

JON SOLE

EDUCATION

Stanford Healthcare Physician Resident – Chief Resident Department of Psychiatry and Behavioral Sciences	2020-Present
Stanford Medicine, Stanford CA Doctor of Medicine <i>Scholarly Concentration:</i> Clinical Research and Neuroscience, Behavior and Cognition	2015-2020
Johns Hopkins University, Baltimore MD Master of Science and Bachelor of Arts <i>Major:</i> Cellular and Molecular Neuroscience <i>Thesis:</i> “Sorting Nexin 27 regulates basal and activity-dependent trafficking of AMPARs”	2008-2013

AWARDS

Academy of Consultation-Liaison Psychiatry Trainee Travel Award - \$750	2023
Lighttower Scholar – Academic Scholarship - \$79,700	2015 – 2020
Klingenstein Fellow – Child and Adolescent Psychiatry Service Award	2019
Borenstein Scholar – Competitive Academic Scholarship - \$10,000	2019
Stanford Medical Scholar – Academic Research Grant - \$59,000	2016 – 2019
Silverstein, Peter and Marg Scholar – Academic Scholarship - \$22,200	2015 – 2016
Meren Scholar – Competitive Academic Scholarship - \$21,000	2008 – 2012
Bloomberg Scholar – Academic Scholarship - \$130,000	2008 – 2012
Intel Science Talent Search Semifinalist – Competitive Research Competition - \$1,500	2008
Young Epidemiology Scholar Finalist – Competitive Research Competition - \$2,000	2008

RESEARCH/QUALITY IMPROVEMENT

Stanford-Ceribell Delirium Data Collection Study – Clinical Research Clinical Researcher – to José R. Maldonado, M.D., FACLP, FACFE – Stanford Healthcare Provide clinical support and coordination in the Stanford arm of a multicenter prospective clinical trial to assess a novel, FDA cleared, portable AI-assisted electroencephalogram (EEG) – Ceribell Rapid Response EEG System – to monitor brain waves for the development of ICU-related delirium.	2023-Present
Dyspnea: A Guide for CL Psychiatrists – Clinical Research Clinical Researcher – Yelizaveta Sher, MD, FACLP – Stanford Healthcare Engaged with multidisciplinary team of CL Psychiatrists and Critical Care Physicians to support development of a dyspnea guide for CL Psychiatrists, including pathophysiology, related psychiatric sequela, and clinical management considerations.	2022-2023
COVID19: Inpatient Telemedicine – Quality Improvement Project Manager – to David Svec, MD/MBA and Lisa Shieh, MD, PhD – Stanford Healthcare Developed inpatient telemedicine protocol, sourced technology-based solutions to reduce PPE use burden per patient interaction and consulted on mental health technology solutions for COVID19 patients at SHC.	2020-2022
SAVE: Stanford Healthcare Sustainability – Quality Improvement Project Manager – to David Svec, MD/MBA and Lisa Shieh, MD, PhD – Stanford Healthcare Established sustainability practices at Stanford Healthcare as important to fulfilling SHC’s mission statement. Developed and launched Sustainability Task Force, comprised of thought leaders at Stanford University and SHC to engage leadership in discussion and inform best practices.	2020-2022
Novel Mouse Line Characterization to Study Glutamatergic Receptors – Basic Science Research	

