

2020 CAIRIBU MEETING SUMMARY

Collaborating for the Advancement of Interdisciplinary Research in Benign Urology

NIDDK George M. O'Brien Centers Cooperative Research Program in Benign Urology (U54)

NIDDK Developmental Centers for Interdisciplinary Research in Benign Urology (P20)

NIDDK Urologic Research (KUR) and Urological Epidemiology (KUroEpi) Institutional Research Career Development Programs

2020 CAIRIBU MEETING SUMMARY

Thank you to everyone for a successful first virtual meeting of the CAIRIBU community.

Participants

There were 200 registrations for the meeting of which 46% held a PhD, 34% held a MD, DO, or DVM, and 20% were students or held other titles such as MS or MPH degrees. At any one time, 140 people participated in the meeting.

Registrants came from approximately 55 unique universities and institutions with 80% of registrants coming from 17 institutions with ≥4 registrants each. This was the first year the annual CAIRIBU meeting was open to those outside the CAIRIBU Community, and these registrants accounted for 34.5% of the total.

Two new P20 Exploratory Centers were part of the CAIRIBU meeting this year: **Medical College of Wisconsin** (PI, Kathryn Flynn, PhD) and **Children's Hospital of Philadelphia-University of Pennsylvania** (PI, Greg Tasian, MD, MSc, MSCE).

CAIRIBU U54 O'Brien Centers represented in scientific sessions and abstracts included:

- Columbia University (PIs, Cathy Mendelsohn, PhD; Ali Gharavi, MD; Jonathan Barasch, MD, PhD)
- University of Pittsburgh (PI, Zhou Wang, PhD)
- University of Wisconsin-Madison (PI, Will Riche, PhD)

P20 Exploratory Centers represented in scientific sessions and posters included:

- Albert Einstein Medical College (PI, Kelvin Davies, PhD)
- Beth Israel Deaconess Medical Center-Harvard University (PI, Mark Zeidel, MD)
- Columbia University (PI, Simone Sanna-Cherchi, MD)
- Duke University (PI, Pei Zhong, PhD)
- NorthShore University Health System-Purdue University (PIs, Simon Hayward, PhD & Timothy Ratliff, PhD)
- University of Alabama at Birmingham (PI, Dean G. Assimos, MD)
- University of Tennessee Health Sciences Center (PI, Georgi Petkov, PhD)
- Vanderbilt University (PI, Maria Hadjifrangiskou, PhD)
- Washington University (PI, Indira Mysorekar, PhD)

Thirteen K scholars represented 2 KUroEpi and 2 KUR Programs:

- UCSF-Kaiser Permanente KUroEpi Program (PIs, Alison Huang, MD; Stephen Van Den Eeden, PhD)
- University of Michigan KUroEpi Program (PIs, Aruna Sarma, PhD; Quentin Clemens, MD)
- Duke University KUR Program (PI, Cindy Amundsen, MD)
- University of Wisconsin-Madison KUR Program (PIs, Dale Bjorling, DVM; Wade Bushman, MD, PhD)

CAIRIBU MEETING EVALUATION

Thank you to everyone who took the time to respond to the meeting evaluation survey. Responses from the 2019 CAIRIBU meeting survey were considered carefully by the 2020 Program Committee. The 2020 meeting survey results will be similarly reviewed. **Respondents** (n=59) included students (17%), post-docs (14%), early investigators (24%), established investigators (36%), NIDDK leadership/staff (5%), and research support and administration personnel (3%).

Evaluation

All 3 scientific sessions were rated highly for effectiveness. Depending on the session, between 81% and 100% of respondents (excluding those who did not attend the session), reported that the sessions were excellent or good at transmitting content and delivering knowledge. Dr. Mark Nelson's keynote speech was highly rated, with 88% of respondents rating it excellent.

