

SEPTEMBER 2021 Uromicrobiota Research Interest Group meeting 9/27/2021

The July 2021 discussion included investigators from various disciplines and fields including clinical urology, urogynecology, and nephrology; microbiology; bacteriology; virology; bioinformatics and computer/data science, and others. Discussants were: Maria Hadjifrangiskou, PhD; Lisa Karstens, PhD; Maryellen Kelly, DNP, MHS; Aaron Miller, PhD; Catherine Putonti, PhD; Nazema Siddiqui, MD, MHS; and Tanya Sysoeva, PhD.

Major points of discussion at the July meeting focused on what is known and what is unknown related to the urinary tract microbiota. Key knowledge gaps were captured on a “mind map” (attached, p. 4). Minutes [HERE](#).

Since the July meeting, **a bibliography of uromicrobiome-related publications was created**, drawing upon those authored by participants at the July and September 2021 meetings. This bibliography is available on the intranet page of the CAIRIBU website, “CAIRIBU Connect.” Link [HERE](#).

The focus of today’s discussion was to identify areas of immediate and potentially collaborative interest and specific actions/activities we can set up to give some “form” to this group. In addition to all the knowledge gaps identified in the mind map, **a few items of immediate interest were suggested and included:**

- Spatial and temporal mapping of microbiomes
- Improving curated reference databases for urinary tract microbes
- Investigating the gut-kidney axis in stone disease and in other urinary tract diseases
- Relationship of specific urinary tract microbes with chronic inflammation and UTI, as well as with other disease processes

Some activities or actions we could undertake were proposed. These included to form a journal or discussion group to read the consensus paper in mSystems (July/August 2021 issue). Many in this group were co-authors (first author Linda Brubaker). We discussed how the issue at this point is NOT whether we should form a consensus but (we know we should), but rather, what that consensus might look like with respect to getting people to actually apply the recommendations in their research. It was noted that while certain things can be standardized, other things should not be standardized if only to conform to the approaches of one or two labs.

Other “actionable” items suggested included:

- Get to know each other better –
 - Could take ~20 min or so up front to hear from 4-5 different people, each giving a 4-5 min review of the work they do (this includes trainees as well as established investigators)
 - Could have everyone address the same set of questions to address
 - Create “catalog” matching individuals with the techniques they use
 - Create a catalog of everyone’s grant titles of Grantome and post these in a central place (CAIRIBU Connect site)
- Identify opportunities for potential research collaborations based on peoples’ interests, skills, background, and expertise
- Get to know the literature better
- Within the broader urologic research community, need to get people to know the literature and to cite appropriate literature in their manuscripts
- Alert investigators within the broader community to resources available (appendices and supplementary materials available in online publications)
- Create “layperson”-like summaries of papers that come out to enhance broader understanding
- Create a public-facing resource of some sort to address common questions

- Develop small working groups to tackle a couple of different issues and write brief “white papers”
 - Animal models
 - Computational models
 - Shared framework
 - Generate specific hypotheses to spin off small grant-writing groups

On the following pages: (Below) Table 1 shows list of participants at the July and September meetings; (Page 3) Table 2 shows those added to the list after the July meeting but who were unable to participate in September; (Page 3) calendar of microbiome-related meetings and events in 2022; and (Page 4) mind map from July 2021 discussion.

TABLE 1. Individuals who participated in the July 2021, September 2021, or both Uromicrobiota Research Interest Group meetings.