<p>Neuroscientist – to Robert Malenka, MD/PhD and Thomas Südhof, MD – Stanford Dep. of Psychiatry</p> <p>Generated, validated, and characterized novel mouse lines with conditional knock-in AMPAR/NMDAR subunits to help elucidate mechanistic components of human cognition and, by association, the pathophysiology of psychiatric disorders.</p>	2018-2020
<p>Quiet at Night: Stanford Healthcare Quietness – Quality Improvement</p> <p>Research Coordinator – to David Svec, MD/MBA – Stanford Healthcare</p> <p>Leveraged artificial intelligence to analyze thousands of Press Ganey responses for impact of noise at Stanford Healthcare on patient experience and presented to VP of Patient Experience at Stanford.</p>	2018-2019
<p>SHC Cost: Limited Echo vs Full Echo – Quality Improvement</p> <p>Project Manager – to David Svec, MD/MBA and Lisa Shieh, MD, PhD – Stanford Healthcare</p> <p>Established TTE as a high cost overutilized procedure at Stanford and provided recommendations for best practices to reduce yearly spending by \$7M.</p>	2018-2019
<p>Improving O:E Mortality Ratio at Stanford Healthcare – Quality Improvement</p> <p>Project Manager – to Jason Hom, MD – Stanford Healthcare</p> <p>Identified protein calorie malnutrition as a key driver of reduced expected mortality at Stanford Healthcare and determined root cause to be variable criteria and documentation. Standardized criteria, educated staff, and improved documentation by 15%.</p>	2018-2019
<p>Patient Perspectives: Operating Room Communication – Clinical Research/Quality Improvement</p> <p>Research Coordinator – to Sabine Girod, MD – Stanford Dep. of Surgery</p> <p>Developed study survey, conducted 30 patient interviews, analyzed data, produced manuscript and conducted oral presentations of findings to Stanford Surgery/Anesthesiology Grand Rounds.</p>	2015-2018
<p>Length of Stay Evaluation at Stanford Healthcare – Quality Improvement</p> <p>Project Manager – to David Svec, MD/MBA – Stanford Healthcare</p> <p>Optimizing length of stay (LOS) was identified as a Stanford Health Care quality initiative across all departments. Explored characteristics of long LOS patients, the barriers to discharge, and developed recommendations.</p>	2016-2017
<p>Pediatric Parapharyngeal Infections – Clinical Research</p> <p>Research Assistant – to Yiren-Chen, MD and Steven Skirboll, MD – Stanford Dep. of Neurosurgery</p> <p>Conducted review of literature on pediatric parapharyngeal infections and produced manuscript.</p>	2016-2017
<p>National Trends for Reoperation in Elderly Patients with GBM – Clinical Research</p> <p>Research Assistant – to Yiren-Chen, MD and Steven Skirboll, MD – Stanford Dep. of Neurosurgery</p> <p>Performed large database analysis, produced manuscript, and presented research at AANS and Neur-Oncology annual scientific meetings.</p>	2016-2017
<p>Spine Clinic: Patient Feedback and Outcomes – Quality Improvement</p> <p>Project Manager – to John Ratliff, MD – Stanford Healthcare</p> <p>Identified barriers to obtaining patient feedback, developed a dashboard for related patient outcomes data, and created patient education materials to improve patient engagement.</p>	2016-2017
<p>Optimizing Stanford’s Internal Medicine Discharge Follow-Up Appointment Process – Quality Improvement</p> <p>Research Coordinator – to Lisa Shieh, MD/PhD – Stanford Dep. of Internal Medicine</p> <p>Reviewed 100 patient charts analyzing barriers/time to follow up appointments post discharge, designed solutions and increased post discharge follow up by 30%.</p>	2015-2016
<p>Cost Per Case Assessment – Quality Improvement</p> <p>Research Coordinator – to David Svec, MD/MBA – Stanford Healthcare</p> <p>Established Level of Care as an important metric in reviewing total yearly spending. Provided and implemented recommendations, saving Stanford \$5.7M.</p>	2015-2016
<p>Novel AMPAR Interactor Characterization: SNX27a – Basic Science Research</p> <p>Neuroscientist – to Richard Haganir, PhD - Johns Hopkins University</p> <p>Established Snx27a as a direct interactor with key molecular players of memory, the necessary and sufficient domains for this interaction, and the subsequent function within molecular memory.</p>	2008-2014

PUBLICATIONS

1. Chen, Y.-R., **Sole, J.**, Jabarkheel, R., Edwards, M., & Cheshier, S. (2019). Pediatric parapharyngeal infection resulting in cervical instability and occipital-cervical fusion—case report and review of the literature. **Child's Nervous System**. <https://doi.org/10.1007/s00381-019-04083-6> 2019
2. **Sole, J.** (2019). From surgery to psychiatry: A medical student reevaluates his motivations. **Scope Stanford Medicine**. <https://scopeblog.stanford.edu/2019/> 2019
3. **Sole, J.**, Chen, Y.-R., Ugiliweneza, B., Johnson, E., Burton, E., Woo, S. Y., ... Skirboll, S. (2018). National Trends for Reoperation in Older Patients with Glioblastoma. **World Neurosurgery**, 113. <https://doi.org/10.1016/j.wneu.2018.01.211> 2018
4. Jia, X; **Sole, J.**; Zhou, J; Grade, M; Hsu, HT; Ouyang, C; Lee, K; Mecum, L; Shieh, L . (2017). Optimizing The Stanford Internal Medicine Discharge Follow-Up Appointment Process. Abstract published at Hospital Medicine 2017, May 1-4, 2017; Las Vegas, Nev. Abstract 214. **Journal of Hospital Medicine**, 12 (suppl 2). <https://www.shmabstracts.com/abstract/optimizing-the-stanford-internal-medicine-discharge-follow-up-appointment-process/> 2017
5. Chen, Y.-R., **Sole, J.**, Ugiliweneza, B., Boakye, M., & Skirboll, S. (2016). SURG-05. National Trends For Reoperation In Patients With Glioblastoma Multiforme. **Neuro-Oncology**, 18(suppl_6), vi191–vi192. <https://doi.org/10.1093/neuonc/now212.806> 2016
6. Hussain, N. K., Diering, G. H., **Sole, J.**, Anggono, V., & Haganir, R. L. (2014). Sorting Nexin 27 regulates basal and activity-dependent trafficking of AMPARs. **Proceedings of the National Academy of Sciences**, 111(32), 11840–11845. <https://doi.org/10.1073/pnas.1412415111> 2014

