UC DAVIS HEALTH | SCHOOL OF MEDICINE

Medical Microbiology and Immunology
MMI 291 Seminar Series
Emerging Challenges in Microbiology and Immunology

MMI 291 Seminar Series

Current Theme: Interdisciplinary Research
Fall Quarter 2025 – CRN 38614

Friday Seminar at 12:10-1 p.m.
GBSF Auditorium, Room 1005

"Developing breath biomarker signatures of infection"

Research Bio

Kenyon is physician-scientist and VA Mather and UC Davis Medical Center staff physician with a translational research focus on arginine metabolism, nitric oxide biology, airway inflammation, and asthma. His lab team employs airway cell culture and mouse models to study these areas, and he leads clinical studies and interventional trials in adult severe asthma. Kenyon is the site PI in the NHLBI Precision Interventions for Severe and/or Exacerbation Prone Asthma (PrecISE) Network. In addition, he is the PI of a VA MERIT award to study toxicant exposures in veterans with asthma.

Over the past eight years, he has co-led three consortium grants (NIBIB U01, Pediatric Research in Integrated Sensor Monitoring Systems for children with asthma (PRISMS), NCATS U18 RADx Screening Chemicals by Electronic Nose Technology (SCENT), NCATS U01 SCENT II) with Christina Davis to develop breath and skin analysis platforms to diagnose asthma in children, COVID-19 infections, and a host of other systemic diseases.

As an Educator, Kenyon has served as the Program Director of the CTSC TL1 Predoctoral Training Program in Translational Research and the T32 Training Program on Comparative Lung Biology and Medicine. He is also the UC Davis PI of the I-Corps@NCATS training program in innovation and entrepreneurship, and the Chair of the Designated Emphasis in Translational Research.

Publications

Eva Borras, Mitchell M McCartney, Dante E Rojas, Tristan L Hicks, Nam K Tran, Tina Tham, Maya M Juarez, Lisa Franzi, Richart W Harper, Cristina E Davis, **Nicholas J Kenyon**. "Oxylipin concentration shift in exhaled breath condensate of SARS-CoV-2 infected patients". *PMC.* 2024 Aug DOI:10.1088/1752-7163/acea3d.

Mitchell M McCartney, Eva Borras, Dante E Rojas, Tristan L Hicks, Katherine L Hamera, Nam K Tran, Tina Tham, Maya M Juarez, Enrique Lopez, **Nicholas J Kenyon**, Cristina E Davis. "Predominant SARS-CoV-2 variant impacts accuracy when screening for infection using exhaled breath vapor". *PubMed.* 2022 Dec 30;10(7):1642. DOI: https://doi.org/10.1038/s43856-022-00221-5

Nov. 7

Nicholas Kenyon, M.D., M.A.S.
Professor of Medicine
Director, NHLBI T32 Training Program
Associate Director, Clinical Translational Science Center
Director, UC Davis Asthma Network
University of California, Davis

Nov. 7, 2025
12:10 – 1 p.m.
GBSF Auditorium
Room 1005
In-person presentation

Medical Microbiology and Immunology
School of Medicine

Seminar Contact:
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We hope to see you there!