Al	Kait		Western University Canada/Lawson
Allmaras	Jennifer	MPH	CAIRIBU Interactions Core
Ambrogio	Marcela		U54 - UW-Madison (Vezina lab)
Barasch	Jonathan	MD, PhD	U54 - Columbia Univ
Barthold	Julie	MD	NIDDK
Binoy Joseph	Diya	PhD	U54 - UW-Madison (Strand lab)
Bjorling	Dale	DVM	KURe - UW-Madison
Burton	Jeremy	PhD	Lawson Research
Coffey	Emily		University of Minnesota
Davis	Catherine		CAIRIBU Interactions Core
De Nisco	Nicole	PhD	University of Texas (Dallas and SW)
Desai	Shalin	MD	Loyola University Chicago
Flynn	Kathryn	PhD	P20 - MCW
Goldberg	Tony	DVM	Opp Pool - U54 UW-Madison
Hadjifrangiskou	Maria	PhD	P20 - Vanderbilt Univ
Hale	Vanessa	DVM, PhD	Ohio State University
Karstens	Lisa	PhD	Oregon Health & Science University
Kelly	Maryellen	DNP, MHSc	KURe - Duke Univ
Klaiber	Douglas		Urobiome Therapeutics
Lane	Guilia	MD	KUroEpi - Univ Michigan
MacIver	Bryce	PhD	P20 - Harvard Univ/BIDMC
Maldonado	Maria		
Miller	Aaron	PhD	Cleveland Clinic
Monga	Manoj	MD	UC San Diego
Morales	Grace		P20 - Vanderbilt Univ
Mrofchak	Ryan	MS	Ohio State University (Hale Lab)
Mullins	Chris	PhD	NIDDK
Mysorekar	Indira	PhD	P20 - Washington Univ
Nihalani	Deepak	PhD	NIDDK
Odom	Michael	PhD	KURe - Duke Univ
Penniston	Kristina	PhD, RDN	CAIRIBU Interactions Core
Peterson	Nelson Thomas		U54 - UW-Madison (Ricke lab)
Popvics	Petra	PhD	KURe - UW-Madison
Putonti	Catherine	PhD	U54 - Columbia Univ
Sandhu	Jaskiran		U54 - UW-Madison (Vezina lab)
Sheikh	Naveen		
Siddiqui	Nazeema	MD, MHS	KURe - Duke Univ
Spruance	Victoria	PhD	NIDDK
Stern	Joshua	MD	Intermountain Healthcare (Utah)
Strand	Doug	PhD	U54 - UW-Madison
Suadcani	Sylva	PhD	P20 - Albert Einstein
Sysoeva	Tatyana	PhD	KURe - Duke Univ
Tasian	Gregory	MD	P20 - CHOP
Wang	Zunyi	PhD	U54 - UW-Madison (Ricke collaborator)
Whittemore	Greg		P20 - Columbia Univ
Wolfe	Alan	PhD	Loyola University Chicago

TABLE 2. Individuals invited to participate after the July 2021 Uromicrobiota Interest Group meeting but who did not attend.

Ackerman	Lenore	MD, PhD	Cedars Sinai
Amato	Katherine	PhD	Northwestern University
Brubaker	Linda	MD	UCSD
Choi	Brian	MS	Loyola University Chicago
Chughtai	Bilal	MD	Weill Cornell Medicine
Dong	Qunfeng	PhD	Loyola University Chicago
Forster	Catherine (Katie)	MD, MS, FAAP	UPMC Children's Hospital of Pittsburgh
Hatch	Marguerite	PhD	University of Florida
Hochstedler	Baylie	MS	Loyola University Chicago
Horsley	Harry	PhD	University College London
Hultgren	Scott	PhD	Washington University
Kachroo	Naveen	MD	Henry Ford Health System, Detroit
Khasriya	Rajvinder	PhD	LUTS Clinic, Whittington Hospital, UK
Lee	John Richard	MD	Weill Cornell Medicine
Neugent	Michael	PhD	University of Texas at Dallas
Subashchandrabose	Sargurunathan	PhD	TAMU
Sze	Christina		NY Presbyterian/Weill Cornell Medicine
Ulvi	Darcie		Duke University
Underhill	David	PhD	Cedars Sinai
Vanek	Michael		Loyola University Chicago
Whittamore	Jonathan	PhD	University of Florida

CALENDAR OF MICROBIOME/UROBIOME AND (POTENTIALLY) RELATED EVENTS

START DT	END DT	NAME	WHERE	INFO
2/13/2022	2/17/2022	Keystone Symposia: The Human Microbiome – Ecology & Evolution	Banff, AB, Canada	Website
3/07/2022	3/09/2022	Center for Microbiome Innovation International Microbiome Meeting ¹	San Diego	Website
4/02/2022	4/05/2022	Experimental Biology Annual Meeting	Philadelphia	Website
5/13/2022	5/16/2022	American Urological Association Annual Meeting	New Orleans	Website
6/09/2022	6/13/2022	American Society for Microbiology Annual Meeting	Washington, DC	Website

¹ **Urobiome** is **Day 3** (Wed., 3/09/2022). This is from the CMI website: *On the third day of this event, leading researchers will present on the emerging science of the Urobiome and its recently discovered implications for human health, including common conditions such as urinary tract infection, urinary incontinence, and bladder overactivity.*

