



Sierra Pacific MIRECC

Advanced Fellowship in Mental Illness
Research and Treatment –
Data Science

PAO P1688



Table of Contents

Training at VA Palo Alto	1
VA Palo Alto Health Care System Facilities	2
Postdoctoral Program Funding, Benefits, and Eligibility	3
Fellowship Structure at VA Palo Alto/MIRECC	4
Research Opportunities and Expectations	4
Healthcare Delivery Improvement	4
Fellow Seminars	5
Other Educational Opportunities for Postdoctoral Fellows	5
Training Objectives for the Year	
Opportunities for Working with Diverse Patient Populations	9
Training Objectives and Trainee Self-Disclosure	9
Evaluation Process	10
Application and Selection Process	11
Living in the San Francisco Bay Area	14
Contacting MIRECC	16
Appendix A: MIRECC Training Faculty	17

Introduction

The Sierra Pacific Mental Illness Research, Education, and Clinical Center (MIRECC) Fellowship is one of 28 sites in the VA Advanced Fellowship Program in Mental Illness Research and Treatment, which is sponsored by the Office of Academic Affiliations. Congress established the MIRECCs and CoEs (Centers of Excellence) to research the causes and treatments of mental illness as well as to disseminate new knowledge for implementation into VA clinical care. See more at <http://www.mirecc.va.gov/index.asp>.

The Mission of the Sierra Pacific MIRECC is to build an integrated system of clinical, research, and educational efforts designed to improve VA care for aging Veterans with dementia and mental health comorbidities both in VISN 21 and system wide. Veterans' military experience and lifestyle substantially increases their vulnerability for dementia for many reasons. Our approach is to identify relevant risk factors in these aging Veterans, then develop and implement novel countermeasures. Our strong translational research programs develop targeted evidence-based programs that slow decline. The need is increasingly important as Vietnam and Gulf War Veterans grow older and more susceptible to cognitive impairment and mental health comorbidities.

In support of this mission, the Sierra Pacific MIRECC Fellowship provides specialized training in aging/dementia and mental health comorbidities. We do not provide funded postdoctoral training in any other areas than those described in this brochure. No postdoctoral training program is perfect for everyone; you will be seeking the best match for your own interests and needs, just as we will be seeking the best matches for our program. We hope this brochure can help you decide whether you want to apply to the Sierra Pacific MIRECC Fellowship at VA Palo Alto.

The national training mission of VA is broad and explicitly includes training of health care professionals for the nation, as well as for the VA system. We train Fellows who go on to VA jobs, and we train others who go on to work in academia, other medical centers, the private sector, etc. The profession of Psychology and the whole health care system in this country are served by having well-trained, enthusiastic, creative professionals. We strive to support VA's training mission, for VA's specific goals and for the nation.

Training at Sierra Pacific MIRECC

The mission of the Sierra Pacific MIRECC Fellowship is to train data scientists and clinical researchers who meet advanced practice competencies in data science. Specifically, we aim to foster the development of data scientists and clinical researchers who are well prepared to meet the emerging and ongoing medical and mental health care needs of today's Veterans. We accomplish this by providing comprehensive training, extensive and individually tailored supervision, and an excellent array of clinical and professional development related didactics to foster advanced skills and independence in foundational functional competencies and goals. In addition, Fellows participate in clinically relevant (service directed) research and educational projects with direct clinical implications that can potentially serve to expand knowledge and quality of care.

Complementing our aim of readying Fellows to function as independent clinical researchers, training prepares Fellows for careers in high priority areas of health care for Veterans. VA's national training goals are listed as primary care, geriatrics, mental health, and rehabilitation (Associated Health Professions Review Subcommittee, 1997). Consistent with our mission, the Sierra Pacific MIRECC Fellowship offers advanced training in the identification of risk and resilience factors associated with dementia and the development and evaluation of interventions to address those factors. Our use of individualized training plans allows Fellows to receive training that facilitates their development of the advanced practice competencies. Fellows also learn advanced clinical research skills that facilitate the empirical investigation of contemporary clinical issues facing Veterans and to translate the findings of these investigations into meaningful clinical practice. Our Fellows receive mentorship in these high priority areas from internationally renowned clinical researchers. Please see Appendix A for a listing of our Faculty Mentors.

In this Introduction, we describe the key procedures such as application, selection, and discuss how the program

is organized. In addition, we discuss our philosophy of training and provide additional information about expected competencies that postdoctoral Fellows will acquire.

MIRECC/COE VA Advanced Fellowship in Mental Illness Research and Treatment

The VA Advanced Fellowship in Mental Illness Research and Treatment exists across 28 VA sites that include MIRECCs, SMITREC (Serious Mental Illness Treatment, Research, and Evaluation Center), NCPTSD (National Center for PTSD), and CoEs. The primary goal of the fellowship program is to train MDs, psychologists, and other allied health professionals to become leading clinical researchers in high priority areas of mental health. Over the course of the training, Fellows receive training in academic and health systems research, advanced clinical care delivery, and program administration in an interdisciplinary setting. Fellows in the Sierra Pacific MIRECC regularly interface with Fellows across the country through regular videoconference seminar series that addresses both professional development and recent advances in clinical research in mental health. Past seminars included VA and academic career development, procurement of funding and resources, behavioral genetics, health informatics, and clinical trials methodology.

VA Palo Alto Health Care System Facilities

The Veterans Affairs Palo Alto Health Care System ([VAPAHCS](#)) is part of the VA Sierra Pacific Network (VISN 21), which serves Veterans in northern and central California, Nevada, Hawaii, the Philippines, and US Territories in the Pacific Basin. VHA provides comprehensive health care to individuals who have served in the armed forces. This health care system is responding to many national changes in the health care field; our training program changes in concert with the changing organization and emphases of health care.



VAPAHCS is a teaching hospital, providing a full range of patient care services across 7 different hospital/clinic sites, with state-of-the-art technology as well as education and research. Fellowship training sites are available at four campuses within the health care system (Palo Alto, Menlo Park, San Jose, and Livermore), with the great majority concentrated in the Palo Alto Division and the Menlo Park Division. The Palo Alto and Menlo Park Divisions are separated by 7 miles (15 minutes by car or shuttle). Our health care facilities operate over 600 inpatient beds, including three Community Living Centers (formerly known as nursing homes) and a 100-bed homeless domiciliary, and over 50 primary care and specialty outpatient clinics, serving over 67,000 enrolled Veterans. In 2021, VAPAHCS was designated as the VISN 21 Specialty Care Clinical Resource Hub and provides collaborative clinical services including eConsults, telephone, Clinical Video Telehealth, and VA Video Connect services for sites throughout our VISN.

VAPAHCS has the largest research program in VHA and maintains a strong cooperative affiliation with Stanford University. The research portfolio at VAPAHCS is vast and includes areas such as Alzheimer's disease, spinal cord regeneration, genomics, diabetes, drug abuse, pain management, cancer, musculoskeletal issues, hypertension, dermatology, atherosclerosis, nephrology, immunology, PTSD, polytrauma, vision rehab, and cardiology. The VHA Office of Research and Development also supports several Centers at the VAPAHCS, including the VA Cooperative Studies Program (CSP), QUERI Coordination Center, Center for Innovation to Implementation (Ci2i), Program Evaluation Resource Center (PERC), and Health Economics Resource Center (HERC). VAPAHCS also has a three-floor 95,000 square foot research facility that houses basic science research and a vivarium.

