



Mahasish Shome

Postdoctoral Scholar, Genetics

Bio

BIO

Dr. Mahasish Shome is interested in understanding the underlying mechanism of disease progression. He uses various omics profiling to identify biomarkers relevant to the disease. He studies antibodies, cytokines, proteins and microbiome profile to decipher the connection of disease with markers. Connecting various omics provide a holistic overview of the disease profile and can help in early diagnosis, understanding disease state and drug/vaccine effectiveness.

STANFORD ADVISORS

- Michael Snyder, Postdoctoral Faculty Sponsor

PATENTS

- Mahasish Shome, Lusheng Song, Yunro Chung, Jonathan Leighton, Joshua Labaer, Ji Qiu. "United States Patent 18/448,685 Anti-microbial antibody signatures of inflammatory bowel disease and uses thereof", National Institutes of Health (NIH), US Dept. of Health and Human Services (DHHS), US Government, Feb 15, 2024
- Mahasish Shome, Yunro Chung, Ramani Chavan, Jin Park, Ji Qiu, Joshua Labaer. "United States Patent 18/326,837 Autoantibodies, kits and methods of verifying the accuracy of diagnostic results", Arizona Board of Regents on behalf of Arizona State University, Nov 30, 2023

Research & Scholarship

LAB AFFILIATIONS

- Michael Snyder (9/1/2022)

Publications

PUBLICATIONS

- **Serological profiling of Crohn's disease and ulcerative colitis patients reveals anti-microbial antibody signatures** *WORLD JOURNAL OF GASTROENTEROLOGY*
Shome, M., Song, L., Williams, S., Chung, Y., Murugan, V., Park, J. G., Faubion, W., Pasha, S. F., Leighton, J. A., LaBaer, J., Qiu, J.
2022; 28 (30): 4089-4101
- **Serum autoantibodyome reveals that healthy individuals share common autoantibodies** *CELL REPORTS*
Shome, M., Chung, Y., Chavan, R., Park, J. G., Qiu, J., LaBaer, J.
2022; 39 (9): 110873
- **The importance, challenges, and possible solutions for sharing proteomics data while safeguarding individuals' privacy.** *Molecular & cellular proteomics : MCP*
Shome, M., MacKenzie, T. M., Subbareddy, S. R., Snyder, M. P.
2024: 100731

- **Comparative Microbiomics Analysis of Antimicrobial Antibody Response between Patients with Lung Cancer and Control Subjects with Benign Pulmonary Nodules** *CANCER EPIDEMIOLOGY BIOMARKERS & PREVENTION*
Shome, M., Gao, W., Engelbrekton, A., Song, L., Williams, S., Murugan, V., Park, J. G., Chung, Y., LaBaer, J., Qiu, J.
2023; 32 (4): 496-504

- **Protein Microarrays and their Fabrication.** *Methods in molecular biology (Clifton, N.J.)*
Shome, M., Labaer, J.
2023; 2597: 131-142

- **Identification of anti-*Helicobacter pylori* antibody signatures in gastric intestinal metaplasia** *JOURNAL OF GASTROENTEROLOGY*
Song, L., Song, M., Rabkin, C. S., Chung, Y., Williams, S., Torres, J., Corvalan, A. H., Gonzalez, R., Bellolio, E., Shome, M., LaBaer, J., Qiu, J., Camargo, et al
2023; 58 (2): 112-124

- **Exploration of autoantibody responses in canine diabetes using protein arrays** *SCIENTIFIC REPORTS*
O'Kell, A. L., Shome, M., Qiu, J., Williams, S., Chung, Y., LaBaer, J., Atkinson, M. A., Wasserfall, C.
2022; 12 (1): 2490

- **Structure, Magnetic Behavior, and Anisotropy of Homoleptic Trinuclear Lanthanoid 8-Quinolinolate Complexes** *INORGANIC CHEMISTRY*
Chilton, N. F., Deacon, G. B., Gazukin, O., Junk, P. C., Kersting, B., Langley, S. K., Moubaraki, B., Murray, K. S., Schleife, F., Shome, M., Turner, D. R., Walker, J. A.
2014; 53 (5): 2528-2534