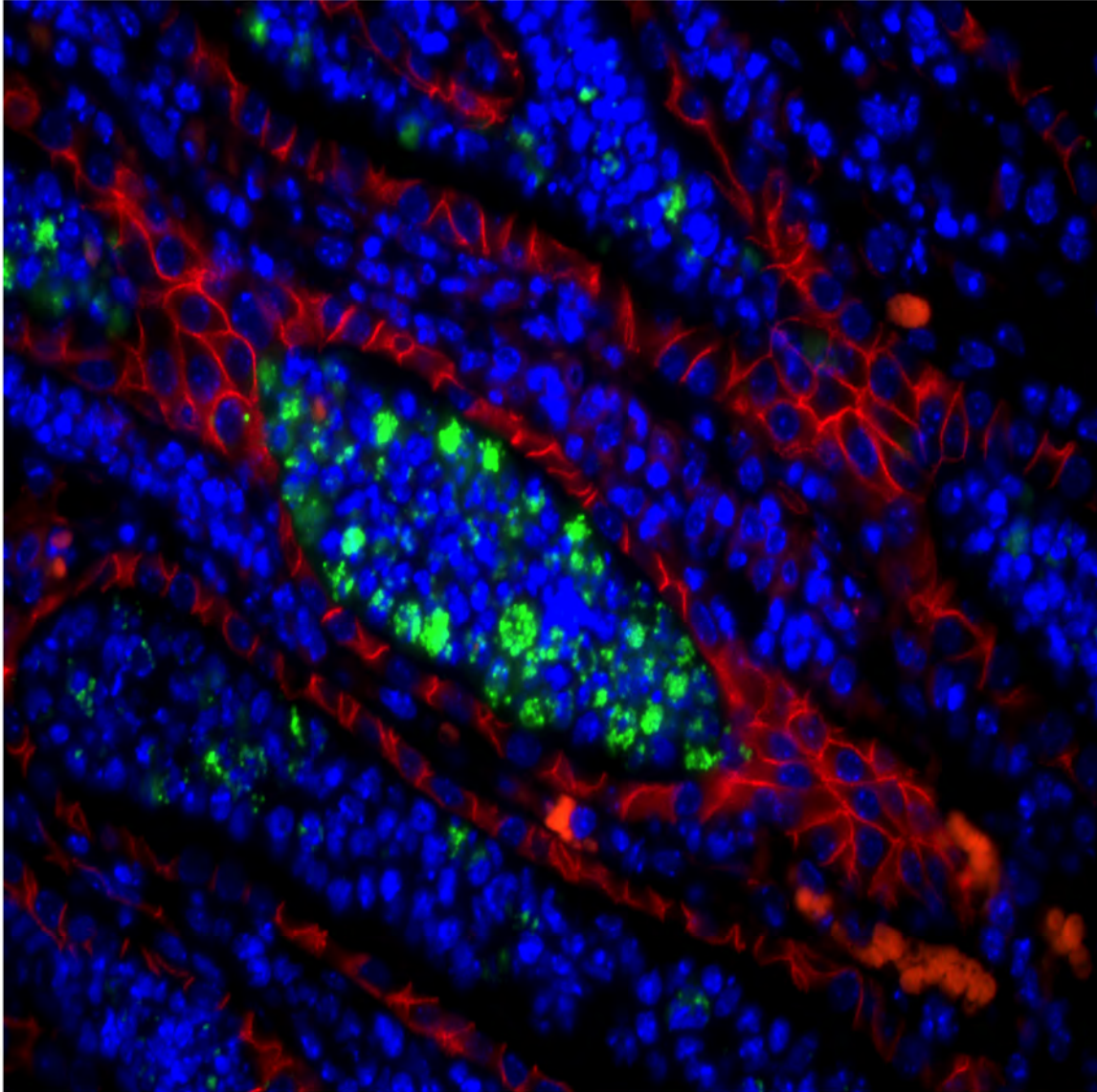


CLINICAL AND SCIENTIFIC ADVANCES IN URINARY TRACT INFECTIONS



**Sheraton Columbus Hotel at Capital Square
Columbus, Ohio
August 26-28, 2016**

UPEC aggregates (green) accumulate in neutrophil-rich casts within medullary collecting ducts of C3H/HeOJ murine kidney 7 days following intravesical inoculation with CFT073 (10^8 CFU). Tubular epithelial cells are identified by E-cadherin (red) staining. Nucleated cells are identified by DAPI. 60x magnification.

Image courtesy of **Brian Becknell**, Nationwide Children's Hospital.

2nd Clinical and Scientific Advances in Urinary Tract Infections

August 26-28, 2016

Sheraton Hotel at Capital Square
Columbus, Ohio

Friday August 26, 2016

- 3:00 – 7:00 Registration – Congressional Foyer
- 4:00 – 5:30 *Opening Reception and Cash Bar* – Legislative Foyer
- 5:30 – 6:00 *Opening Remarks and Announcements* – Congressional Room
Mark Schembri, Ph.D., The University of Queensland
John Barnard, M.D., President, Research Institute at Nationwide
Children's and Chair, Pediatrics

Opening Keynotes

- 6:00 – 6:45 *Recurrent urinary tract infections: pathogenesis, bladder
remodeling and clinical prevention*
Scott Hultgren, Ph.D., Washington University in St. Louis
- 6:45 – 7:30 *Molecular determinants of UTI severity - pyelonephritis, cystitis
and ABU*
Catharina Svanborg, M.D., Lund University

