some of Agatha Christie’s mystery novels.

Dutchman’s Pipe
This large decorative shrub contains aristolochic acid. This chemical, now banned in the US, was used in herbal weight-loss products and caused kidney failure resulting in the need for kidney dialysis and even transplantation. Aristolochia is classed as a Class 1 Carcinogen by the International Agency for Research on Cancer.

Oleander
This shrub, with glossy leaves and fragrant flowers, grows wild throughout the warmer sections of the US. Symptoms include nausea/vomiting, abnormal heart rate and rhythms, collapse, seizures and even death. It is toxic to humans and pets, so be sure that your garden is oleander-free before letting your dog out to play.

Poison Hemlock
Even a tiny amount of the alkaloids found in this weedy plant can lead to respiratory collapse, respiratory failure and death. Although often called ‘hemlock’ it is not related to the tall evergreen tree of the same name. It is the poison that Socrates was forced to drink in 399 BC after being sentenced to death. Agatha Christie also used it as a murder weapon in her Hercule Poirot mysteries.

Dieffenbachia
This houseplant is a popular choice because it is hardy and tolerant of low light. However, the attractive leaves contain calcium oxalate that, if chewed, causes a burning sensation, swelling, drooling and even airway obstruction. Should be kept well away from children and pets.

Deadly Nightshade
The leaves contain atropine so the most noticeable symptoms are pupil dilation. In the past, women used eye drops containing this plant to enlarge their pupils, leading to the name belladonna (beautiful woman).
HRSA PCTE Project Awarded Expansion for Opiate Medication Assisted Treatment

Dr. Jeff Schlaudecker (PI) and his PCTE team that includes Research Division members Dr. Chris White, Soni Regan, and Keesha Goodnow were awarded funding to expand training for Family Medicine residents and community and faculty preceptors for medication assisted treatment (MAT). Daniel Hargraves will serve as Program Coordinator for the expansion project. The funding arrives at a critical time in Southwest Ohio and the surrounding areas as the opiate epidemic persists.

The project will be multi-faceted including production of training video modules on topics such as Screening, Brief Intervention, and Referral to Treatment (SBIRT), Crucial Conversations on Opiate Prescribing, and Urine Drug Screen Interpretation. Resident interns will receive a didactic on Narcan and a skills session on administering. Second year residents will experience a two week rotation and shadowing experience at Brightview, a Cincinnati treatment center.

Faculty from the new Physician Assistant program at Mount St. Joseph’s along with faculty and community preceptors will participate in a workshop that will include buprenorphine waiver training with learners also viewing the video modules.

All participants will also take part in a crucial discussion on implementing MAT in practice and care for opiate addiction facilitated by the book Dreamland, a historical overview of the opiate crisis in the U.S.

The one-year project began July 1 and will run through June 30, 2018.

Mind-Body Program Offers Students Positive Results

The UC Center for Integrative Health and Wellness is pleased to offer Mind-Body Skills course opportunities to students in the Colleges of Medicine, Allied Health, Nursing, Pharmacy, CCM, DAAP, and Law this Fall. For students who have already participated in the Level 1 course, a Level 2 course is also being offered to further develop and practice mind-body techniques, with the guidance of trained faculty co-facilitators. Students who have completed the UC Mind-Body Skills course have reported lower levels of stress and negative affect, as well as increased mindfulness, empathy, positive affect, and resiliency, as compared to peer controls. Faculty who have participated in the three-day immersive training retreat describe the experience as “transformative”, “empowering”, and encourage their peers and colleagues to try it.

For more information, please visit our website: http://med.uc.edu/integrative/student-faculty-wellness/mind-body-skills

Manuscripts Recently Published or In Press


Posters and Presentations


Shomo A, Hargraves D. Community Engagement: Building Trust in a Marginalized Population. A poster presented at the National School-Based Health Care Convention; June 18-21, 2017; Long Beach, CA.
Project Spotlight: Social Innovation Lab

