



Titilola Falasinnu

Assistant Professor of Medicine (Immunology and Rheumatology) and, by courtesy, of Anesthesiology, Perioperative and Pain Medicine (Adult Pain) Medicine - Immunology & Rheumatology

CONTACT INFORMATION

- **Administrative contact**

Leila Denise Asgari - Administrative Associate

Email Lasgari@stanford.edu

Tel 6507369097

Bio

BIO

I am primarily a lupus researcher and identify as a pain scientist and methodologist in this field. Systemic lupus erythematosus (SLE) disproportionately affects women and racial minorities and is the fifth most common cause of death among 15- to 24-year-old Black and Hispanic women in the U.S., highlighting its significant public health impact. More than half of patients with SLE experience chronic pain, often secondary to SLE itself or overlapping conditions (e.g., migraines, low back pain, fibromyalgia), contributing significantly to disability and impaired quality of life. Chronic pain is not merely a symptom but a disease in its own right—one that deserves the same rigorous study and clinical attention as comorbidities like kidney disease and cardiovascular disease in rheumatology. The enormous global burden of chronic pain underscores the urgent need for a clear, standardized definition of pain as a disease, particularly in autoimmune rheumatic diseases where pain can arise from inflammatory, nociplastic, and biopsychosocial mechanisms. Without recognizing pain as a distinct disease entity, its mechanisms remain poorly understood, and effective treatment strategies remain underdeveloped.

I am a co-Principal Investigator of the Pain Intelligence Lab, where our mission is to advance the study of pain as a disease in rheumatology through two primary objectives. First, we develop and validate computational methods that enable clinicians and researchers to leverage electronic health records, administrative claims, and disease registries to study chronic pain as a distinct disease entity in rheumatology. By applying machine learning, natural language processing, and real-world data analysis, we seek to enhance pain phenotyping, classify distinct pain subtypes, and develop predictive models for treatment response. Second, we use a biopsychosocial framework to examine the predictive power of biomarkers and psychosocial measures in rheumatologic pain. By integrating biological, psychological, and social determinants of pain, we aim to conduct rigorous, patient-oriented research that translates targeted assessments into mechanistically informed, personalized treatment approaches for optimized clinical care. Ultimately, my long term career goal is to bridge the gap between research and clinical practice, ensuring that pain management in autoimmune rheumatic diseases is precise, equitable, and optimized for improved patient outcomes.

ACADEMIC APPOINTMENTS

- Assistant Professor, Medicine - Immunology & Rheumatology
- Assistant Professor (By courtesy), Anesthesiology, Perioperative and Pain Medicine

- Member, Cardiovascular Institute
- Member, Maternal & Child Health Research Institute (MCHRI)

PROFESSIONAL EDUCATION

- B.A., Hood College, Frederick, Maryland (2003)
- M.H.S., Johns Hopkins University, Baltimore, Maryland (2006)
- Ph.D., University of British Columbia, Canada (2015)

LINKS

- <https://painintelligencelab.stanford.edu/>: <https://painintelligencelab.stanford.edu/>

Teaching

COURSES

2025-26

- AI for Human & Planetary Health: MED 25N (Win)

STANFORD ADVISEES

Postdoctoral Faculty Sponsor

Md Belal Hossain, Ashley Lewis

Publications

PUBLICATIONS

- **Trends in Complementary and Alternative Medicine Use Among US Youths.** *JAMA pediatrics*
Groenewald, C. B., Kreider, S. L., Cragun, J., Falasinnu, T.
2026
- **Effect of race and sex on lupus diagnosis in primary care: A randomized factorial survey study.** *PloS one*
Howren, A., Tran, Q. L., Sediqi, S., Hawa, S., Owens, D. K., Linos, E., Falasinnu, T. O., Chaichian, Y., Simard, J. F.
2026; 21 (2): e0342328
- **Pharmacoepidemiologic Characterization of Cannabis Use and Symptomatology in Rheumatology using Natural Language Processing of Electronic Health Record Clinic Notes.** *The journal of pain*
Falasinnu, T., Le, N., Wang, Y., Alagappan, A., Walker, A., Park, T., Leung, J., Chaichian, Y., Weisman, M., Kenney, M., Irani, A., Bozkurt, S.
2025: 105633
- **Visualizing Real-World Pain Treatment Pathways in Chronic Disease: A Sequence-Based Analysis of Polypharmacy in Systemic Lupus Erythematosus.** *ACR open rheumatology*
Le, N., Kenney, M. O., Walker, A., Park, T., Chaichian, Y., Weisman, M. H., Irani, A., Bozkurt, S., Falasinnu, T.
2025; 7 (11): e70116
- **Centering Patient Voices in Lupus Pain: A Biopsychosocial Analysis of Reddit Narratives Using Large Language Models.** *Arthritis care & research*
Walker, A., Leung, J., Alagappan, A., Rajwal, S., Lakamana, S., Park, T., Le, N., Irani, A., Sarker, A., Falasinnu, T., Bozkurt, S.
2025
- **The Digital Narrative: Chronic Pain Self-Management Insights from Reddit in Systemic Lupus Erythematosus.** *Studies in health technology and informatics*
Bozkurt, S., Walker, A., Park, T., Le, N., Sarker, A., Irani, A., Falasinnu, T.
2025; 323: 483-485
- **Problem of pain in the USA: evaluating the generalisability of high-impact chronic pain models over time using National Health Interview Survey (NHIS) data** *BMJ PUBLIC HEALTH*