PRESENTATIONS/WORKSHOPS

- “The Transplant and the Brain: Cognitive Deficits through the Transplant Process across the Lifespan”*
Oral Workshop – Academy of Consultation-Liaison Psychiatry 2023
- “LGBTQ+ Program, SOGI Data Capture, and EMR Improvements”*
Oral Presentation – Leadership in Healthcare Disparities Program 2019
- “Novel Mouse Line Characterization for Studies of Glutamate Receptor Trafficking”*
Poster Presentation – Medical Scholars Symposium 2019
- “National Trends For Reoperation in Elderly Patients with GBM”*
Poster Presentation – American Association of Neurological Surgeons Annual Scientific Meeting 2017
- “Stanford Internal Medicine Department Optimization – A Case Study”*
Poster Presentation – Society of Hospital Medicine’s Annual Meeting 2017
- “National Trends for Reoperation in Older Patients with GBM”*
Poster Presentation – Society for Neuro-Oncology Annual Scientific Meeting 2016
- “Optimization of Stanford Healthcare’s Discharge Process”*
Poster Presentation - Northern California American College of Physicians Scientific Meeting 2016
- “Operating Room Communication: From OR Teams to Patient Perspectives”*
Oral Presentation – Anesthesia Grand Rounds, Stanford 2016
- “Improving Operating Room Communication: A Surgical Team Perspective”*
Oral Presentation – General Surgery Grand Rounds, Stanford 2016
- “Optimizing the Stanford Internal Medicine Discharge Follow-up Appointment Process”*
Poster Presentation – Quality Improvement and Patient Safety Symposium 2016
- “National Trends for Reoperation in Older Patients with Glioblastoma”*
Oral Presentation – Neuroscience Research Forum 2015

TEACHING

Stanford Inpatient Psychiatry – Integrated Didactic Series Coordinator, Lecturer	2019-2020
Launched, coordinated and lectured an integrated, multidisciplinary year-round didactic curriculum covering inpatient psychiatry topics for PGY1/PGY2 residents and medical students.	
PSYC240/PSYC241: Designing for the 2 Billion: Leading Innovation in Mental Health Head Teaching Assistant – to Nina Vasani, MD/MBA and Gowri Aragam, MD	2019-2020
Supported curriculum development and managed all course logistics and grading for 50 students.	
MED 279: Stanford Health Consulting Group – Stanford Medicine/Stanford Healthcare Director/Founder – faculty sponsors: David Svec, MD/MBA, Edward Sheen, MD/MBA, Lisa Shieh, MD/PhD	2018-2020
Developed and sourced projects through partnership with Stanford Healthcare, including internal consultants, organizational business stakeholders and hospital administration. Guided project outcomes by overseeing student methods, data capture and analytics, patient/clinician interviews and recommendation synthesis. Mentored students with office hours and project improvement plans.	
Stanford Klingenstein Fellowship Program - Stanford Medicine Teaching Assistant – to Anita Kishore, MD and Shashank Joshi, MD	2019-2020
Coordinated course logistics and lead student discussions in Child and Adolescent Psychiatry.	
Leading Value Improvement in Health Care Delivery - Stanford Medicine Teaching Assistant – to Professor Edward Sheen, MD/MBA	2016-2017
Updated curriculum to reflect current healthcare space, secured guest lectures, and coordinated course logistics.	
The Nervous System – Johns Hopkins University Teaching Assistant – to Professor Steward Hendry, PhD	2012-2013
Head teaching assistant for overhauled curriculum we developed.	

WORK EXPERIENCE

San Mateo Medical Center – San Mateo, CA Medical Doctor - Psychiatry	2023-Present
Conducted comprehensive psychiatric evaluations on multidisciplinary teams in consult liaison and emergency psychiatry settings.	
Interaxis Sourcing, Inc (IXS) - New York, NY Information Technology (IT) Manager	2013-2017
Managed IT department of medium sized, international apparel sourcing company, implementing current technologies to increase efficiency and productivity, saving IXS \$40k annually.	

LEADERSHIP POSITIONS/SERVICE ACTIVITIES

Stanford Hospital, Adult Psychiatry Residency Program PGY4 Chief Resident, Consult Liaison and Call	2023-Present
Serving as the first chief resident in the program's history to be appointed for two full year terms. Overhauled the program's call and coverage systems through ideation, development, stakeholder navigation and implementation of 4 residency wide initiatives (need based jeopardy system, split weekend shifts, programmatic equalization, weekend support shifts) to enhance equitability, transparency, and flexibility and better match resident resources with clinical demand. Designed and launched an EM-Psychiatry swing shift rotation to provide residents a robust ED-Psych experience and reduce total resident call hours worked by 960 per academic year.	