Saturday, August 27, 2016

7:00 – 5:00 Registration – Congressional Foyer

7:00 – 8:00 *Continental Breakfast*– Legislative Foyer

NIH Keynote

8:00 – 8:30 Welcome: **Dr. Steve Allen**, CEO Nationwide Children's

Moderator: **Sheryl Justice**, Ph.D. Nationwide Children's

8:30 – 9:15 *From Bedside to Bench: Applying the NIH Lens to a Clinician Perspective of UTI Research Needs*

Tamara Bavendam, M.D., National Institutes of Health

Session I: Biogenetics and Meta'omics in UTI

Moderator: **Sheryl Justice**, Ph.D. Nationwide Children's

9:15 – 9:35 *Coordinating experimental and genomics approaches to studying UTI*

Swaine Chen, M.D., Ph.D., Genome Institute of Singapore

9:35 – 9:55 *Revealing the evolution of multidrug resistant Escherichia coli*

Scott Beatson, Ph.D., The University of Queensland

9:55 – 10:15 *DamX – a novel factor involved in UPEC shape shifting*

Jakob Møller-Jensen, Ph.D., University of Southern Denmark

10:15 – 10:30 *Break*

Session II: UTI Pathogenesis

Moderator: **Mathew Mulvey**, Ph.D., University of Utah

10:30 – 10:50 *Host innate immune defects as a mechanism of UTI susceptibility*

Andy Schwaderer, M.D., Nationwide Children's

10:50 – 11:10 *Fimbriae, fortresses, flow, and fit: Proteus mirabilis uropathogenesis*

Melanie Pearson, Ph.D., New York University

11:10 – 11:30 *Enterococcus faecalis Immune Modulation During Catheter-Associated UTI*

Kimberly Kline, Ph.D., Nanyang Technical University

11:30 – 11:50 *Risk factors for acquisition of multidrug-resistant Escherichia coli and development of community-acquired UTIs*

Amee Manges, MPH, Ph.D., School of Population Public Health

- 11:50 – 12:10 *Revolutionizing Urological Diagnostic Microbiology-Update*
Bernard Churchill, M.D., University of California-Los Angeles
- 12:10 – 1:00 *Box Lunch* – Legislative Foyer

Session III: Selected from Abstracts

Moderator: **Rod Welch, Ph.D.**, University of Wisconsin

- 1:00 – 1:15 *A T6SS Immunity Protein Acts as a Kin Identifier during Intraspecies Warfare*
Christopher J. Alteri, University of Michigan Medical School
- 1:15 – 1:30 *Dissecting UPEC biofilm subpopulations unveils oxygen-dependent regulation of type 1 pili mediated by FNR*
Kyle A. Floyd, Vanderbilt University
- 1:30 – 1:45 *Transient exposures to dysbiotic vaginal bacteria activate latent *E. coli* infection in the urinary tract*
Nicole M. Gilbert, Washington University in Saint Louis
- 1:45 – 2:00 *A mucosal imprint left by prior *E. coli* bladder infection sensitizes to recurrent disease*
Valerie P. O'Brien, Washington University in Saint Louis

Poster Session – Senate Room

Session IV: From Bench to Bedside Structure/Function in the Urinary Tract

Moderator: **Mark Schembri**, Ph.D., University of Queensland

- 4:00 – 4:20 *Inhibition of Pilus Assembly by the Small Molecule Nitazoxanide*
David Thanassi, Ph.D., Stony Brook University
- 4:20 – 4:40 *Procalcitonin: An Alternative “Top Down” Approach to the Detection of Clinically Significant Vesicoureteral Reflux?*
H. Gil Rushton, M.D., Children’s National
- 4:40 – 5:00 *Cytokines and Urinary Tract Infections - Not Mere Numerology*
Mike Hsieh, M.D., Ph.D. Children’s National
- 5:00 – 5:20 **E. coli* extracellular matrix components, inhibitors, and implications*
Lynette Cegelski, Ph.D., Stanford University
- 6:00 *Dinner and Cash Bar*– Congressional Room

Sunday, August 28, 2016

7:00 – 8:00 *Continental Breakfast* – Legislative Foyer

Keynote: Point/Counterpoint

Moderator: **Christina Ching**, M.D., Nationwide Children's

8:00 – 8:45 *Controversies regarding the management of children with UTI: Perspectives of a pediatrician and a pediatric urologist*

Craig Peters, M.D., University of Texas Southwestern

Kenneth Roberts, M.D., University of North Carolina

Session V: Microbiome landscape: shaping susceptibility to UTI

Moderator: **Christina Ching**, M.D., Nationwide Children's

8:45 – 9:05 *Acquisition, Evolution and Remodeling of the Gastrointestinal and Genitourinary Microbiomes*

Sheryl Justice, Ph.D., Nationwide Children's Hospital

9:05 – 9:25 *Bacteriophage as a Treatment Strategy for Pseudomonas UTI*

Barbara Trautner, M.D., Ph.D., Department of Veterans Affairs

9:25 – 9:45 *Urine microbiome: redefining health and disease*

Hans Pohl, M.D., Children's National

9:45 – 10:05 *Probiotics as a Prevention Strategy for UTI?*

Ann Stapleton, M.D., University of Washington

10:10 – 10:30 *Break*

Closing Keynotes

Moderator: **Mathew Mulvey**, Ph.D., University of Utah

10:30 – 11:15 *Bacterial Exocytosis by Infected Bladder Epithelial Cells*

Soman Abraham, Ph.D., Duke University

11:15 – 12:00 *E. coli Gene Expression during Acute Uncomplicated Cystitis in Women*

Harry Mobley, Ph.D., University of Michigan

12:00 – 12:10 *Closing Remarks and Adjournment*

Mathew Mulvey, Ph.D., University of Utah

Box Lunch to Go – Legislative Foyer