Training resources are available for research or consultation at these and other programs.

VAPAHCS has a variety of specialized regional programs, including a Polytrauma Rehabilitation Center, a Spinal Cord Injury Center, a Comprehensive Rehabilitation Center, the Western Region Blind Rehabilitation Center, a National Center for PTSD, a Women's Trauma Recovery program, Homeless Veterans Rehabilitation program, and a Geriatric Research, Educational, and Clinical Center (GRECC). Special psychological programs are available in health psychology, geropsychology, inpatient and outpatient psychiatric care, drug and alcohol treatment, and brain injury rehabilitation. Clinical training opportunities are available in all these programs.

Organizationally, the Sierra Pacific MIRECC Fellowship is housed within Psychiatry Service, Division of the MIRECC, at VAPAHCS. This fellowship program operates conjointly with MIRECC and the broader Clinical Training Program within VAPAHCS Psychology Service. The MIRECC operates in an interprofessional, collegial fashion with other disciplines, and Fellows obtain training and clinical experience in interprofessional work.

Sierra Pacific MIRECC Postdoctoral Fellow Funding, Benefits, and Eligibility

The Sierra Pacific MIRECC Fellowship is funded by the Office of Academic Affiliations of the Department of Veterans Affairs Central Office as an annual, earmarked allocation to the medical center. The current annual postdoctoral stipend at the Sierra Pacific MIRECC is \$66,387.00. This stipend requires a full calendar year of training. VA provides health care benefits for postdoctoral fellows as for any other VA employee. Health insurance is also available to dependents and married spouses of fellows, including to legally married same-sex spouses of fellows. Unmarried partners are not eligible for health benefits, even those in legal civil unions or domestic partnerships. Insurance programs can be selected from a wide array of options. More information about VA stipends and benefits are available at www.psychologytraining.va.gov/benefits.asp.

Eligible applicants must be US citizens and hold a doctorate in data science or related fields.

In addition, please note that all MIRECC Fellows are considered temporary employees of the Department of Veterans Affairs and, as such, are subject to laws, policies, and guidelines posted for VA staff members, including for required vaccinations (e.g., influenza) and random drug testing (see this [document](#) for more details). There are infrequent times in which this guidance can change during a training year which may create new requirements or responsibilities for MIRECC Fellows. If employment requirements change during a training year, Fellows will be notified of the change and impact as soon as possible and options provided. The Training Director will provide you with the information you need to understand the requirements and reasons for the requirements in timely manner.

All VA employees are required to be vaccinated or having filed an exemption (medical or religious) within 8 weeks of beginning VA employment.

To be eligible to begin the Fellowship, the selected applicant must have completed all doctoral degree requirements (e.g., before September 1). The training program may rescind offers of postdoctoral positions for applicants selected for the postdoctoral fellowship, but who have not completed all doctoral degree requirements by September 1. The number of postdoctoral positions available within this Fellowship has varied in the past but is expected to be at least 1 in the 2026-2028 training year.

MIRECC Fellowship Structure

The Fellowship consists of two calendar years of full-time supervised training; our start date can be flexible, depending on the Fellow's date of graduation and other needs. Generally, Fellows start on or around September 1 each year. The Fellowship ending date will be determined based on the specific start date of each fellow. Fellows must complete the full two years of training, so a start date should be determined with

consideration of hopes for availability for future employment (e.g., ending in time to begin an academic position).

Training is based on a 40-hour workweek, so the total hours over a year come to 2,080. Out of those 2,080 hours, there is time off for vacation (13 days), illness (up to 13 days), Federal holidays (10 days), and authorized absence for professional activity. Like staff, Fellows are paid for 40 hours per week, no matter how much time is spent. Most staff do not get their work done in the allotted 40 hours, and we suspect that most Fellows will not either. A key notion in VA is that we are a "Service," not a department. To serve patients we must be available, and Fellows will see considerable emphasis on being available, especially during working hours. On the other hand, this is not a 60-hour per week or more Fellowship. Each Fellow will work at least 40 hours intensively each week. How much more a Fellow works depends on many factors, including interest in additional training experiences, research involvement, time-effectiveness in completing paperwork and other work demands, etc. The Fellow's Research Mentor and the Fellowship leadership will develop an individualized training plan that balances taking advantage of training and professional development opportunities with time for a full, rich life outside of work. Regardless of the specific training plan, Postdoctoral Fellows will receive at least 4 hours per week of supervision, with at least half of that in individual, face- to- face supervision.

Research Opportunities and Expectations

Each Fellow is expected to actively participate in research during their training tenure with the Fellowship. Fellows choose research projects within their stated area of emphasis (Geropsychology; PTSD) and work collaboratively with their Research Mentors to: a) identify or develop meaningful clinical research projects that address key areas of veterans mental health needs; b) identify roles on ongoing clinical research projects (including the numerous clinical trials available at MIRECC) that may foster the advanced development of both clinical and research skills; and c) participate in the development and submission of empirical manuscripts, grants and other scholarly projects focused on the mental health needs of today's veterans.

Fellows are expected to complete a meaningful research project during their two-year Fellowship, and to consistently show clear markers of their research productivity. Key markers of productivity may include a) the development of a grant proposal; b) generating an article and submitting it for publication; c) presentation of this project at a professional meeting; d) developing and presenting an in-service training module, or some other marker of productivity. Fellows have substantial protected time for research each week, which facilitates expeditious completion of these projects. In addition, many Fellows are involved with research concerning direct clinical hypotheses, so some of their clinical experiences will be in the context of research programs, such that the clinical work contributes to data collection and ongoing generation of hypotheses about the area of research.

Healthcare Delivery Improvement Projects

All Data Science Fellows will devote at least 25% of their time (10 hours per week) to a healthcare delivery improvement project. While this project is separate from the ongoing research that the Fellow is engaged in with their Research Mentor, the project is expected to fall within the Fellow's chosen area of emphasis and are designed to offer rigorous, advanced training in QI and healthcare delivery improvement.

Didactics

MIRECC Fellows can participate in many didactics throughout the training year. There are several required core year-long seminars for the Fellows. The *Clinical Research Postdoctoral Fellowship Professional Development Seminar* covers issues in professional development as a psychologist and development of professional identity as a clinical researcher. This seminar is attended by clinical research postdoctoral trainees across VAPAHCS, thus affords Fellows an opportunity to meaningfully interact with trainees in

similar training programs. Attendance at this seminar is required.

Fellows also participate in didactics specifically focused upon the national community of Fellows in the Advanced Fellowship Program for Mental Illness Research and Treatment. Fellows from all participating training sites join by video-conference (V-Tel). Twice monthly, the *V-Tel Core Didactic Series on Career Planning, Statistics, Clinical Issues, Treatment and Neuroscience of Mental Health* features “hot topics” in clinical practice, clinical and research ethics, research methods and biostatistics, academic citizenship (e.g., participation in the peer review process), mental health priorities within VHA, research methods, as well as broader aspects of personal (work life balance) and career development (promotion and tenure). Fellows also have the can participate in monthly Grant Writing and Scientific Writing Workshops through V-Tel. The objectives of the Grant Writing Workshop include critically analyzing grant proposals and developing key skills in grantsmanship. Similarly, the Manuscript Writing Workshop provides Fellows the opportunity to both review manuscripts as well as receive intensive training in different elements of scientific writing. Data Science Fellows also participate with the national VA Data Science Sessions held each month.