- Falasinnu, T., Hossain, M., Karim, M., Weber II, K., Mackey, S.
2025; 3 (1)
- **Refining Chronic Pain Phenotypes: A Comparative Analysis of Sociodemographic and Disease-Related Determinants Using Electronic Health Records.** *The Journal of pain*
Begum, T., Veeranki, B., Chike, O. J., Tamang, S., Simard, J. F., Chen, J., Chaichian, Y., Mackey, S., Darnall, B. D., Falasinnu, T.
2025: 104775
 - **Problem of pain in the USA: evaluating the generalisability of high-impact chronic pain models over time using National Health Interview Survey (NHIS) data.** *BMJ public health*
Falasinnu, T., Hossain, M. B., Karim, M. E., Weber, K. A., Mackey, S.
2025; 3 (1)
 - **The problem of pain in systemic lupus erythematosus: A comprehensive analysis of pain distribution using the CHOIR body map and PROMIS measures.** *Lupus*
Jiang, T. E., Mackey, S., Darnall, B. D., Simard, J. F., Falasinnu, T.
2024: 9612033241301176
 - **Beyond the Symptoms: Exploring Cognitive Bias in Lupus Diagnosis Within Primary Care**
Howren, A., Quan Le Tran, Sediqi, S., Hawa, S., Linos, E., Falasinnu, T., Chaichian, Y., Simard, J.
WILEY.2024: 374-375
 - **Addressing the research gap: access to care hinders genetic discovery in systemic lupus erythematosus patients throughout the African diaspora** *FRONTIERS IN GENETICS*
Hwang, J., Dzifa Dey, I., Ayanlowo, O., Flower, C., King, A., Johnson, N., Ima-Edomwonyi, U., Olasebikan, H., Falasinnu, T., Durairaj Pandian, V., Blazer, A.
2024; 15: 1414490
 - **Misdiagnosis, missed diagnosis and delayed diagnosis of lupus: A qualitative study of rheumatologists.** *Arthritis care & research*
Bane, S., Falasinnu, T., Rodriguez Espinosa, P., Simard, J. F.
2024
 - **Annual trends in pain management modalities in patients with newly diagnosed autoimmune rheumatic diseases in the USA from 2007 to 2021: an administrative claims-based study.** *The Lancet. Rheumatology*
Falasinnu, T., Lu, D., Baker, M. C.
2024
 - **Impact of Incentives on Physician Participation in Research Surveys: Randomized Experiment.** *JMIR formative research*
Hawa, S., Bane, S., Kinsler, K., Rector, A., Chaichian, Y., Falasinnu, T., Simard, J. F.
2024; 8: e54343
 - **The Problem of Pain in Lupus: Epidemiological Profiles of Patients Attending Multidisciplinary Pain Clinics.** *Pain management nursing : official journal of the American Society of Pain Management Nurses*
Jiang, T. E., Pascual, A. P., Le, N., Nguyen, T. B., Mackey, S., Darnall, B. D., Simard, J. F., Falasinnu, T.
2024
 - **Trends in patient representation in low back pain pharmacological randomized clinical trials, 2011-2020: A systematic review.** *The Journal of pain*
Jiang, T. E., Edwards, K. A., Dildine, T. C., You, D. S., Nguyen, T., Pascual, A. P., Falasinnu, T.
2024
 - **Impact of climate change on rheumatic diseases: A scoping review** *The Journal of Climate Change and Health*
Katsumoto, T. R., Stolyar, L., Dandeniya, C. L., Wong, H. N., Lanata, C. M., Falasinnu, T., Bush, T.
2024
 - **The Problem of Pain in Rheumatology: Variations in Case Definitions Derived From Chronic Pain Phenotyping Algorithms Using Electronic Health Records.** *The Journal of rheumatology*
Falasinnu, T., Nguyen, T., En Jiang, T., Tamang, S., Chaichian, Y., Darnall, B. D., Mackey, S., Simard, J. F., Chen, J. H.
2023
 - **Biologics Initiation in Rheumatoid Arthritis by Race and Ethnicity: Results From a Randomized Survey Study.** *ACR open rheumatology*

