Stanford



Dylan Dodd

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CLINICAL OFFICE (PRIMARY)

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Bio

CLINICAL FOCUS

- Clinical Chemistry
- Anatomic and Clinical Pathology

ACADEMIC APPOINTMENTS

- Associate Professor, Pathology
- Associate Professor, Microbiology and Immunology
- Member, Maternal & Child Health Research Institute (MCHRI)
- Member, Stanford Medicine Children's Health Center for IBD and Celiac Disease

PROFESSIONAL EDUCATION

- Residency: Stanford University Pathology Residency (2016) CA
- Board Certification: Clinical Pathology, American Board of Pathology (2016)
- M.D., Ph.D., University of Illinois at Urbana-Champaign , Medicine, Microbiology (2013)
- B.S., University of California, Davis , Biochemistry (2005)

LINKS

- Dodd Lab Website: https://www.doddlab.org/

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Harnessing the gut microbiome to treat human disease.

Teaching

STANFORD ADVISEES

Postdoctoral Faculty Sponsor

Zhiwei Zhou

Publications

PUBLICATIONS

- **Indole-3-acetic acid production is rare among gut bacteria and reflects OFOR-driven amino acid oxidation in acetogens.** *Gut microbes*
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- **IsoPairFinder: A Computational Workflow for Prioritizing LC-MS Feature Pairs Representing Candidate Microbial Pathway Intermediates from Stable Isotope Tracing Metabolomics.** *Journal of the American Society for Mass Spectrometry*
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- **IsoPairFinder: A Computational Workflow for Prioritizing LC-MS Feature Pairs Representing Candidate Microbial Pathway Intermediates from Stable Isotope Tracing Metabolomics** *JOURNAL OF THE AMERICAN SOCIETY FOR MASS SPECTROMETRY*
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- **gutSMASH 2.0: extended identification of primary metabolic gene clusters from the human gut microbiota.** *Journal of molecular biology*
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- **Gut bacteria degrade purines via the 2,8-dioxopurine pathway.** *Nature microbiology*
  Liu, Y., Zhou, Z., Jarman, J. B., Chen, H., Miranda-Velez, M., Terkeltaub, R., Dodd, D.
  2025
- **Microbiota and kidney disease: the road ahead.** *Nature reviews. Nephrology*
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  Terkeltaub, R., Dodd, D.
  2025
- **γδ T cell antigen receptor polyspecificity enables T cell responses to a broad range of immune challenges.** *Proceedings of the National Academy of Sciences of the United States of America*
  Guo, J., Chowdhury, R. R., Mallajosyula, V., Xie, J., Dubey, M., Liu, Y., Li, J., Wei, Y. L., Palanski, B. A., Wang, C., Qiu, L., Ohanyan, M., Kask, et al
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- **A widely distributed gene cluster compensates for uricase loss in hominids.** *Cell*
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- **Targeted Quantification of Amino Acids by Dansylation.** *Methods in molecular biology (Clifton, N.J.)*
  Liu, Y., Chen, H., Dodd, D.
  2023; 2675: 65-76
- **Systems biology elucidates the distinctive metabolic niche filled by the human gut microbe Eggerthella lenta.** *PLoS biology*
  Noecker, C., Sanchez, J., Bisanz, J. E., Escalante, V., Alexander, M., Trepka, K., Heinken, A., Liu, Y., Dodd, D., Thiele, I., DeFelice, B. C., Turnbaugh, P. J.

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- **gutSMASH predicts specialized primary metabolic pathways from the human gut microbiota.** *Nature biotechnology*
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  Serger, E., Luengo-Gutierrez, L., Chadwick, J. S., Kong, G., Zhou, L., Crawford, G., Danzi, M. C., Myridakis, A., Brandis, A., Bello, A. T., Muller, F., Sanchez-Vassopoulos, A., De Virgiliis, et al
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- **Clostridium sporogenes uses reductive Stickland metabolism in the gut to generate ATP and produce circulating metabolites.** *Nature microbiology*
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  Pascal Andreu, V., Roel-Touris, J., Dodd, D., Fischbach, M. A., Medema, M. H.
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- **A metabolomics pipeline for the mechanistic interrogation of the gut microbiome.** *Nature*
  Han, S., Van Treuren, W., Fischer, C. R., Merrill, B. D., DeFelice, B. C., Sanchez, J. M., Higginbottom, S. K., Guthrie, L., Fall, L. A., Dodd, D., Fischbach, M. A., Sonnenburg, J. L.
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- **Metabolic Foundations of Microbiota-Host Interactions**
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- **Bifidobacterium alters the gut microbiota and modulates the functional metabolism of T regulatory cells in the context of immune checkpoint blockade.** *Proceedings of the National Academy of Sciences of the United States of America*
  Sun, S., Luo, L., Liang, W., Yin, Q., Guo, J., Rush, A. M., Lv, Z., Liang, Q., Fischbach, M. A., Sonnenburg, J. L., Dodd, D., Davis, M. M., Wang, et al
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- **An oral bacterial cocktail for kidney protection.** *Nature biomedical engineering*
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- **Comparison of Japanese and Indian intestinal microbiota shows diet-dependent interaction between bacteria and fungi.** *NPJ biofilms and microbiomes*
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- **Clinical utility of an ultrasensitive urinary free cortisol assay by tandem mass spectrometry** *STEROIDS*
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- **Comparison of Japanese and Indian intestinal microbiota shows diet-dependent interaction between bacteria and fungi.** *NPJ biofilms and microbiomes*
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- **Modulation of a Circulating Uremic Solute via Rational Genetic Manipulation of the Gut Microbiota** *CELL HOST & MICROBE*
  Devlin, A. S., Marcobal, A., Dodd, D., Nayfach, S., Plummer, N., Meyer, T., Pollard, K. S., Sonnenburg, J. L., Fischbach, M. A.
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