Other Educational Opportunities for Postdoctoral Fellows

Each year there are several full day conferences at the VAPAHCS attended by interdisciplinary staff and open to trainees; topics vary from year to year. Several VA clinical research centers (GRECC, Ci2i, National Center for PTSD), offer regular seminars or grand rounds, which are open to Fellows.

Sierra Pacific MIRECC Fellowship Training Program

We have two overarching aims for our postdoctoral training program:

1. Fellows will develop the advanced professional competencies required for independent functioning as a data scientist
2. Fellows will develop skills required to function effectively as a data scientist in a high priority area of health care for veterans (e.g., dementia and associated mental health conditions)

Specifically, Fellows are expected to demonstrate, by the end of their tenure with us (2 years), competence in the following areas:

Foundations of Dementia Risk and Treatment Research

- Measuring Dementia Risk
- Designing Dementia Prevention and Treatment Research

Data Management and Analysis

- Fundamentals of Data Management
- VA Big Data Expertise
- Advanced Data Analysis

Team Science Fundamentals

- Grant Writing
- Research Design and Execution
- Critical Analysis
- Academic Writing
- Translational Research

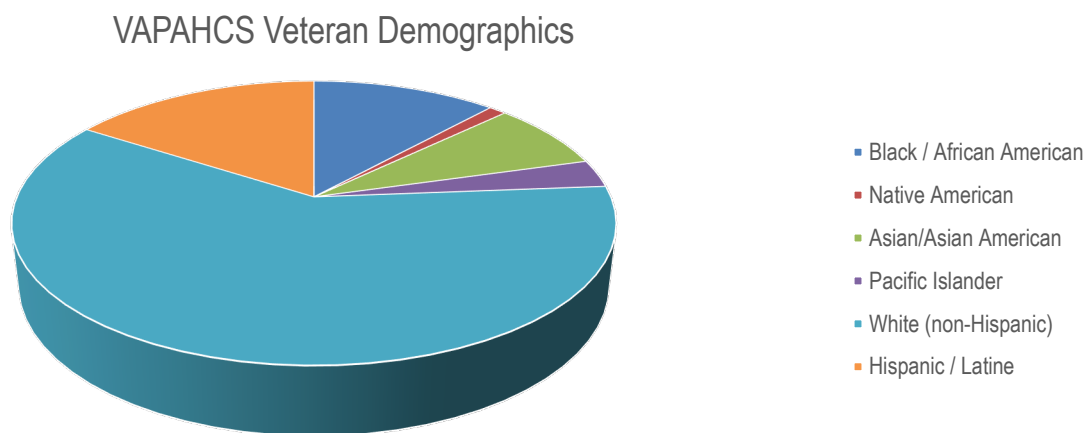
Professionalism and Communication

- Professional Communication
- Collaboration and Partnership
- Professionalism and Ethics

Research training goals are individually tailored to the specific goals, skills and career trajectories established by the Fellow and his/her Mentor.

Opportunities for Working with Diverse Patient Populations

VA Palo Alto serves an ethnically diverse population of veterans and active-duty personnel ranging in age from 19-90+, with more younger ages represented due to our nation's recent military conflicts. While most of the patients are male, VA Palo Alto has specific women's mental health programs drawing female veterans and active-duty personnel from around the nation. Female patients now account for approximately 13% of the VA Palo Alto patient population. Patients also range in socio-economic status, from high-income employees of local technology companies to low-income and/or homeless veterans. The overall VA Palo Alto population reflects the distribution of self-reported ethnic backgrounds in the pie chart below. FY22 VAPAHCS Veteran (n = 55,466) self-reported demographics are as follows: 59.4% White (non-Hispanic), 15.7% Hispanic/Latine, 11.6% Black/African American, 7.6% Asian, 3.1% Native Hawaiian/Pacific Islander, 1.1% Native American, 1.4% two or more races.



Training Objectives and Trainee Self-Disclosure in Training and Supervision

In the most recent version of the APA Code of Ethics (2010), APA described what a program can reasonably expect of students in training regarding personal disclosure. Because this clause is particularly relevant for clinical training programs, such as our internship and postdoctoral programs, we have reproduced this ethics clause and discuss how we approach this issue in our training program:

7.04 Psychologists do not require students or supervisees to disclose personal information in course- or program-related activities, either orally or in writing, regarding sexual history, history of abuse and neglect, psychological treatment, and relationships with parents, peers, and spouses or significant others except if

(1) the program or training facility has clearly identified this requirement in its admissions and program materials or (2) the information is necessary to evaluate or obtain assistance for students whose personal problems could reasonably be judged to be preventing them from performing their training- or professionally related activities in a competent manner or posing a threat to the students or others.

We fully endorse the spirit of the clause, believing that trainees should not be forced to reveal more personal information than they feel ready to process, until they feel some comfort with the supervisory situation, and feel safety regarding how shared information will be handled. At the same time, self-disclosure is an important part of the training experience and serves at least two important purposes. First, the supervisor is ultimately legally and ethically responsible for the welfare of any patient seen by the trainee; thus, any important information about the trainee's internal experience that may affect the conduct of assessment or therapy is expected to be a part of the supervision process. Second, the general competencies expected in our program, especially those described under the category of Professionalism, include some particularly relevant to this new ethics clause, e.g.:

- Shows emotional maturity in professional contexts by tolerating ambiguity and anxiety and considering the views of others, even in charged situations.
- Accurately evaluates level of competency and considers own limitations when working with patients; knows when own level of expertise is exceeded; seeks appropriate consultation when needed.
- Demonstrates knowledge of self and the impact of self on the conduct of therapy, within the theoretical perspective being utilized.

Feelings and the thoughts, beliefs, and circumstances that propel them cannot be simply expunged by a psychologist when it comes time to see a patient or to interact with colleagues. Learning to identify, utilize, and control feelings, attitudes, and actions in the consulting room and all other professional interactions is a lifelong process for all psychologists. We believe it is important that supervision be a place where the Fellow is assisted to explore and understand the qualities and experiences that he or she brings to every aspect of professional work and how these facilitate or hinder effective interactions. We intend that Fellows will recognize, improve, and employ those personal qualities that will assist in forming effective working relationships with patients, peers, MIRECC staff, staff, and trainees of other professions with whom they work in the health care system, etc. – all professional work is influenced by the personal qualities of the trainee, and these are appropriately included in the supervisory process. At the same time, we re-affirm that this needs to be done in a sensitive way, in which the Fellow is given time to develop a safe and effective working relationship with the supervisor. This work should occur such that the underlying APA philosophy is respected. Fellows should not be required or forced to divulge information that is not relevant to the work they are doing or in a way that is not designed to promote and enhance professional development.

