

Behavioral Medicine
July 1, 2006 – June 30, 2007

1. Highlights

Blind Faith: The Unholy Alliance of Religion and Medicine, Richard Sloan, St. Martin's Press, 2006

NIH Roadmap R21 "From Cell to Society: A New Method to Characterize Cardiac Autonomic Control," Richard Sloan, CoPI

2. Staff

Richard Sloan, Ph.D., Department Chief

Behavioral Medicine Psychophysiology Laboratory

Matthew Burg, Ph.D., Assistant Clinical Professor of Behavioral Medicine

Karina Davidson, Ph.D., Associate Professor of Behavioral Medicine

Lynn Evans, Ph.D., Post-Doctoral Fellow

Yixin Fang, Ph.D., Post-Doctoral Fellow

William Gerin, Ph.D., Associate Professor of Clinical Behavioral Medicine

Arlene King, Ph.D., Post-Doctoral Fellow

Paula S. McKinley, Ph.D., Research Scientist IV, Assistant Professor of Clinical Behavioral Medicine

Elizabeth S. Mezzacappa, Ph.D., Assistant Professor of Clinical Psychology

Catherine E. Monk, Ph.D., Research Scientist IV, Assistant Professor of Clinical Psychology

Cognitive Behavior Therapy Program

Ethan E. Gorenstein, Ph.D., Director

Lynn Clemow, Ph.D., Assistant Clinical Professor of Behavioral Medicine

Kenneth Gorfinkle, Ph.D., Assistant Professor of Clinical Psychology

Erin Olivo, Ph.D., Instructor in Clinical Psychology

Daniel Seidman, Ph.D., Assistant Professor of Clinical Psychology

Felice A. Tager, Ph.D., Assistant Professor of Clinical Psychology

3. Overview

The department's research focus is on the contribution of psychological and behavioral factors to the onset, progression, and management of physical and mental disease. Projects range from the purely behavioral to the cellular, with new studies extending to gene expression. Our goal is to elucidate the mechanisms by which psychological and behavioral factors confer risk of physical and mental disease.

4. Current Research

Cytokine-induced depression & the serotonin transporter (Dr. R.P. Sloan, Principal Investigator)

R21 MH067093 NIMH

This study uses the high-risk model of depression following interferon treatment for hepatitis C to study the serotonin transporter.

Mind-Body-Behavioral Medicine Clinical Trials Infrastructure Award (Dr. Thomas Pickering, Principal Investigator; Dr. R.P. Sloan, Co-Investigator)
R24 HL076857 NHLBI

This is an infrastructure development award.

Masked Hypertension: Predictors and Consequences (Dr. Thomas Pickering, Principal Investigator; Dr. R.P. Sloan, Co-Investigator)
P01 HL047540 NHLBI

This project focuses on the difference between ambulatory and clinic blood pressures and those persons who exhibit normal clinic blood pressure but hypertensive blood pressure during ambulatory monitoring in the natural environment.

Behavioral Ecology of Hostility & Cardiac ANS Control (Dr. R.P. Sloan, Principal Investigator; Dr. P. McKinley, Co-Investigator)
R01 HL072057 NHLBI

This study assesses the impact of hostility and interpersonal conflict on autonomic regulation of the heart.

Integrative Pathways to Health and Illness (Dr. C. Ryff, Principal Investigator; Drs. R.P. Sloan & P. McKinley, Co-Investigators)
P01 AG20166 NIA

This is a multicenter of midlife development in the US (MIDUS). This multi-arm, multi-site cohort follow-up study assesses autonomic control of the heart, which is a predictor of cardiac events, during a resting state and reactivity to laboratory-based stressors in a community sample of adults.

Autonomic Control & Birth Outcomes in Minority Women (Dr. R.P. Sloan, Principal Investigator; Dr. C. Monk, Co-investigator)
R21 HD048612 NICHD

This exploratory grant examines the roles of the ANS, psychosocial stress, and racial differences in preterm delivery and reduced gestational age birth weight, processing and analyzing data already collected from another study.

Flexible Multi-modal Therapy for Anxiety in Later-Life (Drs. E. Gorenstein & L. Papp, Co-Investigators)
1R34MH077156-01A2 NIMH

Dr. Ethan Gorenstein is collaborating with Dr. Laszlo Papp (of the Biological Studies Unit) in piloting a study on pharmacological augmentation of cognitive-behavior therapy for the treatment of anxiety in the elderly.

Mobile device-assisted treatment of anger (Drs. R.P. Sloan & E. Gorenstein, co-investigators).

Intel

Dr. Sloan & Dr. Gorenstein are collaborating with researchers and engineers at the Intel Corporation to develop and test a cellular phone adapted to assist in the treatment of dysfunctional anger. Ultimately, the device will be integrated with an ambulatory ECG monitor to match cognitive-behavioral interventions to anger-driven physiological arousal.

Cognitive Therapy vs. Sertraline in the Treatment of Depression in Refractory Epilepsy Patients (Dr. F. Gilliam, Principal Investigator)

5R01NS040808-06 NINDS

Dr. Ethan Gorenstein and Dr. Felice Tager are collaborating with Dr. Frank Gilliam (Neurology) on this study to assess relative efficacy of CBT vs. Sertraline in treating patients with depression associated with refractory seizure disorders.

Perinatal Stress and Gene Influences: Pathways to Infant Vulnerability (Dr. Z.N. Stowe, Principal Investigator, Dr. C. Monk, Co-Investigator)

P50 (MH 077928-01A1) NIMH

The primary focus of this project is to measure stress reactivity in infants of mothers with major depression, a form of ELS, in a controlled laboratory setting.

