



## YALE SCHOOL OF MEDICINE SPECIALIZED CENTER OF RESEARCH EXCELLENCE (SCORE) ON SEX DIFFERENCES IN ALCOHOL USE DISORDER: EARLY INVESTIGATOR CAREER ENHANCEMENT PROGRAM

Principal Investigator: Sherry McKee PhD  
Career Enhancement Core Lead: Ismene Petrakis MD  
Program Manager: Meaghan Lavery

### KEY DATES

Call for Applications: May 1, 2021  
Applications Due: August 1, 2021  
Notification of Awards: August 31, 2021  
Appointment Start: September to Dec 2021

### KEY INFORMATION

Number of Openings: 2-3  
Term: 1-2 years  
Effort Requirement: 50% maximum  
Salary Support: Up to 50% supported  
Type of Research Supported: Basic or Clinical (spanning T1 to T4 translation)  
Pilot Funding Available: \$15,000/year

### OVERVIEW

In March 2020, the National Institute on Alcohol Use and Alcoholism and the Office of Research on Women's Health funded a 5-year U54 Specialized Center of Research Excellence (SCORE) focused on sex and gender-based multidisciplinary research at Yale. One of the primary aims of the Yale-SCORE is to mentor the next generation of biomedical and behavioral researchers focused on alcohol and women's health spanning the T1 to T4 translational spectrum.

The purpose of the Career Enhancement Core (CEC) is to provide qualified PhD and MD junior faculty with salary support and translational team mentorship to enhance their research career development focused on women's health and alcohol use. Each year we will support 1 to 2 new SCORE-Early Investigators (meeting the definition of NIH Early Stage Investigator) for 1-2 years, with 50% of their time protected to engage in career enhancement activities.

Career enhancement activities include: 1) mentored research, leading to K or R award submissions, 2) access to pilot funds supporting research focused on sex/gender and alcohol, 3) a curriculum dedicated to education regarding sex/gender and alcohol, and 4) professional development and leadership skills necessary for an academic career.

Mentored research projects must focus on sex and gender differences as they uniquely relate to alcohol use. Research projects can span the T1 to T4 translational spectrum.

Early Investigators will be selected for a career development award to begin as early as September 2020. Applicants must be on faculty or eligible to join the Yale faculty by this date. Early Investigators will receive 1-2 years of salary support commensurate with 50% effort per year to pursue basic/clinical research.

The program includes a supportive environment, team mentorship with access to core faculty who provide expertise, and guidance in research design, measurement techniques, study coordination, data management, biostatistical analysis, research dissemination, and grant writing. After acceptance, applicants will develop a training and research plan in consultation with a team of mentors.

## ELIGIBILITY

Who. Junior faculty and senior fellows/post-doctoral trainees pending faculty appointment and who must meet criteria for an NIH Early Stage Investigator <https://grants.nih.gov/policy/early-investigators/index.htm>

Early Investigators are scientists with doctoral-level professional degrees who represent a broad range of disciplines, professions, specialties, and sub-specialties, and who can develop into future leaders. Examples include MD, PhD, DO, DDS, DMD, and PharmD. All candidates with clinical doctorates are expected to have completed the specific requirements leading to clinical certification.

Salary & Time Commitment. A maximum of 50% of an Early Investigator's full-time professional effort must be devoted to the program for training and research activities. The remaining 50% effort can be divided among other research, clinical, and teaching activities if these activities are consistent with the proposed goals of the SCORE CEC program.

Citizenship. By the time of award, the applicant must be a citizen or a non-citizen national of the United States or have been lawfully admitted for permanent residence (i.e., possess a currently valid Permanent Resident Card USCIS Form I-551 or other legal verification of such status).

Prior Research Experience. Early Investigators may not have served as the principal investigator (PI) or equivalent on an NIH research project (R01), as PI of a subproject of a program project (P01), center grant or equivalent, or received support from a mentored career development (K-series) grant (including but not limited to K23, K12, KL2, K01, or K08 support). During the period of this award, Early Investigators are encouraged to apply for, and may accept and hold, independent research grant support.

## EARLY INVESTIGATOR SELECTION CRITERIA

The following criteria will be used by the SCORE CEC Executive Committee to evaluate applications from Early Investigator candidates.

- Candidate must show evidence of interest in and commitment to sex/gender-based research as a career objective.
- Candidate must show evidence of research interest in an area related to alcohol.
- Candidates must indicate how the SCORE support will be used to prepare for an independent program of research. The significance of the topic, likelihood of future funding, and the applicant's commitment will be part of the selection criteria. The topic must be consistent with program objectives, specifically a focus on sex and gender differences and alcohol.
- Candidates must devote a maximum of 50% of full-time professional effort (6.0 person months) to the SCORE CEC Pilot Project Program.
- Early Investigator candidates may indicate preference for mentors from the list below. Additional mentors (not on the list) may be proposed. All mentors will provide a research-supportive environment including access to critical resources such as laboratories, patients, data sets, and community settings.

