

BIOGRAPHICAL SKETCH

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NAME: Franklin Schneier MD

eRA COMMONS USER NAME (credential, e.g., agency login): fschneier

POSITION TITLE: Co-Director, Anxiety Disorders Clinic, NY State Psychiatric Institute

EDUCATION/TRAINING (*Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.*)

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
Yale University, New Haven, CT	B.S.	05/1979	Biology
Cornell University Medical College, New York, NY	M.D	05/1983	Medicine
Tufts-New England Medical Center, Boston, MA		06/1984	Internship
Mt. Sinai Medical Center, New York, NY		06/1987	Residency
Columbia University College of Physicians and Surgeons, New York, NY		06/1990	NIMH Research Fellowship

A. Personal Statement

My research interests include mechanisms of psychopathology and of response to medication and psychotherapy treatment of social anxiety disorder, other anxiety disorders, PTSD, and depression. In this work I've published findings on a variety of assessment approaches, including neuroimaging with fMRI and PET, eye tracking, and behavioral tasks assessing reward learning and attention bias. I have experience as PI of an NIH First Award, several R01s for clinical trials, including in social anxiety disorder, and NIH-funded R01s involving translational research in social anxiety disorder and other disorders. I have also held NARSAD Young Investigator and Independent Investigator grants. I currently am PI of an NIMH-funded R01 studying reward mechanisms in major depression, an R61 studying mechanisms (other than those studied in this proposal) of music-reinforced attention training in social anxiety disorder, and a foundation grant to study disruption of fear memory reconsolidation as a treatment for social anxiety disorder.

Schneier FR, Slifstein M, Whitton AE, Pizzagalli DA, Reinen J, McGrath PJ, Iosifescu DV, Abi-Dargham A. Dopamine Release in Antidepressant-Naive Major Depressive Disorder: A Multimodal [(11)C]-(+)-PHNO Positron Emission Tomography and Functional Magnetic Resonance Imaging Study. *Biol Psychiatry*. 2018; 84:563-573. PMID: 30041971

Schneier FR, Kimeldorf MB, Choo T, Steinglass JE, Wall M, Fyer AJ, Simpson HB: Attention bias in

adults with anorexia nervosa, obsessive-compulsive disorder, and social anxiety disorder. Journal of Psychiatry Research 2016; 79:61-69. PMID: 27174402. PMC4891283

Schneier FR, Pomplun M, Sy M, Hirsch J. Neural response to eye contact and paroxetine treatment in generalized social anxiety disorder. Psychiatry Research Neuroimaging. 2011;194(3):271-8. PMCID: PMC2745296

Zhu X, Helpman L, Papini S, **Schneier F**, Markowitz JC, Van Meter PE, Lindquist MA, Wager TD, Neria Y. Altered resting state functional connectivity of fear and reward circuitry in comorbid PTSD and major depression. Depression and Anxiety. 2017; 34:641-650 PMID: 28030757. PMC5667358

B. Positions and Honors.

7/87 – Present New York Medical License 164947-1

7/87 - 6/90: Post-doctoral Clinical Fellow in Psychiatry, Columbia University, College of Physicians and Surgeons

7/87 - 6/90: Assistant in Clinical Psychiatry, Presbyterian Hospital;

4/89 – Present Diplomate, American Board of Psychiatry and Neurology

7/90 - 6/94: Assistant Professor of Clinical Psychiatry, Columbia University, College of Physicians and Surgeons

7/90 - 6/94: Assistant Attending in Psychiatry, Presbyterian Hospital

3/93 - 2/96: Assistant Director, Anxiety Disorders Clinic, New York State Psychiatric Institute

2/96 - 7/01: Associate Director, Anxiety Disorders Clinic, New York State Psychiatric Institute

7/90 - Present: Research Psychiatrist, New York State Psychiatric Institute

7/94 – 6/10: Associate Professor of Clinical Psychiatry, Columbia University, College of Physicians and Surgeons

7/94 – 6/10: Associate Attending in Psychiatry, New York Presbyterian Hospital

2007 - 2012: Ad hoc member, NIH ZRG1 F12B and APDA Study Sections

2008 - Present: Member, Scientific Advisory Board, Anxiety Disorders Association of America

2010-2013: Professor of Clinical Psychiatry, Columbia University College of Physicians and Surgeons

2013-2014: Professor of Psychiatry, Columbia University Medical Center

2010-Present: Attending in Psychiatry, New York Presbyterian Hospital

2014-Present Special Lecturer in Psychiatry, Columbia University Medical Center

2014-Present Standing member NIH APDA Study Section

2014-Present Member, Scientific Advisory Board, Andrew Kukes Foundation for Social Anxiety

2016-Present Co-Director, Anxiety Disorders Clinic, New York State Psychiatric Institute

2016-Present Associate Editor, Comprehensive Psychiatry

C. Contribution to Science:

1. Characterization of psychopathology of social anxiety disorder

At the time I began my research career, social anxiety disorder was known as social phobia, and was considered an uncommon condition with fear usually limited to performance situations. Descriptive studies by my colleagues and me in community and clinical samples led to the recognition that social anxiety disorder was far more common and disabling than previously thought, and clarified subtypes, cultural variants, and relationship to embarrassing medical conditions. Our work revealed that the more severe form of social anxiety disorder was not limited to performance situations, leading to an expanded definition of the disorder since DSM-III-R.