NIDDK CAIRIBU SUPPORT:

Chris Mullins, PhD – Program Official

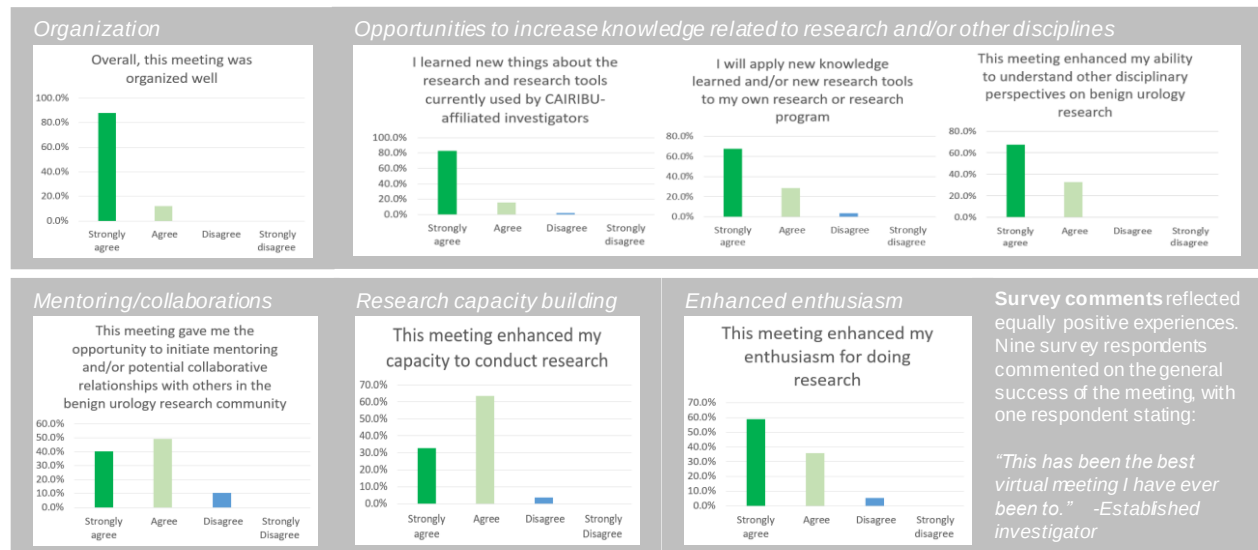
Tamara Bavendam, MD – Project Scientist

Kristina Penniston, PhD – PI, UW-Madison U24 Interactions Core

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Meeting Satisfaction

Surveys (n=59) showed overwhelming satisfaction with the meeting in a variety of capacities (see below).



Meeting Comments

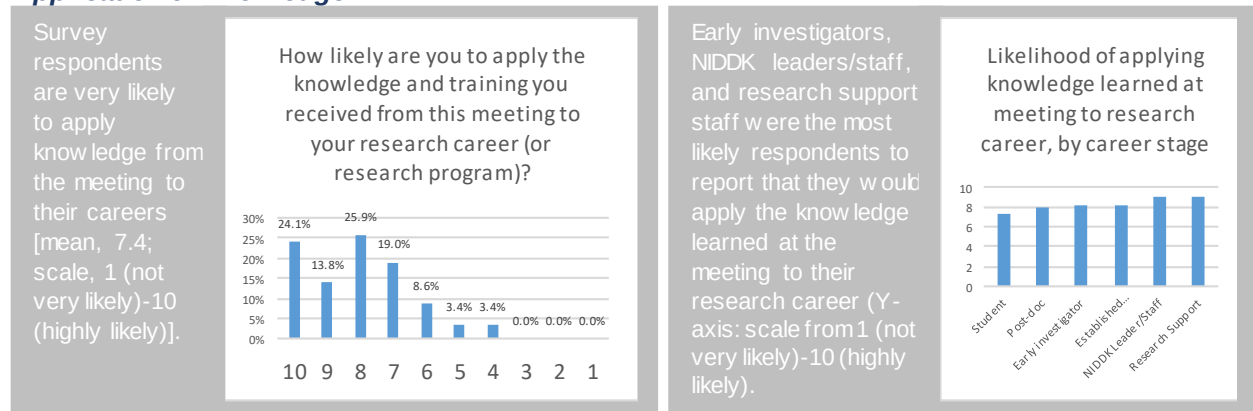
Notable successes mentioned by respondents in the comment portion of the survey included (1) having trainees moderate the sessions, (2) active and on-going discussion within the Zoom chat feature, (3) the interactive poster presentations, and (4) the innovative format of the meeting overall.

Changes in Knowledge

After attending sessions, respondents increased their self-reported knowledge about epidemiology research by 28%, about clinical and translational research by 20%, and about basic science research by 10%.