## PROGRAM REQUIREMENTS

1. **Duration of the Award.** Early Investigators will receive 1-2 years of salary support at a maximum of 50% effort per year. Each year of funding is contingent on satisfactory participation in SCORE CEC activities and progress toward the Early Investigator's individual career goals, and continued support from the Early Investigator's mentor and department.
2. **Career Development Plan.** At the time of program entry, an individualized career development plan that meets the needs of each Early Investigator will be developed which satisfies the general goals and objectives of the program. While each Early Investigators will have an individually-tailored career development plan, all will participate in a unified core curriculum designed to address the following objectives: (1) Increase scientific knowledge and provide for professional development; (2) Provide fundamental research skills; (3) Enhance research presentation skills; and 4) Improve scientific writing skills. Early Investigators are required to write

and submit an extramural grant application by the end of their second year of SCORE CEC program support.

- 3. Mentor Teams.** Early Investigators will be assisted in selecting their Primary and Secondary Mentors: a) one with the research expertise in alcohol use and women's health most closely aligned with the trainee's interests and discipline; and b) one from a discipline and translational focus that is different from that of the trainee and Primary Mentor to enhance the breadth and depth of the SCORE-Early Investigators' primary interests and interdisciplinary and translational experience. Mentors (listed below) have active federally-funded clinical or basic research and a successful record of mentorship.

## **APPLICATION**

Completed applications must be submitted by email by **5:00 PM on August 1, 2021**, adhering to the instructions provided. Completed applications can be sent directly to the SCORE Program Manager ([Meaghan.lavery@yale.edu](mailto:Meaghan.lavery@yale.edu)).

Candidates are required to submit the following:

- (a) a curriculum vitae
- (b) a statement by the candidate (3 pages maximum) describing the reasons for seeking further training, general areas in which training at Yale would be sought and plans for future research. Mentors may be proposed in the statement (listed below).
- (c) two letters of recommendation.

Candidates may be contacted by program investigators for interviews (via Zoom or in person).