Evaluation Process

Supervisors, Mentors, and Fellows are expected to exchange feedback routinely as a part of the supervisory process; other evaluation procedures are meant to formalize this continuous information flow. It is the responsibility of the Fellowship leadership, Research Mentor, and Supervisors to ensure that formal evaluation occurs in a timely and constructive fashion, but Fellows are encouraged and expected to take an active role. Evaluation is a mutual process between Fellows, Supervisors, Mentors, and the training program. Fellows are encouraged to delineate their learning goals, to evaluate their progress at mid-rotation in terms of those original goals, to modify their goals as appropriate, and to plan for attaining these goals during the remainder of the rotation.

We have developed well-specified, measurable exit competencies for our two overarching training goals (i.e., general advanced practice competencies, emphasis area specific competencies). Twice yearly, the Research Mentor evaluates Fellow's overall progress toward reaching the general advanced practice competencies and the emphasis area specific competencies, based on feedback from supervisors and on their own experience working with the Fellow. If any supervisor notes a problem that could affect successful completion of the Fellowship, Due Process procedures are in place to work towards resolution of the problem if possible. The Due Process procedure is reviewed in detail with Fellows during orientation at the start of the year.

Application and Selection Process

Selection of Fellows is done by the Postdoctoral Selection Committee, with input from the staff in each emphasis area, using the following criteria (not in priority order):

- Breadth and quality of previous training experience
- Breadth, depth, and quality of training experience areas relevant to the Sierra Pacific MIRECC mission

- Quality and scope of scholarship, as indicated partially by research, convention papers, and publications
- Relationship between healthcare service delivery and research interests/experience of the applicant
- Evidence of personal maturity and accomplishments
- Thoughtfulness of answers to the application questions
- Goodness of fit between the applicant's stated objectives and the training program and medical center's resources
- Strength of letters of recommendation from professionals who know the applicant well

The Fellowship program follows a policy of selecting the most qualified candidates and is an Equal Opportunity Employer. Our commitment to diversity includes attempting to ensure an appropriate representation of individuals along many dimensions, including (but not limited to) gender, sexual orientation, age, ethnic/racial minorities, and persons with disabilities.

To apply to our fellowship program, you must submit **via email** the required application elements listed below. The fellowship brochure is updated in the fall of each year and may be obtained on the MIRECC's website (www.mirecc.va.gov/visn21) or by emailing the Fellowship Director, Kaci Fairchild, PhD, ABPP, at JenniferKaci.Fairchild@va.gov. This year the due date will be **December 12, 2025**. **All application materials must be received by us on or before this date.**

Incomplete applications will not be read by the Postdoctoral Selection Committee.

All application elements from you (#1-3) should be sent electronically to JenniferKaci.Fairchild@va.gov in one email. A separate electronic cover letter is not expected (note that any text in your transmittal email will not be saved as part of your application). Letters from your recommendation letter writers (# 4) should be emailed to JenniferKaci.Fairchild@va.gov from their institutional (e.g., university or agency) email address with your name indicated in the subject line. We encourage all files to be sent as one Adobe Acrobat file saved in the following format: [lastname_2026applicationcycle.pdf] (e.g., Fairchild_2026applicationcycle.pdf). This does not apply to letters of recommendation. Please do not mail any materials in hard copy form.

Application Requirements List:

1. A signed letter of interest that strictly follows the instructions. Please review the Sierra Pacific MIRECC Fellowship Training Brochure, which describes our programs training goals and opportunities with Training Faculty. In your letter please described,
 - Your previous educational and research experiences
 - Your areas of research interest and its alignment with the MIRECC emphasis area(s) and mission
 - Specific training goals and objectives for your Fellowship year
 - You career "next steps"
2. Current Curriculum Vitae
3. Work Sample, such as a published manuscript on which you are first author or other written product that highlights your work relevant to your identified emphasis area
4. Three letters of recommendation from faculty members or supervisors who know your research work well. One of these letters must be from your primary research mentor. Letter writers should email an electronic copy from his/her university or agency email address, and this will be considered an official "signed" copy. We encourage letter writers to send documents as Microsoft Word or Adobe Acrobat files.

Following receipt of these materials, a select number of applicants will be invited to an interview. The VISN 21 MIRECC will only hold virtual interviews. Interviews will be held in early January 2026. Interviews are scheduled for a full day and will include meetings with the Director and Co-Director of Training, Selection Committee members, research mentors, and current fellows. We will try to accommodate requests for

meetings with specific staff, and interviewees are encouraged to contact faculty or current residents whom they were not able to meet.

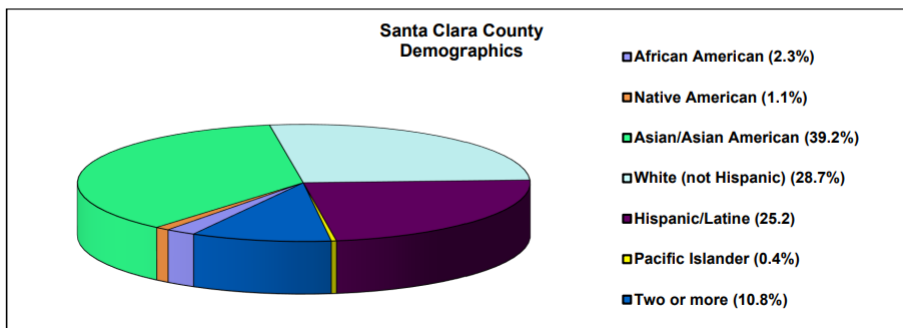
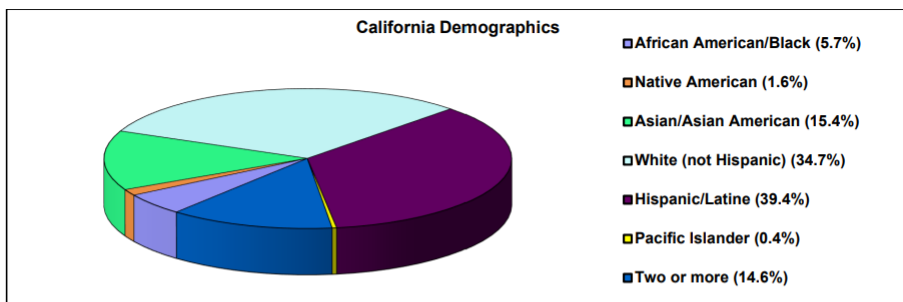
Initial fellowship offers will be made by email on or before January 16th. We look forward to hearing from you. Further information can be obtained by contacting the Fellowship Director preferably by email at JenniferKaci.Fairchild@va.gov or at (650) 493- 5000 X 63432.

Living in the San Francisco Bay Area

The San Francisco Bay Area is a geographically and ethnically diverse area surrounding the San Francisco Bay in Northern California. Home to world-class universities such as Stanford University, UC San Francisco and UC Berkeley as well as the headquarters of leading Silicon Valley high-tech companies such as Google, Yahoo!, Facebook, Apple, Houzz, Intel, Twitter, Netflix, Uber, YouTube and eBay, the Bay Area is one of the most culturally, intellectually, and economically dynamic areas of the country. Palo Alto is located on the San Francisco Peninsula about 35 miles south of San Francisco, which is referred to as “The City” and the cultural center of the Bay Area.