Maternal Incarceration and Course of Child Psychopathology in the South Bronx (Dr. C.W. Hoven, Principal Investigator; Dr. C. Monk, Co-Investigator)

1R01DA023733-01A2 NIDA

The main objective of this investigation is to understand the impact, over time, of maternal incarceration on children's mental health.

Cognitive effects of chemotherapy and estrogen in women with breast cancer (Dr. F. Tager, Principal Investigator; Dr. Paula McKinley, Co-Investigator)

RSGPB-05-010-01-CPPB American Cancer Society

The objective of this project is to investigate the cognitive and psychological effects of both chemotherapy treatment as well as estrogen in women with breast cancer.

Development of Multimodal Treatment for Late Life Generalized Anxiety Disorder (Dr. L. Papp, Principal Investigator; Dr. F. Tager, Co-Investigator)

R34 MH077156-01A2 NIMH

The principal aim of this proposal is to collect pilot data on a multi-modal intervention for late-life GAD, involving augmentation of CBT with pharmacotherapy, incorporating a sequential procedure that allows for flexibility and patient choice; after four weeks of initial CBT, tailored to the specific needs of the elderly, patients will have the option to add pharmacotherapy or to continue with CBT alone for an additional 8 weeks.

Treatment Options for Type 2 Diabetes in Adolescents and Youth (Dr. K. Hirst, Principal Investigator; Dr. D. Seidman, Co-Investigator)

5U01DK061230-06 NIDDK

5. Education and Training

Behavioral Medicine clinical faculty provide regular face-to-face supervision of Psychiatry Residents (PGY-III), Psychology Interns, and Psychology Externs in cognitive-behavior therapy. In addition, clinical faculty lecture regularly in seminars for Psychiatry Residents (Dr. Mike Devlin, Dr. Peter Shapiro, course administrators) and Psychology interns (Dr. Mike Quittman, Dr. Susan Sussman, course administrators).

6. Clinical Services

The Division of Behavioral Medicine maintains an active clinical service that provides state-of-the-art, evidence-based, cognitive-behavior therapies for Medical Center patients suffering from a variety of psychological and medical conditions. Our clinical and research activities are closely related and mutually informative. Clinical services include:

Cognitive-behavior therapy for treatment of specific psychological disorders such as: panic disorder, obsessive-compulsive disorder, generalized anxiety, phobias (including social anxiety), posttraumatic stress disorder, depression, eating disorders, behavioral disorders in children.

Cognitive-behavior therapy for psychological factors in medical conditions such as:
heart disease, irritable bowel syndrome, cancer treatment, epilepsy, obesity, and smoking.

7. Publications

Gorenstein, E.E., Tager, F.A., Shapiro, P.A., Monk, C., & Sloan, R.P. (2007). Cognitive-behavior therapy for reduction of persistent anger. *Cognitive and Behavioral Practice*, 14, 168-184

Gorenstein, E. E., & Papp, L. A. (2007). Cognitive-behavioral therapy for anxiety in the elderly. *Current Psychiatry Reports*, 9, 20-25

Karasz, A., & McKinley, P.S. (2007). Cultural differences in conceptual models of everyday fatigue: A vignette study. *Journal of Health Psychology*. 12(4) Jul, 613-626.

Werner, E. A, Myers, M.M., Fifer, W.P., Cheng, B., Fang, Y. & Monk, C. (2007) Prenatal predictors of infant temperament. *Developmental Psychobiology* 49: 474-484.

Werner E. & Monk, C. (2006) Review of Forms of Intersubjectivity in Infant Research and Adult Treatment by Beatrice Beebe, Steven Knoblauch, Judith Rustin, Dorianne Sorter. *Psychotherapy: Theory, Research, Practice & Training* 43(3) Fall: 362-363.

The TODAY Study Group (D. Seidman, member and co-author). Treatment options for type 2 diabetes in adolescents and youth: a study of the comparative efficacy of metformin alone or in combination with rosiglitazone or lifestyle intervention in adolescents with type 2 diabetes. *Pediatric Diabetes*, April, 2007: 8 74-87.

Sloan RP, McCreath H, Tracey KJ, Sidney S, Liu K, Seeman T. RR Interval Variability is Inversely Related to Inflammatory Markers: The CARDIA Study. *Mol Medicine*. 2007;13:178-184.

Goldstein RS, Bruchfeld AN, Yang L, Qureshi AR, Puerta MG, Patel NB, Gregersen PK, Sloan RP, Sama AE, Tracey KJ. Cholinergic Anti-Inflammatory Pathway Activity and Serum High Mobility Group Box-1 (HMGB1) Levels in Patients with Rheumatoid Arthritis. *Mol Medicine*. 2007;13:210-215.

Sloan RP. Attendance at Religious Services, Health, and the Lessons of Trinity (invited editorial). *Psychosomatic Medicine*. 2007;69:493-494.

Pereira AC, Huddleston D, Brickman AM, Hen R, Sosunov AA, McKhann GM, Sloan RP, Gage FH, Brown TR, Small SA. An *in vivo* correlate of dentate gyrus neurogenesis observed in exercising mice and humans. *Proc Natl Acad Sci*. 2007;104:5638-5643.

Gorenstein EE, Tager FA, Shapiro PA, Sloan RP. Cognitive-behavior therapy for reduction of persistent anger. *Cognitive and Behavioral Practice*. 2007;41:168-184.

Yeager D, Gleib D, Au M, Lin H, Sloan RP, Weinstein M. Religious Involvement and Health Outcomes among Older Persons in Taiwan. *Social Science and Medicine*. 2006;63:2228-2241.

Sloan, Richard P. *Blind Faith: The Unholy Alliance of Religion and Medicine*. St. Martin's Press, 2006