

Project Summary

Career Development and Mentoring Plan: My career is dedicated to building an evidence-based body of research focusing on psychosocial interventions for hypertensive and post-ACS patients. These interventions are only useful to the extent that they are safe, efficacious, improve clinical outcomes, and can be disseminated into clinical practice. Behavioral cardiology has had a difficult time translating into practice even those patient interventions that have been shown to be effective. We have few systematic reviews of RCTs in our field, and we have no effective way of disseminating either the intervention materials or the results of systematic reviews.

Career Goal #1: Educate trainees in how to contribute to evidence-based behavioral cardiology interventions.

Career Goal #2: Recruit, train, support, and sustain the next generation of clinical investigators to succeed in interdisciplinary team environments.

Career Goal #3: Create, test, and disseminate depression interventions for high-risk or post-ACS patients.

Research Plan: Depression is known to be caused by a wide range of medical conditions, some of which are also implicated in excess morbidity and mortality following an acute coronary syndrome event (ACS). While many medical comorbidities and clinical prognostic markers have been investigated as possible confounders to the depression-CHD recurrence/mortality association, many general medical conditions that can cause depression and possible excess CHD risk have not. Testing for the presence of secondary depression causes links nicely to the overall aims of my program of research, which is to more precisely identify subtypes of depression that confer excess CHD recurrence/mortality, and to then propose and test appropriate treatments.

Research Aim #1: To determine the point prevalence of underlying medical conditions known to cause depression and excess CHD recurrence/mortality in a large cohort of post-ACS patients.

Research Aim #2: To determine the point prevalence of the detection and treatment of underlying medical conditions known to cause depression and excess CHD recurrence/mortality in a large cohort of post-ACS patients, regardless of their depressive disorder status.

Research Aim #3: To determine if any of the above medical confounds explains some of the excess risk of depression for CHD recurrence/mortality controlling for standard covariates.

If depressed ACS patients have undetected medical conditions for their depression, and one or more of these accounts for a substantial proportion of their excess CHD recurrence/mortality, my trainees and I will investigate if treatment for the medical condition is a novel therapeutic target for reducing the increased cardiovascular risk in depressed ACS patients. The potential significance and impact of this research is that we could substantially impact on current research or clinical practice paradigms, should we detect high prevalence rates of one or more of the depression medical confounds, and discover that these should be treated, rather than instead trying to treat depression through conventional means.