The **Bladder Infection and Immunity Group** at University College London, part of the **Centre for Kidney & Bladder Health**, **The Eastman Dental Institute: Microbial diseases** is at the forefront of research into urinary tract infections (UTIs). Our team is dedicated to unravelling the complexities of chronic and recurrent UTIs, focusing on innovative diagnostics, treatments and overcoming antibiotic resistance.

Our Mission

Our mission at BIIG is to **revolutionize** the understanding and treatment of UTIs. We strive to develop *patient-focused treatments* and diagnostics, moving away from traditional approaches, to better care for those suffering from bladder infections.

Research Focus

BIIG's research areas include:

- **Cell Biology of UTIs:** Delving into the biological mechanisms of chronic and recurrent UTIs.
- **Microbial Diversity and Resistance:** Exploring the microbes involved in UTIs and their resistance to antibiotics.
- **Innovative Human Organoid Models:** Utilizing human organoid models for a deeper understanding of UTIs and testing new treatments.
- **Diagnostic strategies:** Using artificial intelligence to better understand the pathophysiology and detection of disease**.**
- **New Innovative treatments:** We are working on new non-antibiotic anti-microbial technologies.
- **Immunology:** Discovering potential perturbations in host immune responses in those suffering with recurrent and chronic UTI**.**

Key Team Members

- **Dr. Harry Horsley, Principal Scientific Investigator:** A pivotal figure in BIIG, leading many of the group's innovative research projects.
- **Dr. Rajvinder Khasriya, Consultant Urogynaecologist, Principal Clinical Investigator:** Renowned for her clinical expertise and contributions to the field of UTI research.
- **Dr. Catherine Chieng:** Specializing in immunology and host response to bacteria.
- **Dr. Peter Kong:** Molecular microbiology
- **Dr. Natasha Liou PhD student:** Working on artificial intelligence, data modelling, hormonal influence on urinary tract infection.
- **Marina Neira, PhD Student:** Image based machine learning and ML ops to understand the urinary immune system in UTI
- **Dr. Katie Dalby:** The role of the vaginal microbiome in chronic UTI.

Community and Patient Engagement

We are driven by the real-life impact of our research on patients. The story of a patient with chronic UTI, who later became a benefactor, exemplifies the transformative power of our work. We work closely with Chronic UTI Global Support (www.chronicutiglobalsupport.com, CUTIC (cutic.com), Bladder heath UK (bladderhealthuk.org).

Legacy and Impact

Inspired by the late **Professor James Malone-Lee**, we continue to challenge the conventional understanding and treatment of UTIs. His legacy inspires our commitment to innovative research and patient advocacy.

Collaborations and Outreach

We maintain robust collaborations with specialists across various fields, developing new diagnostic tools and therapies with a focus on combating antibiotic-resistant UTIs.

Join and Support Us

Your collaboration and support can play a crucial role in advancing urological health. We invite researchers, healthcare professionals, and anyone passionate about this field to join us.

https://aoc.ucl.ac.uk/alumni/public-gbp-single?id=2b2d3295-5513-4209-8b36-ccfeda505865

How one patient-doctor journey gives hope to millions who suffer UTIs | UCL Giving - UCL – University College London

Contact Information

- **Social Media:** https://twitter.com/BIIG_UCL
- Rajvinder Khasriya Profile | University College London (ucl.ac.uk)