Schneier FR, Liebowitz MR, Johnson J, Fyer AJ, Weissman MM: Social phobia: Comorbidity and morbidity in an epidemiologic sample. Archives of General Psychiatry 1992; 49:282-289. PMID: 1558463

Schneier FR, Heckelman LR, Garfinkel R, Campeas R, Fallon BA, Gitow A, Street L, DelBene D, Liebowitz MR: Functional impairment in social phobia. Journal of Clinical Psychiatry 1994; 55:322-331 PMID: 8071299

Schneier FR. Clinical Practice: Social anxiety disorder: New England Journal of Medicine 2006;355:1029-1036. PMID: 16957148

Steinglass JE, Lempert KM, Choo TH, Kimeldorf MB, Wall M, Walsh BT, Fyer AJ, **Schneier FR**, Simpson

HB. Temporal discounting across three psychiatric disorders: Anorexia nervosa, obsessive compulsive disorder, and social anxiety disorder. *Depress Anxiety*. 2017;34:463-470. PMID: 28009473; PMCID: PMC5869031

2. Pharmacotherapy of social anxiety disorder

My colleagues and I were among the first to establish efficacy of pharmacotherapies for social anxiety disorder. Early NIMH-funded studies led to recognition of social anxiety disorder as responsive to medication treatments, and later large scale industry studies that established indications for several medications. I also was involved in early trials integrating and comparing pharmacotherapy and CBT treatments in social anxiety disorder.

Schneier FR, Goetz D, Campeas R, Fallon B, Marshall R, Liebowitz MR: Placebo controlled trial of moclobemide for social phobia. *British Journal of Psychiatry*, 1998; 172:70-77. PMID: 9534836.

Heimberg RG, Liebowitz MR, Hope DA, **Schneier FR**, Holt CS, Welkowitz LA, Juster HR, Campeas R, Bruch MA, Cloitre M, Fallon B, Klein D: Cognitive-behavioral group therapy vs phenelzine therapy for social phobia: 12-week outcome. *Archives of General Psychiatry*, 1998; 55:1128. PMID: 9862558.

Schneier FR, Blanco C, Campeas R, Lewis-Fernandez R, Lin S-H, Marshall R, Schmidt AB, Sanchez-Lacay JA, Simpson HB, Liebowitz MR: Citalopram treatment of social anxiety disorder and comorbid major depression. *Depression and Anxiety* 2003; 17:191-196. PMID: 12820174.

Blanco C, Heimberg RG, **Schneier FR**, Fresco DM, Chen H, Turk CL, Vermes D, Erwin BA, Schmidt AB, Juster HR, Campeas R, Liebowitz MR: A placebo-controlled trial of phenelzine, cognitive behavioral group therapy and their combination for social anxiety disorder. *Archives of General Psychiatry*, 2010;67(3):286-95. PMID: 20194829; PMCID: 2856667

3. Neuroreceptor imaging studies of dopamine system dysfunction in social anxiety and other disorders

As a leader of early neuroreceptor imaging studies in social anxiety disorder I have explored dopamine system dysfunction in this disorder.

Schneier FR, Liebowitz MR, Abi-Dargham A, Zea-Ponce Y, Lin S-H, Laruelle M: Low dopamine D2 receptor binding potential in social phobia. *American Journal of Psychiatry* 2000; 157:457-459. PMID: 10698826.

Schneier FR, Martinez D, Abi-Dargham A, Zea-Ponce Y, Simpson HB, Liebowitz MR, Laruelle M. Striatal dopamine D(2) receptor availability in OCD with and without comorbid social anxiety disorder: preliminary findings. *Depress Anxiety*. 2008;25(1):1-7. PMID: 17252580.

Schneier FR, Martinez D, Abi-Dargham A, Slifstein M, Hwang D-R, Liebowitz MR, Laruelle M: Striatal dopamine D₂ receptors, dopamine transporters and dopamine release in social anxiety disorder. *Depression and Anxiety* 2009; 26:411-418. PMID: 19180583; PMCID: 2679094.

4. Clinical trials of medication and psychotherapy in other anxiety disorders

Building on models of integrative medication and psychotherapy RCTs in social anxiety disorder I have conducted studies in PTSD showing benefit of combined SSRI + CBT treatment over CBT alone, and benefit of combined SSRI+mirtazapine treatment over SSRI alone.

