Stanford

John W. Thompson

Clinical Instructor, Adult Neurology

CLINICAL OFFICE (PRIMARY)

- **Stanford Neuroscience Health Center**

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Bio

BIO

Dr. Thompson is a physician-scientist and Clinical Instructor in the Division of Comprehensive Neurology at Stanford University School of Medicine. He cares for adults across the full range of neurologic conditions. Deeply aware of how these conditions can reshape a person's life, he is committed to partnering with patients and their families to navigate diagnostic and treatment challenges. He has a particular interest in caring for patients with complex medical comorbidities and those transitioning from inpatient to outpatient settings. His other areas of focus include neuroimmunology and the prevention of chronic neurologic diseases such as stroke and dementia.

Dr. Thompson earned his medical degree from the David Geffen School of Medicine at UCLA as part of the UCLA-Caltech Medical Scientist Training Program, where he received the Richard D. Walter Award for Excellence in Neurology. He completed his PhD in Cellular and Molecular Neurobiology at the California Institute of Technology, studying how protein glycosylation affects neuronal signaling and metabolism. He went on to complete his neurology residency at UCLA, where he designed computational methods to resolve dementia subtypes in an unbiased manner. At Stanford, his research focuses on the development of novel multiomics technologies to understand the genetic and molecular underpinnings of frontotemporal dementia and other neurodegenerative disorders. Beyond the clinic and the laboratory, Dr. Thompson is a passionate educator dedicated to mentoring medical students and residents. Across all his work, his overarching goal is to help patients better understand and confront neurologic disease through the translation of high-dimensional data into meaningful clinical insights.

CLINICAL FOCUS

- Neurology
- Comprehensive Neurology

ACADEMIC APPOINTMENTS

- Clinical Instructor, Adult Neurology

HONORS AND AWARDS

- The Augustus S. Rose Award for Excellence in Teaching, UCLA Dept of Neurology (2026)
- Distinction in Research, UCLA Dept of Neurology (2026)
- NINDS Research Education Program in Neurology, Participant, NINDS (2025-)
- UCLA Bannister Fastest Door to Needle Award, UCLA Dept of Neurology (2024)
- UCLA Bannister Fastest Door to Skin Puncture Award, UCLA Dept of Neurology (2024)
- Richard D. Walter Award for Excellence in Neurology, UCLA David Geffen School of Medicine (2022)
- Gerald S. Levey MSTP Scholarship, UCLA-Caltech Medical Scientist Training Program (2021)
- Graduate Innovator Grant, Tianqiao and Chrissy Chen Institute for Neuroscience (2018-2019)
- Ruth L. Kirschstein National Research Service Award, NIA (2017-2019)
- T32 Molecular Biology Training Program Grant, NIGMS (2015-2017)
- The Lee Ramo Endowment Graduate Fellowship, California Institute of Tehcnology (2014-2015)
- T32 Medical Scientist Training Program Grant, NIGMS (2012-2014)
- Phi Beta Kappa, University of Minnesota (2012)
- Undergraduate Research Opportunities Program Grant, University of Minnesota (2009-2010)
- Honors Program Scholarship, University of Minnesota (2008-2012)
- Mayo Foundation Scholarship, Mayo Clinic Rochester (2008-2012)
- National Merit Finalist Scholarship, University of Minnesota (2008-2012)
- Presidential Scholarship, University of Minnesota (2008-2012)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Member, American Academy of Neurology (2021 - present)

PROFESSIONAL EDUCATION

- PhD, California Institute of Technology , Cellular and Molecular Neurobiology (2020)
- Residency: UCLA Dept of Neurology (2026) CA
- Internship: Olive View-UCLA Medical Center Internal Medicine Residency (2023) CA
- Medical Education: UCLA David Geffen School Of Medicine (2022) CA

Publications

PUBLICATIONS

- **Functional analysis of O-GlcNAcylation by networking of OGT interactors and substrates.** *Nature chemical biology*
  Griffin, M. E., Thompson, J. W., Xiao, Y., Sweredoski, M. J., Jensen, E. H., Aksenfeld, R. B., Awad, H., Kim, T. D., Schacht, A. L., Choudhry, P., Koldobskaya, Y., Lomenick, B., Garbis, et al
  2026

- **Optimization of Chemoenzymatic Mass Tagging by Strain-Promoted Cycloaddition (SPAAC) for the Determination of O-GlcNAc Stoichiometry by Western Blotting.** *Biochemistry*
  Darabedian, N., Thompson, J. W., Chuh, K. N., Hsieh-Wilson, L. C., Pratt, M. R.
  2018; 57 (40): 5769-5774

- **Methods for the Detection, Study, and Dynamic Profiling of O-GlcNAc Glycosylation.** *Methods in enzymology*
  Thompson, J. W., Griffin, M. E., Hsieh-Wilson, L. C.
  2018; 598: 101-135

- **Deciphering the Functions of O-GlcNAc Glycosylation in the Brain: The Role of Site-Specific Quantitative O-GlcNAcomics.** *Biochemistry*
  Thompson, J. W., Sorum, A. W., Hsieh-Wilson, L. C.
  2018; 57 (27): 4010-4018
- **Activities for Middle School Students To Sleuth a Chemistry "Whodunit" and Investigate the Scientific Method** *JOURNAL OF CHEMICAL EDUCATION*
  Meyer, A. F., Knutson, C. M., Finkenstaedt-Quinn, S. A., Gruba, S. M., Meyer, B. M., Thompson, J. W., Maurer-Jones, M. A., Halderman, S., Tillman, A. S., DeStefano, L., Haynes, C. L.
  2014; 91 (3): 410-413
- **Time- and concentration-dependent effects of exogenous serotonin and inflammatory cytokines on mast cell function.** *ACS chemical biology*
  Gruba, S. M., Meyer, A. F., Manning, B. M., Wang, Y., Thompson, J. W., Dalluge, J. J., Haynes, C. L.
  2014; 9 (2): 503-9
- **Isotope-dilution UPLC-MS/MS determination of cell-secreted bioactive lipids.** *The Analyst*
  Meyer, A. F., Thompson, J. W., Wang, Y., Koseoglu, S., Dalluge, J. J., Haynes, C. L.
  2013; 138 (19): 5697-705
- **Development of screening assays for nanoparticle toxicity assessment in human blood: preliminary studies with charged Au nanoparticles.** *Nanomedicine (London, England)*
  Love, S. A., Thompson, J. W., Haynes, C. L.
  2012; 7 (9): 1355-64
- **Assessing nanoparticle toxicity.** *Annual review of analytical chemistry (Palo Alto, Calif.)*
  Love, S. A., Maurer-Jones, M. A., Thompson, J. W., Lin, Y. S., Haynes, C. L.
  2012; 5: 181-205