Students and early investigators reported increased knowledge. Self-reported changes in knowledge before and after the clinical and translational research session were **statistically significantly higher for students** ($P=0.0003$) and **early investigators** ($P=0.047$) as compared to established investigators. Similarly, the basic science session produced different results between groups. **Students reported statistically significant increases** in self-reported knowledge relative to established investigators ($P=0.012$) and early investigators ($P=0.022$).

Application of Knowledge



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Best Posters & Abstracts – PDF posters and full-text abstracts available on [CAIRIBU website](#)

Thank you to all of those who presented posters. “Best posters” are shown below.

- Prostate and aging: **TIE: Teresa Liu, PhD**, UW-Madison U54 O'Brien Center.
Mitochondrial dysfunction due to aging contributes to prostatic fibrosis
- Prostate and aging: **TIE: Livianna Myklebust, BS**, UW-Madison U54 O'Brien Center.
The Co-localization of COX-1 and COX-2 in Aged Mouse Prostate and Human Prostate
- Prostate/ GU tract signaling and morphology: **Renee Vickman, PhD**, NorthShore HealthSystems-Purdue University P20 Exploratory Center.
Macrophage-Derived Tumor Necrosis Factor Contributes to Benign Prostatic Hyperplasia Through Increased Fibroblast Proliferation
- Prostate and LUTS, pathophysiology: **Hannah Ruetten, DVM/PhD candidate**, UW-Madison U54 O'Brien Center.
A Phenome-Based Approach for Characterizing Mouse Urinary Pathophysologies
- Therapeutics and treatment: **Khue Tran, research specialist**, Houston Methodist, in the lab of Dr. Rose Khavari, former Opportunity Pool awardee, University of Pittsburgh U54 O'Brien Center.
Preliminary Results of Novel Noninvasive Cortical Modulation using Transcranial Rotating Permanent Magnet Stimulator in Improving Voiding Dysfunction in Female Multiple Sclerosis Patients
- Neuroregulation and voiding or LUTS: **Logan Hubbard, MD**, Urology Resident, Houston Methodist.
Preliminary Results of Baseline Cortical Neural Activity in Men with Benign Prostatic Hyperplasia and Bladder Outlet Obstruction
- Genetics – kidney or bladder: **Bisiayo Fashemi, graduate student**, Washington University P20 Exploratory Center.
The Decision Maker: The Role of IFRD1 in Urothelial Plasticity and Regeneration
- Infection: **John Brannon, PhD**, Postdoctoral Researcher, Vanderbilt University P20 Exploratory Center.
Invasion Of Vaginal Epithelial Cells By Uropathogenic Escherichia coli
- Population health: **Scott Bauer, MD**, K12 Scholar, UCSF-Kaiser Permanente KUroEpi Program.
Association of Frailty with Clinical Benign Prostatic Hyperplasia Progression and Serious Adverse Drug Events: the MTOPS Study
- Other kidney, bladder, prostate: **Matthew Grimes, MD**, K12 Scholar UW-Madison KURe Program.
Decreased CD44 Expression Is Associated With Increased Hyaluronic Acid Abundance In Human Lichen Sclerosus

These abstracts received the highest scores from reviewers' evaluations. Congratulations!

1. **Connor Beebout, graduate student**, P20 Center of the Vanderbilt University Medical Center (PI, Maria Hadjifrangiskou, PhD) *“Cytochrome bd is required for uropathogenic Escherichia coli pathogenesis and biofilm development”*
2. **Sarah Maxwell, graduate student**, P20 Center of the University of Tennessee Health Sciences Center (PI, Georgi Petkov, PhD) *“Age-dependent expression of TRPM4 channel in guinea pig detrusor smooth muscle is associated with altered contractility”*
3. **Derek Ho, PhD**, K12 Scholar, Duke University KURe Program (PI, Cindy Amundsen, MD) and a postdoctoral researcher at the Duke University P20 Center (PI, Pei Zhong, PhD) *“The major contribution of cavitation to stone damage in dusting mode during laser lithotripsy”*

“Peoples' Choice” awards were selected by poster session attendees. Congratulations **Khue Tran, research specialist** (Houston Methodist); **Sarah Maxwell, graduate student** (Univ Tennessee P20 Exploratory Center); **Jim Hokanson, PhD** (K12 Scholar, Duke Univ KURe Program); and **Connor Beebout, graduate student** (Vanderbilt Univ P20 Exploratory Center).

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