The Bay Area has three major airports (San Francisco International, San Jose Mineta International, and Oakland), as well as an extensive freeway system. Public transportation on BART (Bay Area Rapid Transit) and local bus systems connects the cities and suburbs of the Bay Area, though most residents drive themselves. Housing for renters and homebuyers is one of the most expensive in the country.

The Bay Area is the fifth most populous metropolitan area in the United States, with high levels of international immigration. Palo Alto is part of Santa Clara County, which has slightly different demographics than the Bay Area and the state overall, with greater numbers of Asians and Asian Americans and fewer numbers of African Americans. Also, more than 2 out of 5 persons (roughly 42%) living in Santa Clara County were born outside the U.S. There are 46,470 Veterans living in Santa Clara County. See pie charts below for specifics on state and county demographics from U.S. Census data (retrieved September 30, 2025), from https://data.census.gov/profile/Santa_Clara_County,_California?q=050XX00US06085#populations-and-people



The region has a lot to offer, making the Bay Area one of the most desirable places to live in the country – mild weather, beaches, mountains, and open space perfect for outdoors enthusiasts, a thriving business and technology sector, and excellent universities and academically-affiliated medical centers providing resources for intellectual and scholarly activities. Visitors and residents alike can enjoy the diversity of social and cultural attractions, such as museums, cultural events, top-rated restaurants, and wineries in the Napa and Sonoma Valleys. In addition to easily accessible outdoor recreation areas for skiing, surfing, hiking, and biking, sports fans can follow the many Bay Area sports teams (Oakland Ballers, SF Giants,

SF 49ers, Bay Area Panthers, San Jose Sharks, Bay FC, San Jose Earthquakes, Golden State Warriors, Golden State Valkyries).

The Sierra Pacific MIRECC Fellowship values practicing balance in one’s professional and personal life, which our Mentors strive for and hope to be good models for our Fellows. If you come to Sierra Pacific MIRECC for fellowship, we hope you will have many opportunities to explore and enjoy living in this great area.

Contacting MIRECC

The Sierra Pacific MIRECC is open for business Monday through Friday, 8AM - 4:30PM Pacific Time, except on Federal holidays. The Fellowship administration can be reached at the following address and contact information:

Kaci Fairchild, PhD, ABPP
Director, Advanced Fellowship in MIRT, Psychology
Sierra Pacific MIRECC (151Y)
VAPAHCS
3801 Miranda Avenue
Palo Alto, CA 94304
Telephone: (650) 493-5000 x 63432
Email: Jenniferkaci.Fairchild@va.gov

Michelle Madore, PhD
Co-Director, Advanced Fellowship in MIRT, Psychology
Sierra Pacific MIRECC (151Y)
VAPAHCS
3801 Miranda Avenue
Palo Alto, CA 94304
Telephone: (650) 493-5000 x 64221
Email: Michelle.Madore@va.gov

An electronic copy of this brochure may be obtained by accessing the Sierra Pacific MIRECC's website at <http://www.mirecc.va.gov/vjsn21> or by emailing the Director at JenniferKaci.Fairchild@va.gov. Thanks for your interest in our program. Feel free to be in touch Dr. Fairchild if you have additional questions.

The VA Palo Alto Health Care System MIRECC Psychology Fellowship is an APA-accredited program. The [APA Office of Program Consultation and Accreditation](#) can be reached at the American Psychological Association, 750 First St. NE, Washington DC 20002-4242; phone number 202 336-5979.

Appendix A MIRECC Fellowship Research Mentors

Sherry A. Beaudreau, PhD, ABPP

Dr. Beaudreau is a licensed clinical psychologist with board certification in geropsychology. Her research focuses on the reciprocal relationship between late life mental health symptoms and cognitive functioning and their implications for mental health treatment. She obtained her B.A. in Psychology at Smith College in Northampton, M.A. and her Ph.D. in Psychology with an aging and neuropsychology emphasis at Washington University in St. Louis, MO. She completed her clinical internship at VA Palo Alto in 2005 and VA Advanced Fellowship in Mental Illness Research and Treatment (MIRT) at the Sierra Pacific MIRECC in 2008. She is currently an investigator in the Sierra Pacific MIRECC and national Director of the 28-site MIRT fellowship program. She is also a Clinical Professor (Affiliated) at Stanford University School of Medicine in the Department of Psychiatry and Behavioral Sciences and an Honorary Associate Professor at the University of Queensland in Brisbane, Australia.

Dr. Beaudreau's research examines association of cognitive functioning on the development of psychiatric symptoms, suicidal thinking, and suicidal behaviors. She leverages this work to develop behavioral interventions for mental health disorders and suicide prevention in older Veteran and has a particular interest in problem-solving therapy. She is available to work with Fellows as a primary or secondary mentor in the areas of interventions for late life mental health disorders, including cognitive and other baseline predictors of treatment response. Fellows have opportunities to conduct problem-solving therapy with older Veterans or caregivers at risk for suicide. Fellows may also work with her existing data to conduct studies on mental health symptoms and genetic moderators in relation to neurocognitive performance in older adults, or they may collaborate on national VA projects on problem solving therapy training programs or health disparities for late life LBGT+ Veterans using electronic medical record data. Opportunities to work with large secondary datasets such as the Aging Demographics and Memory Study (ADAMS), Health and Retirement Study (HRS), and Wisconsin Longitudinal Study (WLS) are also available to trainees. Dr. Beaudreau serves on three journal editorial board is currently funded by a VA multi-site clinical trial on late life suicide prevention. As a research mentor, she encourages professional development for academic readiness through attendance at NIH research institutes, first authorship and co-authorship on several peer-reviewed publications during fellowship, and actively applying for pilot funding, career development grants, or both. Past and current fellows with an aging or lifespan focus have attended NIH research institutes as funded participants through NIA, NIMH, and OBSSR, and have received funding from the Brain and Behavior Research Institute (NARSAD), Stanford Innovator Training grant program, GRECC clinical innovations, and VA Career Development Award program.

Timothy C. Durazzo, PhD

Dr. Durazzo is a Professor of Psychiatry and Behavioral Sciences at Stanford University, and an Investigator and Clinician in the VA Sierra-Pacific Mental Illness Research Education and Clinical Center (MIRECC) at the Palo Alto VA. He is a licensed clinical psychologist with postdoctoral training and extensive experience in clinical neuropsychology and neuroscience. Dr. Durazzo joined the Stanford School of Medicine and Palo Alto VA in 2015 following 15 years at the University of California, San Francisco, and San Francisco VA Medical Center. He also serves as a Commissioned Officer in the California Army National Guard and is the current Commanding Officer of the 297th Medical Company Area Support in San Mateo CA.