- Simard, J. F., Lu, R., Falasinnu, T. O., Baker, M. C., Hawa, S., Deluna, M. D., Horomanski, A., Fairchild, R. M.
2023
- **The Problem of Pain in the United States: A Population-Based Characterization of Biopsychosocial Correlates of High Impact Chronic Pain using the National Health Interview Survey.** *The journal of pain*
Falasinnu, T., Hossain, M. B., Weber, K. A., Helmick, C. G., Karim, M. E., Mackey, S.
2023
 - **Risk of End-stage Renal Disease in Patients with Systemic Lupus Erythematosus and Diabetes Mellitus: Danish Nationwide Cohort Study.** *Arthritis care & research*
Hansen, R. B., Falasinnu, T., Faurschou, M., Jacobsen, S., Simard, J. F.
2023
 - **The Problem of Pain in Rheumatology: Clinical Profiles Associated With Concomitant Diagnoses With Chronic Overlapping Pain Conditions.** *ACR open rheumatology*
Falasinnu, T., Nguyen, T., Jiang, T. E., Chaichian, Y., Rector, A., Darnall, B. D., Mackey, S., Simard, J. F.
2022
 - **A review of potential national chronic pain surveillance systems in the United States.** *The journal of pain*
Duca, L. M., Helmick, C. G., Barbour, K. E., Nahin, R. L., Von Korff, M., Murphy, L. B., Theis, K., Guglielmo, D., Dahlhamer, J., Porter, L., Falasinnu, T., Mackey, S.
2022
 - **Factors Associated with the Initiation and Retention of Patients with Lupus in the Chronic Disease Self-Management Program.** *Arthritis care & research*
Falasinnu, T., Bao, G., Brady, T. J., Lim, S. S., Drenkard, C.
2021
 - **The Burden of Systemic Lupus in Five Distinct Racial and Ethnic Groups in Israel: A Population-based Study**
Falasinnu, T., Rizk, N., Feldman, B., Zisman, D., Leshchinsky, M., Lawrence, G., Chaichian, Y., Simard, J.
WILEY.2021: 1203-1207
 - **Global epidemiology of systemic lupus erythematosus.** *Nature reviews. Rheumatology*
Barber, M. R., Drenkard, C., Falasinnu, T., Hoi, A., Mak, A., Kow, N. Y., Svenungsson, E., Peterson, J., Clarke, A. E., Ramsey-Goldman, R.
2021
 - **Are we missing lupus in males? Evidence of cognitive bias from a randomized experiment in the US.** *American journal of epidemiology*
Simard, J. F., Chaichian, Y., Rizk, N., Rector, A., Feldman, C. H., Falasinnu, T. O.
2021
 - **Evidence of under-reporting of early-onset preeclampsia using register data.** *Paediatric and perinatal epidemiology*
Simard, J. F., Rossides, M., Wikstrom, A., Falasinnu, T., Palmsten, K., Arkema, E. V.
2021
 - **Validation of a clinical prediction rule to predict asymptomatic chlamydia and gonorrhoea infections among internet-based testers.** *Sexually transmitted diseases*
Ablona, A., Falasinnu, T., Irvine, M., Estcourt, C., Flowers, P., Murti, M., Gomez-Ramirez, O., Fairley, C. K., Mishra, S., Burchell, A., Grennan, T., Gilbert, M.
2020
 - **The problem of pain in lupus: an explication of the role of biopsychosocial mechanisms.** *The Journal of rheumatology*
Falasinnu, T., Drenkard, C., Bao, G., Mackey, S., Lim, S. S.
2020
 - **"MINI DIAL-A-NURSES" AND "GOOD BRANDS": WHAT ARE THE DESIRABLE FEATURES OF ONLINE HIV/STI RISK CALCULATORS?** *AIDS EDUCATION AND PREVENTION*
Gomez-Ramirez, O., Thomson, K., Salway, T., Haag, D., Falasinnu, T., Grennan, T., Grace, D., Gilbert, M.
2020; 32 (6): 528-42
 - **Emerging Characteristics of Isotonitazene-Involved Overdose Deaths: A Case-Control Study.** *Journal of addiction medicine*
Shover, C. L., Falasinnu, T. O., Freedman, R. B., Humphreys, K.

