Stanford



Agnieszka Kalinowski

Assistant Professor of Psychiatry and Behavioral Sciences (General Psychiatry and Psychology)

CLINICAL OFFICE (PRIMARY)

- **Psychiatry Clinic**

  401 Quarry Rd

  MC 5797

  Stanford, CA 94305

  Tel (650) 498-9111 **Fax** (650) 498-4960

Bio

BIO

I am a translational physician-scientist committed to understanding the pathophysiology of schizophrenia to identify disease-modifying therapeutic interventions. I examined the role of C4 protein activation in clinical samples from individuals with schizophrenia compared to controls, its relationship to C4 CNV and effect on blood brain barrier permeability using in vitro model systems. I contributed to identifying LINE-1 insertions in postmortem brain samples of individuals with schizophrenia and C4 copy number variation (CNV) in pediatric patients with neuropsychiatric symptoms. Since accumulating evidence points to the synapses as the locus of pathology in schizophrenia, I am focusing my current research effort to defining the underlying abnormality in synapses in schizophrenia using a combination of in vitro iPS based model systems and postmortem brain samples, and applying cutting-edge techniques like spatial transcriptomics and array tomography.

CLINICAL FOCUS

- Psychiatry
- Schizophrenia
- Neuroimmunology

ACADEMIC APPOINTMENTS

- Assistant Professor-Univ Med Line, Psychiatry and Behavioral Sciences

HONORS AND AWARDS

- CDI Fellow, Career Development Institute for Psychiatry (2025-2026)
- K08 Career Development Award, National Institute of Mental Health (2024-2029)
- 2022 Young Investigator Grant, Brain and Behavior Research Foundation (2023-2025)
- Early Career Award Program, Veterans Association Palo Alto VISN21 (2022-2024)
- Advanced Fellow in Mental Illness Research, Sierra Pacific Mental Illness Research Education and Clinical Center (MIRECC), VA Palo Alto (2019-present)
- Translational Research and Applied Medicine Scholar, Stanford University School of Medicine (2018-2020)

- T32 Postdoctoral Research Training in Psychiatric Research, National Institutes of Health (2017-2019)
- Outstanding Resident Award- Honorable Mention, National Institutes of Health (2017)
- Ruth L. Kirschstein National Research Service Award F30, National Institutes of Health (2008-2013)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- NIMH Study Section Reviewer, Training in Neurobiology of Disease, Psychopathology & Molecular Processes Special Emphasis Panel (2025 - present)

PROFESSIONAL EDUCATION

- Residency: Stanford University Psychiatry Residency (2017) CA
- Board Certification: Psychiatry, American Board of Psychiatry and Neurology (2018)
- Medical Education: University of Pittsburgh School of Medicine (2013) PA
- PhD, Carnegie Mellon University , Biomedical Engineering (2011)