### **Formatting Information**

**File type:** PDF only

**Font:** Arial, 11 point

**Margins:** 0.5"

**Paper size:** 8 ½" x 11"

**Note:** Please DO NOT submit any supplementary materials (e.g. appendices) as these will not be reviewed.

## Yale SCORE Mentors

Faculty Mentors	Selected Positions	Highlighted Research Expertise
Kelly Cosgrove PhD	Associate Professor of Psychiatry, Radiology/ Biomedical Imaging & Neuroscience	PET imaging of sex differences in alcohol dependence, tobacco smoking, and other drug use disorders
Gail D'Onofrio MD MS	Professor of Emergency Medicine; Chair, Department of Emergency Medicine	Screening/treatment (SBIRT) of alcohol and other substance use in the ED; sex differences in cardiovascular disease
Deepak Cyril D'Souza MBBS MD	Professor of Psychiatry; Director Schizophrenia Neuropharmacology Research Group; Director, Neurobiological Studies Unit, VACHS	Intersection of alcohol/substance use and psychosis; Pathophysiology of cannabis use disorder and schizophrenia;
Irina Esterlis PhD	Associate Professor of Psychiatry; Director, Molecular Imaging Program; Director, Mood, Anxiety, and Cognitive Sciences Division	PET imaging in alcohol dependence, tobacco addiction and mood disorders; sex differences in neuroreceptor imaging
David Fiellin MD	Professor of Medicine & Public Health; Director, Yale Program in Addiction Medicine; Project PI, Center for Interdisciplinary Research on AIDS	Management of alcohol use disorder in patients with comorbidities (e.g., HIV); pharmacological and psychosocial interventions for unhealthy alcohol use
Lynn Fiellin MD	Associate Professor of Medicine; Director, Alcohol & Other Drugs Harm Reduction Initiative;	Alcohol and drug use treatment in primary care and in patients with HIV; development of videogame to inform teens about alcohol use
Lisa Fucito PhD	Associate Professor of Psychiatry; Director, Tobacco Treatment Service Smilow Cancer Hospital	Integration of alcohol/tobacco interventions; mobile sleep interventions to reduce heavy drinking
Joel Gelernter MD	Professor of Psychiatry, Genetics & Neuroscience; Director, Division of Human Genetics (Psychiatry)	Genetics of alcohol/drug use, & psychiatric disorders; GWAS of sex-specific alleles related to AUD and other psychiatric disorders
Ralitzha Gueorguieva PhD	Senior Research Scientist in Biostatistics; Director of Biostatistics in Psychiatry	Statistical analysis of clinical trials/longitudinal data, including collaborative work in alcohol use & women's behavioral health
Ansel Hillmer PhD	Assistant Professor of Radiology/Biomedical Imaging & Psychiatry	PET imaging of neurochemical basis of alcohol dependence, sex-differences in neurochemical basis of alcohol use
Yasuko Iwakiri PhD	Associate Professor of Medicine	Vascular biology in alcohol liver disease pathogenesis
Amy Justice MD PhD	Professor of Medicine & Public Health; Co-Director, Virus and Other Infection-associated Cancers	Assessment/ treatment of HIV symptoms within the context of alcohol and other substance use; aging/veterans' health
Trace Kershaw PhD	Department Chair and Professor of Public Health	Social/structural determinates of alcohol use & health behaviors
Brian Kiluk PhD	Associate Professor of Psychiatry; Director, Technology-Based Interventions	Clinical trials for AUD/SUD; computer-based psychotherapy development for AUD; psychotherapy process and efficacy research
Suchitra Krishnan-Sarin PhD	Professor of Psychiatry; Committee Chair, Human Research Protections Program	AUD pharmacotherapy development; progression of alcohol and drug use disorders in adolescents; tobacco use regulatory science
John Krystal MD	Professor of Translational Research, Psychiatry & Neuroscience; Director, NIAAA Center for the Translational Neuroscience of Alcoholism	Neurobiology of AUD; pharmacotherapy development for AUD
Chiang-Shan Ray Li MD PhD	Professor of Psychiatry & Neuroscience	fMRI studies of cognitive control in AUD/SUD; computational modeling of neuroimaging data
Sherry McKee PhD	Professor of Psychiatry; Director, Yale Behavioral Pharmacology Laboratory	Sex differences in AUD/SUD; medication development for alcohol and nicotine use disorders
Wajahat Mehal MD PhD	Professor of Medicine; Director of Yale Fatty Liver Disease Program	Alcohol-related liver injury and inflammation
Evan Morris PhD	Professor of Radiology/ Biomedical Imaging, Psychiatry, & Biomedical Engineering; Co-director for Imaging, Yale PET Center	PET imaging technology and methodology with alcohol and SUD; sex differences in real-time dopamine release
Stephanie O'Malley PhD	Professor of Psychiatry; Director, Division of Substance Abuse Research in Psychiatry; Deputy Chair, Clinical Research	Pharmacotherapy and behavioral treatment development for AUD; tobacco use regulatory science
Godfrey Pearlson MA MBBS	Professor of Psychiatry & Neuroscience	Translational neuroscience AUD/SUD & psychiatric disorders; fMRI/PET imaging, genetic & behavioral analysis of alcoholism endophenotypes
Ismene Petrakis MD	Professor of Psychiatry; Chief of Psychiatry, VACHS	Pharmacologic treatments for alcohol and drug dependence; treatment of AUD/SUD in patients with comorbidities (e.g., PTSD)
Marina Picciotto PhD	Professor of Psychiatry, Neuroscience, & Pharmacology; Deputy Chair for Basic Science Research (Psychiatry); Deputy Director, Kavli Institute for Neuroscience	Sex differences in susceptibility to alcohol, tobacco, and stress-related disorders; Biochemical, cellular, and anatomical underpinnings of substance use behavior;
Marc Potenza MD	Professor of Psychiatry & Neuroscience; Director, Women & Addictive Disorders, Women's Health Research	Neurobiology of alcohol use and other addictive behaviors; sex differences in addiction
Carolyn Sartor PhD	Associate Professor of Psychiatry	Developmental and genetic study of alcohol & other substance use; AUD/trauma-related psychopathology in women & racial minorities
Jody Sindelar PhD	Professor of Public Health & Economics	Economics of substance abuse, including alcoholism
Sandra Springer MD	Associate Professor of Medicine & Nursing; Director, Infectious Disease Outpatient Clinic, VACHS	Pharmacotherapy development for AUD among patients with HIV; treatment of AUD in incarcerated populations
Hugh Taylor MD	Professor/Chair of Obstetrics, Gynecology, and Reproductive Sciences & Professor of Molecular, Cellular, and Developmental Biology	Reproductive endocrinology and uterine biology; sex steroids in menopause; transgender animal models
Jacob Tebes PhD	Professor of Psychiatry & Epidemiology; Director, The Consultation Center	Prevention of alcohol and other substance use in adolescents; strategies for promoting resilience in at-risk populations; community research methodology
Jeanette Tetrault MD	Associate Professor of Medicine	Treatment of AUD/SUD & related comorbidities (e.g., HIV/Hepatitis) in primary care; SBIRT
Federico Vaca MD MPH	Professor of Emergency Medicine; Director, Developmental Neurocognitive Driving Simulation Research Center	Alcohol & drug impaired driving; adolescent development; health disparities
Vasilis Vasilou PhD	Department Chair and Professor of Epidemiology & Ophthalmology and Visual Science	Mechanisms of cellular response to alcohol toxicity; environmental stress and gene-environment interactions