2020

- **Increasing Ancestral Diversity in Lupus Trials: Ways Forward.** *Rheumatic diseases clinics of North America*
Falasinnu, T., Chaichian, Y., Simard, J. F.
2020; 46 (4): 713–22
- **Steep increases in fentanyl-related mortality west of the Mississippi River: Recent evidence from county and state surveillance.** *Drug and alcohol dependence*
Shover, C. L., Falasinnu, T. O., Dwyer, C. L., Santos, N. B., Cunningham, N. J., Freedman, R. B., Vest, N. A., Humphreys, K.
2020; 216: 108314
- **Association of State Policies Allowing Medical Cannabis for Opioid Use Disorder With Dispensary Marketing for This Indication.** *JAMA network open*
Shover, C. L., Vest, N. A., Chen, D., Stueber, A., Falasinnu, T. O., Hah, J. M., Kim, J., Mackey, I., Weber, K. A., Ziadni, M., Humphreys, K.
2020; 3 (7): e2010001
- **Toward the Estimation of Unbiased Disease Prevalence Estimates Using Administrative Health Records.** *The Journal of rheumatology*
Falasinnu, T., Simard, J. F.
2019; 46 (12): 1549–51
- **A review of non-immune mediated kidney disease in systemic lupus erythematosus: A hypothetical model of putative risk factors.** *Seminars in arthritis and rheumatism*
Falasinnu, T., O'Shaughnessy, M. M., Troxell, M. L., Charu, V., Weisman, M. H., Simard, J. F.
2019
- **Demographic Characteristics of Participants in Rheumatoid Arthritis Randomized Clinical Trials: A Systematic Review.** *JAMA network open*
Strait, A., Castillo, F., Choden, S., Li, J., Whitaker, E., Falasinnu, T., Schmajuk, G., Yazdany, J.
2019; 2 (11): e1914745
- **Does SLE widen or narrow race/ethnic disparities in the risk of five co-morbid conditions? Evidence from a community-based outpatient care system.** *Lupus*
Falasinnu, T., Chaichian, Y., Li, J., Chung, S., Waitzfelder, B. E., Fortmann, S. P., Palaniappan, L., Simard, J. F.
2019: 961203319884646
- **Impact of Diabetes on Risk of End Stage Renal Disease in Danish Nationwide Cohort of Newly Diagnosed Patients with Systemic Lupus Erythematosus**
Hansen, R., Simard, J., Faurischou, M., Jacobsen, S., Falasinnu, T.
WILEY.2019
- **Development of Comorbidity in Danish Nationwide Cohort of Newly Diagnosed Patients with Systemic Lupus Erythematosus**
Hansen, R., Falasinnu, T., Simard, J., Faurischou, M., Jacobsen, S.
WILEY.2019
- **VALIDATING A CLINICAL PREDICTION RULE FOR CHLAMYDIA AND GONORRHEA INFECTION AMONG ONLINE TESTERS IN BRITISH COLUMBIA, CANADA**
Ablona, A., Falasinnu, T., Irvine, M., Haag, D., Chang, H., Mishra, S., Burchell, A., Fairley, C., Lachowsky, N., Flowers, P., Estcourt, C., Murti, M., Gomez-Ramirez, et al
BMJ PUBLISHING GROUP.2019: A87
- **Years of Potential Life Lost Because of Cardiovascular Disease in Asian-American Subgroups, 2003-2012.** *Journal of the American Heart Association*
Iyer, D. G., Shah, N. S., Hastings, K. G., Hu, J., Rodriguez, F., Boothroyd, D. B., Krishnan, A. V., Falasinnu, T., Palaniappan, L.
2019; 8 (7): e010744
- **Diabetes-Attributable Mortality in the United States from 2003-2016 Using a Multiple-Cause-of-Death Approach.** *Diabetes research and clinical practice*
Rodriguez, F., Blum, M. R., Falasinnu, T., Hastings, K. G., Hu, J., Cullen, M. R., Palaniappan, L. P.
2019
- **The Representation of Gender and Race/Ethnic Groups in Randomized Clinical Trials of Individuals with Systemic Lupus Erythematosus.** *Current rheumatology reports*
Falasinnu, T. n., Chaichian, Y. n., Bass, M. B., Simard, J. F.