Dr. Durazzo's BRASS lab serves both Veterans and non-Veterans and his current research program is focuses on 1) Evaluation of repetitive transcranial magnet stimulation (rTMS) for treatment for alcohol use disorders: At least 60% of individuals with an alcohol use disorder (AUD) relapse within 6 months after inpatient and/or outpatient treatment. More efficacious treatments are needed to decrease the high rate of relapse in those with AUD. Dr. Durazzo is PI on VA and Stanford funded clinical trials to evaluate the efficacy of intermittent theta burst rTMS to target neural circuits known to show significant neurobiological abnormalities in AUD and treat common comorbidities (e.g., depressive disorders, cigarette smoking) that are associated with relapse in AUD; 2) Neurobiological and neurocognitive predictors of relapse in alcohol/substance use disorders: while multiple psychosocial correlates of relapse after treatment have been identified, the neurobiological and neurocognitive risk factors for relapse are largely unspecified. Our methods involve multimodality MR neuroimaging and neurocognitive assessments to identify the neurobiological and neurocognitive factors that predict relapse in alcohol/substance use disorders. This research will inform the development of more efficacious treatments for alcohol/substance use disorders to prevent the high rate of relapse seen in these conditions. This research is conducted in

conjunction with BRASS lab rTMS studies; 3) Neurobiological and neurocognitive consequences of cigarette smoking: The vast majority of research on the adverse health effects of cigarette smoking has focused on cardiac and pulmonary functions, vascular systems, and risk for cancer. It is clear that smoking involves adverse effects on the human brain. Dr. Durazzo is Co-PI on a dual site NIH/NIAAA funded project to employ the advanced multimodality MR neuroimaging and neurocognitive assessments to delineate the under-appreciated neurobiological and neurocognitive consequences of smoking in those with alcohol use disorders, traumatic brain injury and “healthy” individuals. Understanding the neurobiological and neurocognitive consequences of smoking, and the mechanisms by which smoking injures the brain, is necessary to promote development of more efficacious smoking cessation interventions; 4) Relationship of military leadership styles and quality, during service, on psychiatric symptomatology, suicide risk and resilience in Veterans seeking treatment for alcohol/substance use disorder: There is considerable research on the associations of leadership styles on post-deployment PTSD frequency and severity and resilience; however, little is known about the long-term associations with military leadership styles and psychiatric symptomatology, alcohol/substance use severity and resilience in Veterans seeking treatment for alcohol/substance use disorders. This research will provide novel information that can be used to inform and modify leadership styles in Active Duty and Reserve Component commissioned and non-commissioned officers for the benefit of their followers.

J. Kaci Fairchild, PhD, ABPP

Dr. Fairchild is a board-certified Geropsychologist who serves as the Deputy Director of the VISN 21 MIRECC and Director of the Advanced Fellowship in MIRT at VISN 21 MIRECC at VAPAHCS as well as a Clinical Professor (Affiliated) of Psychiatry and Behavioral Sciences at Stanford University School of Medicine. Dr. Fairchild is also the Co-Leader of the Research Education Component (REC Fellowship) at the Stanford Alzheimer’s Disease Research Center. Her research seeks to understand the relationship between physical activity and brain health, and then apply that knowledge towards the design of effective interventions for late life cognitive impairment. She obtained her PhD in Clinical Psychology with a geropsychology emphasis at the University of Alabama, completed her internship at the Palo Alto VA followed by a postdoctoral fellowship with a dementia emphasis at the MIRECC/Stanford University School of Medicine, before joining the faculty in 2009.

The primary focus of Dr. Fairchild’s lab is to reduce the negative effect of late life cognitive impairment and neuropsychiatric disorders in those affected by late life cognitive impairment. This work is accomplished through a three-tiered approach that includes the development and evaluation of interventions that promote healthy function and prevention of future impairment through: 1) the identification of risk and protective factors for late life cognitive impairment, 2) development of non-pharmacological treatments for cognitive impairment and neuropsychiatric disorders; and 3) identification of demographic, cognitive and biological mechanisms of treatment response. Ongoing work addresses these questions through investigation of the role of physical activity and cognitive training in older adults with amnesic MCI as well as the role of physical activity and psychosocial interventions in caregivers of veterans with dementia and/or Traumatic Brain Injury. Fellows have the opportunity to contribute to ongoing investigations of the effects of physical activity on brain health. Current funded projects in Dr. Fairchild’s lab include: a VA RRD funded RCT of water-based exercise + cognitive training in Veterans with MCI, a VA RRD funded pilot of a multicomponent intervention for Veterans suffering from neurological sequelae of Long COVID, the VA ORD funded mental health precision medicine initiative, Department of Defense funded trial of multicomponent intervention for older Veterans with Traumatic Brain Injury, and a VA OMH funded lethal means safety for Veterans clinical demonstration project. Fellows also have the opportunity to work with Dr. Fairchild’s extensive databases from recently completed Department of Defense and VA ORD funded trials of exercise for cognitive function in older adults with MCI. These databases include full cognitive, psychological, physiological, biological (e.g., neurotrophic factors, myokines, etc.) and genome sequencing of participants thus hold great potential as a secondary data source. Furthermore, Dr. Fairchild encourages fellow involvement in manuscript writing, grant preparation, and collaboration with colleagues in Psychology, Psychiatry, Cardiology, and Neurology. Accordingly, much of Dr. Fairchild’s mentorship focuses on manuscript writing, grantsmanship, and professional development and networking.

Andrea Goldstein-Piekarski, PhD

Dr. Goldstein-Piekarski is an Assistant Professor in the Psychiatry and Behavioral Sciences Department at Stanford University and an Investigator in the MIRECC at the Palo Alto VA. She is also the director of the Computational Psychiatry, Neuroimaging, and Sleep Laboratory (CoPsyN Sleep Lab). Dr. Goldstein-Piekarski received her bachelor’s degree in Cognitive Science and Psychology at the University of California, San Diego and a doctorate in Neuroscience/Psychology at

the University of California, Berkeley. Following obtaining her PhD, she completed a postdoctoral fellowship at Stanford.

Dr. Goldstein-Piekarski's translational research program utilizes human neuroimaging and high-density EEG, to understand how sleep disruption and individual differences in sleep physiology affect psychiatric disorder symptomology and treatment response across the lifespan. Specifically, her research aims to: (1) identify the neural mechanisms that underlie the relationship between sleep and mood, (2) identify biomarkers of vulnerability to the affective consequences of disrupted sleep, and (3) identify sleep and brain related biomarkers that can identify who is likely to benefit from psychosocial and pharmacological interventions.

Fellows in the lab would work closely with Dr. Goldstein-Piekarski to gain in-depth experience in translational sleep and neuroscience research by contributing to several ongoing VA and NIMH funded clinical trials. Examples of ongoing projects include a NIMH funded clinical trial examining the impact of a sleep intervention on emotion regulation brain function in individuals with depression, a separate NIMH funded clinical trial studying sleep disturbance and emotion regulation in individuals with Mild Cognitive Impairment (MCI) and mild Alzheimer's Dementia, and a NIDA funded study examining sleep changes early in cannabis and alcohol abstinence in a collaboration with MIRECC PI Dr. Claudia Padula. Fellows will also have the opportunity to analyze already collected high-density EEG, fMRI, and behavioral data.

Dr. Goldstein-Piekarski will provide mentorship on neuroimaging and EEG data analysis as well as career development topics such as networking, grantsmanship, and publishing. Dr. Goldstein-Piekarski is excited to integrate her expertise in sleep and neuroimaging research with clinical research interests of her fellows to support their own independent projects for career development awards.