<p>Graduate Medical Education Committee Resident Representative Represent 1,200+ resident trainees as an elected committee member tasked with overseeing institutional Graduate Medical Education policies, procedures and accreditation for 123 residency training programs at Stanford Healthcare. .</p>	2023-Present
<p>Academy of Consultation-Liaison Psychiatry Evidence Based Medicine Subcommittee Appointed Consultant Appointed by ACLP committee leadership to review literature and appraise internally submitted clinically practice guideline submissions for varied consult liaison psychiatry topics. Review and publish 3 journal article annotations in the critical care psychiatry space per quarter.</p>	2022-Present
<p>Academy of Consultation-Liaison Psychiatry Critical Care Psychiatry Interest Group Member Active member of ACLP interest group focused on leading critical care psychiatry as subspecialty.</p>	2022-Present
<p>Stanford Hospital, Adult Psychiatry Residency Program PGY3 Chief Resident, Stanford Inpatient Psychiatry Developed, launched, and coordinated a comprehensive year-round inpatient psychiatry didactic series for 50+ PGY1/PGY2 trainees and medical students per academic year through multidisciplinary engagement of MDs, Psychology, Social Work, Nursing, and Security teaching over 180 lectures per academic year.</p>	2022-2023
<p>Brainstorm: The Stanford Laboratory for Mental Health Innovation Resident Fellow Brainstorm seeks to tap the potential of academic and industry to bridge medicine, technology and entrepreneurship in guiding the design and use of quality, tech-based products to improve patient's mental health and overall well-being.</p>	2020-2021
<p>American Academy of Child and Adolescent Psychiatry Local Arrangements Committee Appointed Committee Member Appointed by AACAP to engage resident physicians and prepare monitors for AACAP's Northern California academic meeting.</p>	2019-2021
<p>LGBTQ+ Stanford Clinic Task Force Student Lead Aided Chair of OB/GYN department and other stakeholders, including psychiatry department and family medicine, to conceptualize, develop, and found Stanford's first LGBTQ+ focused program. Program will include a clinic, research, academics, and community outreach.</p>	2018-2020
<p>Stanford Health Consulting Group (SHCG) Director, Acting Senior Partner Oversaw all group operations, managing 20+ pro-bono Quality Improvement projects for Stanford Healthcare. Notable projects include reducing Stanford's costs by \$5M in 1 year, increasing patient follow up appointments by 30% and implementing an institution wide SOGI data collection portal. Developed and launched MED279, a related healthcare consulting course curriculum open to all Stanford Students.</p>	2015-2021
<p>Sexual Orientation and Gender Identity (SOGI) Data Capture Task Force Project Lead Organized and lead a taskforce to develop an evidence-based SOGI data capture form and implement evidence-based policies across all Stanford Healthcare departments with the goal to improve quality of care provided to LGBTQ+ minority populations.</p>	2015-2020
<p>Sexuality, Gender, and Sexual Function Working Group Student Lead Updated Stanford Medicine curriculum to incorporate issues of gender and sexuality with keen attention to AAMC's core competencies, creating two new required pre-clerkship courses for Stanford Medicine, instituting implicit bias training, and developing a 90-minute session for incoming medical students on LGBTQ+ health.</p>	2016-2020

LGBTQ+ Meds

Co-President

2015-2017

Directed LGBTQ+ Medical Student interest group efforts. Worked to provide an inclusive and safe space, co-founded an internal "Little-Big" mentoring program, and supported a Stanford Medicine wide visibility campaign, culminating in a university wide diversity forum.

Stanford Healthcare Innovation (SHIFT)

Advisory Board Member

2015-2017

Advised Stanford undergraduate group through monthly meetings. Served as judge at yearly "hackathon," where 30+ Stanford students compete to create cost effective solutions to third party healthcare organizational issues.

PALs Program

Student Volunteer

2015-2017

Served as "Big Brother" to a chronically ill child at Lucile Packard Children's Hospital, aided family in transitions of care, and served as patient and family advocate.

Stanford Free Clinics

Quality Assurance Manager, Lab Manager

2015-2017

Aided in medical care provided to underserved populations. Addressed patient experience and satisfaction pain points through process flow mapping and quality metrics to reduce process inefficiency, task duration, and systems interactions.

MEMBERSHIPS

American Academy of Consult Liaison Psychiatry	2022-Present
American Psychiatry Association	2018-Present
American Medical Association	2016-Present
American Academy of Child and Adolescent Psychiatry	2020
American Medical Association	2016
American Medical Student Association	2015