Bain Butcher, MD, MFA holds a joint faculty appointment as Associate Professor at both the College of Medicine and DAAP. He received his MD degree at UC and his MFA in Painting from the New York Academy of Art. Since joining the UC faculty in 2014, he has continued to work in both fine art and medicine and has developed what he identifies as the third space between them. This third space effort reflects his belief that creative, collaborative, trans-disciplinary methods can yield unexpected and human-centered solutions to complicated problems. In the Department of Family Medicine, Dr. Butcher is active in research, teaching and mentoring and is developing a number of interdisciplinary initiatives that include arts-integration into the medical sciences. At DAAP, he teaches drawing and painting and exhibits work nationally. In 2013-14, he was the Darwin Lambert Artist in Residence at Great Basin National Park where he worked with an interdisciplinary team studying the ancient Bristlecone Pine. He has won numerous awards and his work has appeared in publications such as Fine Art Connoisseur Magazine, the International Drawing Annual 6, and the International Painting Annual 2. In his third space efforts, Dr. Butcher has worked with the Office of Research, the Office of the Provost, and leaders from several of UC’s colleges to develop high-impact, trans-disciplinary research and educational opportunities centering on arts integration. Among these are co-founding and co-directing the UC Social Innovation Lab (SI Lab), being selected as the COM representative for the Transdisciplinary Research Leadership Program (TDRLP), and developing novel interdisciplinary courses and opportunities for the medical sciences major and UC Forward. At the international level, he was selected for a 3-year funded project with Jiangnan University in China to form a Joint International Lab for Healthcare Design with trans-disciplinary experts from the US, Europe, and China.

Dr. Butcher Co-Founded and Co-Directs the UC SI Lab along with Craig Vogel, Associate Dean at DAAP. Projects at the SI Lab typify the kind of innovation that can occur when students, faculty, staff, and administration work toward mutual goals across disciplinary or departmental boundaries. The lab began in 2014-15 as the UC Wellbeing Initiative funded by the Office of Research under Dr. Bill Ball and evolved into the SI Lab with continued support from VP of Research, Pat Limbach. It is now a multidisciplinary hub of faculty and student collaboration generating transformative research, educational, and thought models that address the complex social challenges of our time. Current research themes include health/wellness, diversity/inclusion, human-centered systems, and arts integration into medicine. The lab’s faculty-coached, multidisciplinary teams of graduate and undergraduate students follow a novel process that combines design-thinking techniques with qualitative, quantitative, and ethnographic research methods. The process facilitates clarity in the spaces between disciplines where complexity and communication barriers can inhibit progress. One of the keys to the lab’s success is fostering a greater comfort with the “fuzzy front end” of hypothesis formation.

This initial emphasis on creativity and exploration builds the context and background for further discipline specific research to take place with greater team efficiency, broader understanding, enhanced cross-disciplinary communication, and more attention to human centered outcomes.

In 2015-16, the SI Lab addressed nutritional challenges faced by UC students as they transition from living at home to living on their own. The project proposed options for a nutritional ecosystem involving campus food services, local restaurants, and the development of new food delivery technologies. The lab’s second project addressed the gaps between actual and perceived safety of students on UC campus in the wake of the Samuel DuBose shooting. The study provided valuable insights to Robin Engle, VP for Safety and Reform, and other UC and community stakeholders. Recently, the SI Lab undertook an ambitious ethnographic comparison of the academic cultures at COM and DAAP. The project compared student/faculty perceptions, educational methods, academic culture, work environment, and research methods between the two colleges. This study identified valuable insights about the academic cultures at both COM and DAAP, especially regarding opportunities for greater collaboration in the context of UC’s strategic goals to expand interdisciplinary research and education. During this coming year, the SI Lab is collaborating with Dr. Sarah Pickle on a grant-funded project examining health disparities in transgender populations using art as a method for communication. In addition to the educational and research components of this project, a major deliverable outcome will be a series of campus wide art events involving COM, DAAP, and the university galleries. The project engages a team of expert faculty and students from COM, DAAP, A&S, UC Galleries and the UC LGBTQ Center. As part of this project, Dr. Butcher secured a grant to embed a librarian/informationist on the team who will assist with the challenges of interdisciplinary literature review and information management.
Faculty

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Dedicated full-time staff members with over 50 years of cumulative experience provide full project support from assisting in design and implementation to analysis and evaluation. The division offers expertise in:

- Project Management
- Data Management
- Grant Writing
- IRB Protocols
- Statistical Analysis
- Data Collection Methods
- Project Reports
- Manuscript Development, Writing and Editing
- Research Nurse
- Qualitative Research

For more updates on our projects and other events in the UC Department of Family & Community Medicine, please like our Facebook page today!

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