Corey Keller, MD, PhD

Dr. Corey Keller is an Assistant Professor in Psychiatry and Behavioral Sciences at Stanford University and an Investigator and Psychiatrist at the VA Palo Alto. Dr. Keller received his MD and PhD in neuroscience from the Medical Scientist Training Program at Albert Einstein College of Medicine. Dr. Keller completed his residency in psychiatry at Stanford University Medical Center. During his training, he has received a pre-doctoral NINDS F31 award, a mentored NIMH K23 award, and the NIH DP5 Early Independence Award.

Using neuroimaging and electrophysiological techniques, the goal of [Dr. Keller's Laboratory \(kellerlab.stanford.edu\)](http://kellerlab.stanford.edu) is to improve Transcranial Magnetic Stimulation (TMS) by better understanding the fundamental principles of human brain plasticity and building trans-diagnostic real-time monitoring platforms for personalized brain stimulation. TMS is a non-invasive brain stimulation technique that is FDA-approved for depression, OCD, migraines, and smoking cessation, with clinical trials underway for PTSD, addiction, and Alzheimer's. Unfortunately, TMS is typically applied in a one-size-fits-all manner without reference to one's biology. TMS has the potential to treat many of the disorders that affect veterans, and as such we are in critical need for a personalized and more effective approach. Dr. Keller emphasizes an environment conducive to team-based learning in order to train the next generation of clinically informed circuit neuroscientists, question the status quo with rigorous scientific experiments, and make important contributions in understanding how brain stimulation alters neural circuits and behavior and translate these findings to develop targeted, personalized, and more effective treatments.

Fellows in Dr Keller's lab will have the opportunity to contribute to ongoing investigations from funded research and work at the intersection of psychiatry, neuroscience, electrophysiology, brain stimulation, engineering, clinical trials, and precision neurotherapeutics. They will analyze already collected human multi-layered electrophysiological signals (high density scalp and intracranial EEG) paired with brain stimulation to better understand the relationship between 1) how brain circuits interact; 2) how treatments change these brain circuits; 3) how these changes map onto clinical symptoms. In addition, fellows will have the opportunity to contribute to our randomized clinical trial on personalized EEG-based closed-loop TMS treatment for depression. Dr. Keller will provide mentorship around analyzing brain signals, networking, grantsmanship, and manuscript writing.

Michelle R. Madore, PhD

Dr. Madore is a licensed clinical psychologist and neuropsychologist. She is currently the Fellowship Co-Director at the Sierra Pacific MIRECC, Director of the VA National Clinical TMS Program, and Clinical Assistant Professor at Stanford University School of Medicine. Her research, broadly speaking, focuses on environmental and biological influences on brain

function, mood regulation, and cognition. More specifically, Dr. Madore's research seeks to explore the predictive value of biological markers in mood dysregulation and cognitive impairment with the goal of investigate mechanisms, such as transcranial magnetic stimulation (TMS), which may influence these markers. She earned her B.A. in cognitive science at the University of California, Irvine; her M.A. in clinical psychology at California State University, Northridge; and her doctorate in Psychology, with a specialization in Clinical Neuropsychology, at the University of Cincinnati. She completed her pre-doctoral internship in neuropsychology at VA Palo Alto Health Care System. She went on to receive post-doctoral training at VA Northern California Health Care System – Martinez, San Francisco VA Medical Center, and VA Palo Alto Health Care System/Stanford University School of Medicine. In her post-doctoral education, she received specialized training in clinical neuropsychology, cognitive rehabilitation, and polytrauma. She is a member of the American Psychological Association – Society for Clinical Neuropsychology (APA-SCN), Asian Neuropsychological Association (ANA), the International Neuropsychological Association (INS), and the Asian American Psychological Association – Division on Filipino Americans (AAPA-DoFA). She has been involved in several leadership positions, including recently serving as a Delegate from the ANA in the Minnesota Update Conference. Currently, she serves as the Secretary for APA-SCN, Treasurer for the Digital Technologies and Teleneuropsychology Special Interest Group for INS, Working Group lead for the Glossary of Terms working group of the Cultural Neuropsychology SIG of INS, and Delegate from ANA to the Cultural Neuropsychology Council. In addition to serving as a research mentor, she is available to mentor fellows in a variety of other areas, such as clinical neuropsychology training and professional development, such as gaining involvement in national organizations. Research fellows in her lab would have the opportunity to work on her current projects looking at biomarkers, such as fMRI, EEG, or blood-based markers, of treatment response to neuromodulation treatments (e.g., TMS), and analyzing public available data focus on national and cultural differences in cognitive functioning as a few examples.

Claudia Padula, PhD

Dr. Padula is a Research Health Science Specialist at the Palo Alto VA and an Instructor (Affiliate) of Psychiatry and Behavioral Sciences at Stanford University. She directs the Padula BRAVE Lab, which focuses on Brain Research on Addiction and Veterans' Emotions. Her research program is aimed at providing novel, innovative, and exciting science to improve treatment outcomes for Veterans with addiction. She uses a combination of multimodal brain imaging techniques, cognitive and neuropsychological measures, socio-demographic and clinical information to understand each individual person in the context of their life experiences. Her vision is for Veterans with addiction to eventually receive precision care based on their individual brain and symptom profiles, instead of a one-size-fits-all approach to treatment. In addition, the BRAVE Lab is committed to fostering a diverse and representative lab. To this end the BRAVE Lab aims to 1) provide safe, equitable, and inclusive environment through deliberate actions, 2) value differences and use them to better our science, 3) respect individual needs, styles, and career goals and mentor accordingly, and 4) find areas to change the status quo in order to broaden representation in STEM, in an attempt to correct historical opportunity imbalances.

Dr. Padula lab focuses are on using multi-modal brain imaging methods together with clinical evaluation and outcome measurement to define the underlying neural circuits underlying addiction in Veteran men and women. The long-term goal of this line of research is to personalize interventions can ultimately be employed with the goal of improving treatment outcomes and reducing risk of relapse. The current studies focus on alcohol use disorder, and affiliate studies are examining stimulant use disorders. To define brain circuits within these populations, she uses multiple sources of information from brain imaging, including resting and task-based functional MRI, spectroscopy, diffusion tensor imaging, and T1 weighted structural imaging techniques. These sources of information are then integrated with assessments of general and emotional cognition, psychological symptomatology, and life history. Additional studies in the lab are testing the efficacy of an interventional component to try and augment current treatment. Specifically, she uses repetitive transcranial magnetic stimulation (rTMS) to increase neural plasticity and promote neural recovery during the early stages of addiction recovery. Future studies will aim to integrate rTMS with psychotherapy to understand additive or synergistic effects. Because the BRAVE Lab takes a translational and transdiagnostic approach to research, she includes Veterans with co-occurring depression, anxiety, and PTSD, as these conditions are highly co-morbid in Veterans with addiction.