Research & Scholarship

CLINICAL TRIALS

- Peripheral Immune System in Individuals With Schizophrenia, Not Recruiting

Publications

PUBLICATIONS

- **Peripheral complement C4 protein in schizophrenia: Association with gene copy number and immune cell subtypes.** *Proceedings of the National Academy of Sciences of the United States of America*
  Kalinowski, A., Macaubas, C., Guo, H., Anker, L. A., Wakeham, D. E., Ho, M., Pattni, R., Bayram, B., Sharma, S., Liliental, J., Yoon, J. H., Mellins, E. D., Steinman, et al
  2026; 123 (20): e2536376123
- **The complexity of interpreting TSPO PET neuroimaging in first-episode psychosis.** *Brain : a journal of neurology*
  Kalinowski, A., Steinman, L.
  2026
- **THE ROLE OF C4A GENE EXPRESSION IN SYNAPTIC FORMATION**
  Kalinowski, A., Ho, M., Pattni, R., Urban, A.
  SPRINGERNATURE.2026
- **Synaptic pruning in schizophrenia is not classical.** *Brain, behavior, and immunity*
  Kalinowski, A., Urban, A. E.
  2024
- **Author Correction: Machine learning reveals bilateral distribution of somatic L1 insertions in human neurons and glia.** *Nature neuroscience*
  Zhu, X., Zhou, B., Pattni, R., Gleason, K., Tan, C., Kalinowski, A., Sloan, S., Fiston-Lavier, A. S., Mariani, J., Petrov, D., Barres, B. A., Duncan, L., Abyzov, et al
  2023
- **Inspire self report scale (ISRS): A feasibility study of a Novel self report scale for people with schizophrenia spectrum disorders.** *Journal of psychiatric research*
  Chawla, V., Bansal, N., Spelber, D., Desai, A., Frehlich, L., Ballon, J. S., Kalinowski, A., Noordsy, D. L.
  2023; 165: 248-253
- **Evaluation of C4 gene copy number in Pediatric Acute Neuropsychiatric Syndrome** *DEVELOPMENTAL NEUROSCIENCE*
  Kalinowski, A., Tian, L., Pattni, R., Ollila, H., Khan, M., Manko, C., Silverman, M., Ma, M., Columbo, L., Farhadian, B., Swedo, S., Murphy, T., Johnson, et al
  2023

- **Myalgic Encephalomyelitis/Chronic Fatigue Syndrome is common in post-acute sequelae of SARS-CoV-2 infection (PASC): Results from a post-COVID-19 multidisciplinary clinic.** *Frontiers in neurology*
  Bonilla, H., Quach, T. C., Tiwari, A., Bonilla, A. E., Miglis, M., Yang, P. C., Eggert, L. E., Sharifi, H., Horomanski, A., Subramanian, A., Smirnoff, L., Simpson, N., Halawi, et al
  2023; 14: 1090747

- **Reductions in synaptic marker SV2A in early-course Schizophrenia.** *Journal of psychiatric research*
  Yoon, J. H., Zhang, Z., Mormino, E., Davidzon, G., Minzenberg, M. J., Ballon, J., Kalinowski, A., Hardy, K., Naganawa, M., Carson, R. E., Khalighi, M., Park, J. H., Levinson, et al
  2023; 161: 213-217

- **Increased activation product of complement 4 protein in plasma of individuals with schizophrenia.** *Translational psychiatry*
  Kalinowski, A., Liliental, J., Anker, L. A., Linkovski, O., Culbertson, C., Hall, J. N., Pattni, R., Sabatti, C., Noordsy, D., Hallmayer, J. F., Mellins, E. D., Ballon, J. S., O'Hara, et al
  2021; 11 (1): 486

- **Machine learning reveals bilateral distribution of somatic L1 insertions in human neurons and glia.** *Nature neuroscience*
  Zhu, X. n., Zhou, B. n., Pattni, R. n., Gleason, K. n., Tan, C. n., Kalinowski, A. n., Sloan, S. n., Fiston-Lavier, A. S., Mariani, J. n., Petrov, D. n., Barres, B. A., Duncan, L. n., Abyzov, et al
  2021

- **Low C4 Copy Number of Total C4 Gene, C4B Gene and C4BL Gene in Children with Pediatric Acute-onset Neuropsychiatric Syndrome (PANS)**
  Kalinowski, A., Lee, J., Hedlin, H., Pattini, R., Ollila, H., Mignot, E., Levinson, D., Swedo, S., Murphy, T., Chan, A., Thienemann, M., Urban, A., Frankovich, et al
  WILEY.2020: 254–55

- **Teaching Practice-Based Learning on Inpatient Psychiatric Services.** *Academic psychiatry : the journal of the American Association of Directors of Psychiatric Residency Training and the Association for Academic Psychiatry*
  Kalinowski, A., Raj, K. S., Bandstra, B. S.
  2019