Schneier FR, Neria Y, Pavlicova M, Hembree E, Suh EJ, Amsel L, Marshall RD. Combined Prolonged Exposure Therapy and Paroxetine for Posttraumatic Stress Disorder Related to the World Trade Center Attacks: A Randomized Controlled Trial *American Journal of Psychiatry*. 2011; 169(1): 80-88. PMID: 21908494; PMCID: 3606709.

Schneier FR, Campeas R, Carcamo J, Glass A, Lewis-Fernandez R, Neria Y, Sanchez-Lacay A, Vermes D, Wall M: Combined mirtazapine and SSRI treatment of PTSD: A placebo-controlled trial. *Depression and Anxiety*, 2015; 32(8): 570-579; PMID 26115513; PMCID 4515168.

Rutherford BR, Bailey VS, **Schneier FR**, Pott E, Brown PJ, Roose SP. Influence of study design on treatment response in anxiety disorder clinical trials. *Depression and Anxiety*. 2015 Dec;32(12):944-57. PMID: 26437267; PMCID: 4922308.

5. Studies of gaze in social anxiety disorder, and other mechanistic studies of anxiety-related conditions

I have conducted a series of studies eye gaze in social anxiety disorder, demonstrating involvement of regions other than fear circuitry in social anxiety disorder, and individual difference in functional connectivity between social anxiety disorder and panic disorder. Recent work has used several neurocognitive tasks to probe commonalities and differences in neural function across social anxiety disorder, OCD, and anorexia nervosa (also see references above) and studies of extinction learning in several disorders.

- Talati A, Pantazatos SP, Hirsch J, **Schneier F**: A pilot study of gray matter volume changes associated with paroxetine treatment and response in social anxiety disorder. Psychiatry Research: Neuroimaging, 2015;231:279-285. PMID: 25659476; PMCID: 4363180.
- Pantazatos SP, Talati A, **Schneier FR**, Hirsch J. Reduced Anterior Temporal and Hippocampal Functional Connectivity During Face Processing Discriminates Individuals with Social Anxiety Disorder from Healthy Controls and Panic Disorder, and Increases Following Treatment. Neuropsychopharmacology. 2014 Jan;39(2):425-34. PMID: 24084831; PMCID: 3870777.
- Helpman L, Marin M-F, Papini S, Zhu X, Sullivan GM, **Schneier F**, Neria M, Shvil E, Aragon MJM, Markowitz JC, Lindquist M, Wager T, Milad M, Neria Y: Neural changes in extinction recall following prolonged exposure treatment for PTSD: A longitudinal fMRI study, Neuroimage Clinical 2016;53:223-231. PMID: 27761402; PMCID: PMC5065048.
- Talati A, Pantazatos SP, **Schneier FR**, Weissman MM, Hirsch J. Gray matter abnormalities in social anxiety disorder: primary, replication, and specificity studies. Biol Psychiatry. 2013;73:75-84. PMID: 22748614; PMC3465490.

List of my published scientific papers available via PubMed:

<https://www.ncbi.nlm.nih.gov/sites/myncbi/franklin.schneier.1/bibliography/52735769/public/?sort=date&direction=ascending>

D. Research Support

ACTIVE:

R61MH116089 (Franklin Schneier, M.D. (PI) 6/01/18 – 4/30/20

Gaze-contingent music reward therapy for social anxiety
NIMH

To optimize dose of a computer based gaze contingent reward therapy and to test whether it modifies targets of attention to threat, reward valuations, and attention control.
Responsibilities: Overall direction of project.

(Franklin Schneier, MD) (PI)

5/1/16 – 4/30/19

Erasing Fear Memories with Propranolol
Youth Anxiety Center

To examine the efficacy of propranolol during reconsolidation of fear memories in patients with public speaking anxiety (performance type social anxiety disorder)
Responsibilities: Overall direction of the project.

(Franklin Schneier, MD) (site PI)

02/01/20-12/30/21

A Phase 3, Multicenter, Randomized, Double-blind Trial of Brexpiprazole as Combination Therapy with Sertraline in the Treatment of Adults with Post-traumatic Stress Disorder
Otsuka Pharmaceuticals

To examine the efficacy of Brexpiprazole in the treatment of post-traumatic stress disorder in adults.
Responsibilities: Overall direction of the site.

COMPLETED RESEARCH SUPPORT

R01MH MH099322-01 (Franklin Schneier, M.D. (PI) 8/01/13 – 1/31/19

Ventrostriatal Dopamine Release and Reward Motivation in MDD
NIMH

To use an established reward learning task and PET imaging with the D3-receptor selective ligand PHNO to study ventrostriatal dopamine release and its relationship to reward motivation and to treatment response with the dopamine agonist pramipexole in patients with MDD.

Responsibilities: Overall direction of project.