2018; 20 (4): 20

- **Do Death Certificates Underestimate the Burden of Rare Diseases? The Example of Systemic Lupus Erythematosus Mortality, Sweden, 2001-2013.** *Public health reports (Washington, D.C. : 1974)*
Falasinnu, T., Rossides, M., Chaichian, Y., Simard, J. F.
2018: 33354918777253
- **Unraveling Race and Social Context in Understanding Disparities in Lupus Mortality in the United States**
Falasinnu, T., Chaichian, Y., Palaniappan, L., Simard, J. F.
WILEY.2017
- **Impact of Sex on Systemic Lupus Erythematosus-Related Causes of Premature Mortality in the United States.** *Journal of women's health (2002)*
Falasinnu, T. n., Chaichian, Y. n., Simard, J. F.
2017
- **An assessment of population-based screening guidelines versus clinical prediction rules for chlamydia and gonorrhea case finding.** *Preventive medicine*
Falasinnu, T., Gilbert, M., Gustafson, P., Shoveller, J.
2016; 89: 51-56
- **Integrating gender and sex to unpack trends in sexually transmitted infection surveillance data in British Columbia, Canada: an ethno-epidemiological study.** *BMJ open*
Knight, R., Falasinnu, T., Oliffe, J. L., Gilbert, M., Small, W., Goldenberg, S., Shoveller, J.
2016; 6 (8)
- **Predictors identifying those at increased risk for STDs: a theory-guided review of empirical literature and clinical guidelines.** *International journal of STD & AIDS*
Falasinnu, T., Gilbert, M., Hottes, T. S., Gustafson, P., Ogilvie, G., Shoveller, J.
2015; 26 (12): 839-51
- **A validation study of a clinical prediction rule for screening asymptomatic chlamydia and gonorrhoea infections among heterosexuals in British Columbia.** *Sexually transmitted infections*
Falasinnu, T., Gilbert, M., Gustafson, P., Shoveller, J.
2015
- **Deriving and validating a risk estimation tool for screening asymptomatic chlamydia and gonorrhea.** *Sexually transmitted diseases*
Falasinnu, T., Gilbert, M., Gustafson, P., Shoveller, J.
2014; 41 (12): 706-712
- **A Critical Appraisal of Risk Models for Predicting Sexually Transmitted Infections** *SEXUALLY TRANSMITTED DISEASES*
Falasinnu, T., Gustafson, P., Hottes, T. S., Gilbert, M., Ogilvie, G., Shoveller, J.
2014; 41 (5): 321-330
- **Risk prediction in sexual health contexts: protocol.** *JMIR research protocols*
Falasinnu, T., Gustafson, P., Gilbert, M., Shoveller, J.
2013; 2 (2)
- **Implementing a Novel Citywide Rapid HIV Testing Campaign in Washington, DC: Findings and Lessons Learned** *PUBLIC HEALTH REPORTS*
Castel, A. D., Magnus, M., Peterson, J., Anand, K., Wu, C., Martin, M., Sansone, M., Rocha, N., Jolaosho, T., West, T., Hader, S., Greenberg, A. E.
2012; 127 (4): 422-431
- **Use of AIDS Drug Assistance Program data to increase the completeness of HIV/AIDS reporting** *Journal of HIV/AIDS Surveillance & Epidemiology*
Castel, A., Jolaosho, T., Vangani, R., Griffin, A., Ehrmann, T., Gurung, D., West-Ojo, T., Hader, S.
2011; 3 (1)
- **A Population-Based Evaluation of the Intention to Quit Smoking, Cervical Cancer Screening Behaviour, and Multiple Health Behaviours Among Female Canadian Smokers** *Journal of Smoking Cessation*
Falasinnu, T.

2011; 6 (2): 119-125

- **Electronic Record Linkage to Identify Deaths Among Persons with AIDS --- District of Columbia, 2000--2005** *MMWR*

Jolaosho, T., Gauntt, J., West-Ojo, T., Castel, A., Selik, R., Durant, T., Peters, P., Tai, E.

2008