- **MACHINE LEARNING REVEALS BILATERAL DISTRIBUTION OF SOMATIC L1 INSERTIONS IN HUMAN NEURONS AND GLIA**
  Zhu, X., Zhou, B., Pattni, R., Gleason, K., Tan, C., Kalinowski, A., Sloan, S., Fiston-Lavier, A., Mariani, J., Vogel, H., Moran, J., Vaccarino, F., Tamminga, et al
  ELSEVIER.2019: S68

- **Medical Workup for First-Episode Psychosis** *Intervening Early in Psychosis*
  Kalinowski, A., Ballon, J. S.
  American Psychiatric Association Publishing.2019; 1: 133–150

- **Medical Workup for First-Episode Psychosis** *INTERVENING EARLY IN PSYCHOSIS: A TEAM APPROACH*
  Kalinowski, A., Ballon, J. S.
  edited by Hardy, K. V., Ballon, J. S., Noordsy, D. L., Adelsheim, S.
  2019: 133–49

- **Neuroscience in Clinical Supervision: Toward a Neurobiopsychosocial Approach** *Supervision in Psychiatric Practice Practical Approaches Across Venues and Providers*
  Raj, K., Kalinowski, A., Bandstra, B.
  American Psychiatric Association Publishing.2019

- **Governmental standard drink definitions and low-risk alcohol consumption guidelines in 37 countries** *ADDICTION*
  Kalinowski, A., Humphreys, K.
  2016; 111 (7): 1293-1298

- **The tail domain of lamin B1 is more strongly modulated by divalent cations than lamin A.** *Nucleus (Austin, Tex.)*
  Ganesh, S., Qin, Z., Spagnol, S. T., Biegler, M. T., Coffey, K. A., Kalinowski, A., Buehler, M. J., Dahl, K. N.
  2015; 6 (3): 203-11

- **Interfacial binding and aggregation of lamin A tail domains associated with Hutchinson-Gilford progeria syndrome.** *Biophysical chemistry*
  Kalinowski, A., Yaron, P. N., Qin, Z., Shenoy, S., Buehler, M. J., Lösche, M., Dahl, K. N.

2014; 195: 43-8

- **Calcium causes a conformational change in lamin A tail domain that promotes farnesyl-mediated membrane association.** *Biophysical journal*
  Kalinowski, A., Qin, Z., Coffey, K., Kodali, R., Buehler, M. J., Lösche, M., Dahl, K. N.
  2013; 104 (10): 2246-53
- **Computational image analysis of nuclear morphology associated with various nuclear-specific aging disorders.** *Nucleus (Austin, Tex.)*
  Choi, S., Wang, W., Ribeiro, A. J., Kalinowski, A., Gregg, S. Q., Opresko, P. L., Niedernhofer, L. J., Rohde, G. K., Dahl, K. N.
  2011; 2 (6): 570-9
- **Structure and stability of the lamin A tail domain and HGPS mutant.** *Journal of structural biology*
  Qin, Z., Kalinowski, A., Dahl, K. N., Buehler, M. J.
  2011; 175 (3): 425-33
- **Nucleoskeleton mechanics at a glance.** *Journal of cell science*
  Dahl, K. N., Kalinowski, A.
  2011; 124 (Pt 5): 675-8
- **Stabilization of the spectrin-like domains of nesprin-1α by the evolutionarily conserved "adaptive" domain.** *Cellular and molecular bioengineering*
  Zhong, Z., Chang, S. A., Kalinowski, A., Wilson, K. L., Dahl, K. N.
  2010; 3 (2): 139-150
- **Mechanobiology and the microcirculation: cellular, nuclear and fluid mechanics.** *Microcirculation (New York, N.Y. : 1994)*
  Dahl, K. N., Kalinowski, A., Pekkan, K.
  2010; 17 (3): 179-91
- **Dynamical response of nanomechanical oscillators in immiscible viscous fluid for in vitro biomolecular recognition.** *Physical review letters*
  Dorignac, J., Kalinowski, A., Erramilli, S., Mohanty, P.
  2006; 96 (18): 186105