

The Department of Nutritional Sciences Spring 2025 Seminar Series

"Stealth metabolism: How to hide a pathway in plain sight"

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Host: Malcolm Watford, D.Phil
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Wednesday, January 22, 2025 @ 2:15 PM

Zoom option: <https://go.rutgers.edu/Cluntun-Seminar>



Dr. Ahmad A. Cluntun, newly appointed assistant professor in the Department of Biochemistry and Molecular Biology, will present groundbreaking insights into the often-overlooked role of mitochondrial lactate metabolism. Once dismissed as a mere byproduct of anaerobic metabolism, lactate is now recognized as a crucial fuel source that supports cardiac energetics, especially under metabolic stress.

In this talk, Dr. Cluntun will explore the history of how evidence for mitochondrial lactate oxidation was overlooked or misinterpreted, delaying recognition of its critical role. Using advanced stable isotope tracing, his research demonstrates the direct mitochondrial import of lactate and its oxidation via the lactate transporter MCT1, revealing how this pathway sustains cardiac function during stress by supporting respiration and energy production.