



## Yuqin Dai

Director of Metabolomics  
Sarafan ChEM-H

### Bio

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#### BIO

Dr. Yuqin Dai is the Director of Metabolomics at Stanford ChEM-H. In this role, she collaborates with faculty in the development and execution of experiments aimed at measuring small molecule drug candidates, endogenous and exogenous metabolites in a variety of biomedical R&D contexts. In addition, she provides strategic vision, mentorship, and leadership in the development of new LC/MS analytical methodologies for metabolomics research, the Metabolomics Knowledge Center's daily operation and growth.

Dr. Dai came to ChEM-H with 20 years of research, marketing and managerial experiences across biotech/pharma and analytical instrument industries. Prior to joining ChEM-H in January of 2020, Dr. Dai worked at Agilent managing strategic collaborations with key opinion leaders in academia and industry for metabolomics research, driving new application marketing opportunities, and developing differential solutions to support new LC/MS and automation product introductions. Before Agilent, Dr. Dai led bioanalytical R&D teams and managed DMPK projects to support drug discovery and development programs at three biotech/pharm companies. She was also extensively involved in new technology assessment and implementation. Dr. Dai received her Ph.D. in analytical chemistry from the University of Alberta, Canada, where her research focused on the LC/MS and MALDI/MS instrumentation and method development for proteomics and small molecule applications.

#### ACADEMIC APPOINTMENTS

- Sr Research Engineer, Sarafan ChEM-H

### Publications

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#### PUBLICATIONS

- **Adrenomedullin restores the human cortical interneurons migration defects induced by hypoxia** *ELIFE*  
Puno, A., Michno, W. P., Li, L., Everitt, A., McCluskey, K., Htun, S., Nagar, D., Choi, J., Dai, Y., Park, S., Gurwitz, E., Willsey, J. A., Birey, et al  
2026; 14
- **Adrenomedullin restores the human cortical interneurons migration defects induced by hypoxia.** *eLife*  
Puno, A., Michno, W. P., Li, L., Everitt, A., McCluskey, K., Htun, S., Nagar, D., Choi, J. B., Dai, Y., Park, S., Gurwitz, E., Willsey, J. A., Birey, et al  
2026; 14
- **Patient-derived colon epithelial organoids reveal lipid-related metabolic dysfunction in pediatric ulcerative colitis.** *Nature communications*  
Ojo, B. A., Zhu, Y., Heo, L., Fox, S. R., Qiao, Y., Waddell, A., Moreno-Fernandez, M. E., Gibson, M., Tran, T., Dunn, A. L., Elkaway, E. I., Saini, N., López-Rivera, et al  
2025; 16 (1): 11026
- **ApoE is Secreted as a Lipid Nanoparticle by Mammalian Cells: Implications for Alzheimer's Disease Pathogenesis.** *Biochemistry*  
Hernandez Arriaza, R., Reil, D., Fatuzzo, N., Fu, M., Dai, Y., Fernandez Martinez, D., Jiang, H., Holtzman, D. M., Greicius, M. D., Khosla, C.  
2025

- **Cell State-Driven Metabolic Dependency in Small Cell Lung Cancer**  
Kim, J. W., Bebbler, C. M., Dai, Y., Bopp, S., Edenhofer, A., Li, A. M., Drainas, A. P., Rosner, T., Berning, L., Yang, M., Leak, L. B., Shrestha, B., Abdallah, et al  
ELSEVIER SCIENCE INC.2025
- **Plasma lipids as novel biomarker of non-arteritic anterior ischemic optic neuropathy**  
Alkhabaz, A., Kaushal, K., Ren, Y., Modgil, S., Pujari, R., Zhang, J., Zhu, P., Fu, M., Dai, Y., Liao, Y.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2025
- **A  $\beta$ -hydroxybutyrate shunt pathway generates anti-obesity ketone metabolites.** *Cell*  
Moya-Garzon, M. D., Wang, M., Li, V. L., Lyu, X., Wei, W., Tung, A. S., Raun, S. H., Zhao, M., Coassolo, L., Islam, H., Oliveira, B., Dai, Y., Spaas, et al  
2024
- **Multimomics Analysis Illuminates the Molecular Basis of Autosomal Dominant Optic Disc Drusen**  
Kaushal, K., Liu, L., Patel, H., Kumar, A., Pugazhendhi, S., Oses-Prieto, J. A., Shariati, M., Dai, Y., Burlingame, A., Liao, Y.  
ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2024
- **Tachycardia-induced metabolic rewiring as a driver of contractile dysfunction.** *Nature biomedical engineering*  
Tu, C., Caudal, A., Liu, Y., Gorgodze, N., Zhang, H., Lam, C. K., Dai, Y., Zhang, A., Wnorowski, A., Wu, M. A., Yang, H., Abilez, O. J., Lyu, et al  
2023
- **Carnitine octanoyltransferase is important for the assimilation of exogenous acetyl-L-carnitine into acetyl-CoA in mammalian cells.** *The Journal of biological chemistry*  
Hsu, J., Fatuzzo, N., Weng, N., Michno, W., Dong, W., Kienle, M., Dai, Y., Pasca, A., Abu-Remaileh, M., Rasgon, N., Bigio, B., Nasca, C., Khosla, et al  
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