Julie Weitlauf, PhD

Dr. Weitlauf is Director of the Women's Mental Health and Aging Core at the MIRECC and a Clinical Professor of Psychiatry and Behavioral Sciences at Stanford School of Medicine where she directs the Women's Sexual Functioning Center within Adult Psychiatry/Women's Wellness. Her clinical research interests relate to the intersection of women Veterans' physical and mental health, with particular emphasis on the impact of interpersonal violence and posttraumatic stress disorder on: a)

psychosocial functioning, i.e., personal safety related behaviors, family and relationship conflict, sexual functioning; b) preferences and patterns of utilization for preventive women's health care; and c) salient co-factors (e.g., sleep, vasomotor symptoms, mood disturbance) associated with peri-and post-menopausal health and mortality risks, and d) sexual dysfunction in women, with emphasis on the intersection of genital pain disorders in women with prior trauma or abuse exposure. In addition, Dr. Weitlauf is a lead investigator on the National Vietnam Veterans' Mortality Study, leading the study arm on women Vietnam war era veterans. She has long investigated mortality risks and trends in veteran women, with particular interest in how military occupational risk factors may intersect with interpersonal violence exposure to influence post-menopausal mortality risk. Finally, Dr. Weitlauf has an active program of research on elder abuse detection, including detection amongst aging populations of women Veterans within and beyond VHA. Dr. Weitlauf is interested in the intersection of caregiving, elder abuse risk and mortality. Dr. Weitlauf currently works clinically in a variety of settings (VA and Stanford) where she helps to address these issues in women Veterans (VA) and civilian women (Stanford). Specifically, Dr. Weitlauf facilitates DBT skills groups, cognitive therapy for vasomotor symptoms treatment protocols, and cognitive behavioral and exposure based therapeutic protocols to address women's sexual pain disorders. She collaborates with Well-Connect at Stanford, is also actively involved in program evaluation efforts related to the effectiveness of the national career development award programs (NIH K awards, VA and AHRQ CDA awards), improvement of post-doctoral and early career mentoring relationships, and efforts to enhance career development of women in the medical sciences.

For Post-doctoral Fellows within the MIRECC program, Dr. Weitlauf views her primary role to be one of fostering independence and facilitating Fellows' progress towards securing competitive research funding and initiating their own laboratories. All of her prior fellows have gone on to secure tenure track positions in competitive departments around the country. As such, she encourages early engagement in grant writing, and welcome trainees who want to "initiate" their own projects related to health/mental health functioning in women Veterans--particularly those Veterans with prior exposure to interpersonal violence. That said, she deeply understands each Fellow's need for research related products during their time on Fellowship. To that end, her lab offers ample opportunities for Fellows to mine large, archival databases replete with information on women Veterans physical and mental health, psychosocial functioning, health risk behaviors, and patterns of health care utilization--and to take a lead role in developing a series of meaningful manuscripts that can serve as the foundation of their future grants. There are opportunities for clinical and/or research related roles within her currently funded research portfolio which includes research on elder abuse detection in women, treatment of sexual pain disorders in women with trauma, and assessment and treatment of sleep disturbances in peri and post-menopausal women with hot flashes. Further there will be both clinical, health policy, and research related roles for trainees on projects associated with the study of women veterans' sexual health and functioning, with particular emphasis assessment and treatment of sexual dysfunction among women with prior exposure to interpersonal violence, throughout the 2023-2024 academic year. Dr. Weitlauf co-led a national needs assessment on the mental health (burnout prevention) needs of early career clinical scientists serving on the front lines of the COVID 19 pandemic. There are additional opportunities for collaboration within this arena.

Lea Williams, PhD

Dr. Williams is the inaugural Vincent V.C. Woo Professor of Psychiatry and Behavioral Sciences at Stanford University and at the Palo Alto VA. She directs the Personalized and Translational Neuroscience lab (PanLab) and Center for Precision Mental Health and Wellness which have twin sites at Stanford and at the Palo Alto MIRECC. She is Director of Precision Medicine Core at the MIRECC. The PanLab and Center function around a collaborative ethos.

Her research programs are aimed at developing and testing a precision approach to mental health. Insights from human neuroscience are used to characterize forms of trauma, mood, and anxiety disorders and to personalize clinical care in order to improve outcomes. The research integrates across five related themes: advanced imaging and 'biotyping', mechanistic trials, biotype-guided trials, computational approaches, and clinical and field translation. Fellows, postdocs, research coordinators, and grad students within the PanLab and Center have complementary backgrounds and expertise that make possible both the research outcomes and thriving collaborations.

Outcomes from her research contributed to over 375 publications to the field and attracted awards that include the \$1M Pfizer Foundation Research award and the American Psychosomatic Society Presidential award. Prior

to joining the Stanford faculty in 2013, Dr. Williams was the founding chair and professor of Cognitive Neuropsychiatry at the Sydney Medical School and Director of the Sydney Brain Dynamics Center. Her PhD in clinical affective and cognitive neuroscience was awarded in 1996; it was completed with a British Council scholarship for study at Oxford University, in the Experimental Psychology department. Her undergraduate training was in clinical and cognitive psychology.

In Dr. Williams' PanLab and Center, imaging, biotyping and biotype-guided trial research focuses on large-scale neural circuits that have been implicated in core human functions that are disrupted in trauma and mood disorders, including emotional reactivity, emotion regulation, cognitive control, and self-reflection. To delineate these circuits, research studies use multiple sources of information acquired from functional Magnetic Resonance Imaging (fMRI) and EEG. These sources of information are then integrated with assessments of general and emotional cognition, symptom profiles and life history, in order to relate circuit information to a deep understanding of phenotypes. In some studies, additional genetic or other biomarkers are also investigated as moderators. Modern computational and machine learning techniques are used to identify new ways to develop and test a taxonomy of mental illness based on these data. To ensure the insights have clinical and real-world relevance, these multiple sources of data and computational approaches are deployed in both mechanistic and biotype-guided interventional studies. One set of current projects focuses on the use of human connectome imaging to characterize subtypes of mood and anxiety disorders. A second set focuses on imaging of cognitive control circuits and executive function as biomarkers for response to repetitive transcranial magnetic stimulation (rTMS). The rTMS studies are precision medicine mechanistic trials of Veterans undertaken in partnership with the National Clinical TMS Program coordinated from the Palo Alto VA. Because Dr. Williams' research takes a cross-disorder point of view, the research embraces the heterogeneity of trauma, mood and anxiety disorders and their comorbidity with other disorders.

Jamie Zeitzer, PhD

Dr. Zeitzer is a health science specialist at the VA Palo Alto Health Care System and a Professor in Psychiatry and Behavioral Sciences at Stanford University where he co-directs the Center for Sleep and Circadian Sciences. He is a member of a variety of programs at Stanford, including the Wearable Electronics Initiative, Precision Health and Integrated Diagnostics Center, Program in Neuroscience, Center on Longevity, Program in Human Biology, Neurosciences Institute, and the Child Health Research Institute. He has degrees from Vassar College (AB, biology) and Harvard University (PhD, neurobiology) and completed post-doctoral training in neurology (UCLA) and psychiatry (Stanford).

Dr. Zeitzer specializes in sleep and circadian biology and has more than 150 peer-reviewed publications in these fields. His current work is a combination of laboratory, field, and in silico studies examining the impact of light on brain function, the reciprocal role of sleep in a variety of medical and psychiatric disorders (TBI, breast cancer, spinal cord injury, AD, pain), and the use of wearable tech to discover novel ways in which sleep, and its associated physiology can be measured. His lab uses a variety of data collection techniques (blood and salivary hormones, EEG, balance, vision, actigraphy, cognitive testing) with advanced statistical techniques (machine learning, functional data analysis) to accomplish their goals.