

**BIOGRAPHICAL SKETCH**

Provide the following information for the Senior/key personnel and other significant contributors in the order listed on Form Page 2.

Follow this format for each person. **DO NOT EXCEED FOUR PAGES.**

NAME Barbara J. Coffey	POSITION TITLE Chief, ISMMS Tics and Tourette’s Clinical and Research Program
eRA COMMONS USER NAME coffeb01	Professor, Department of Psychiatry

EDUCATION/TRAINING			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	MM/YY	FIELD OF STUDY
University of Rochester	A.B.	1971	Biology and Psychology
Tufts University	M.D.	1975	Medicine
Harvard University	M.S.	2000	Epidemiology

**A. Personal Statement**

This application focuses on sensory phenomena as a critical component of both Obsessive Compulsive Disorder (OCD) and Tourette’s Disorder (TD), and with a discrete neurobiological circuitry centered on the insula and somatosensory cortex. The current project will test the ability of ondansetron, a 5-HT3 antagonist acting on the sensory system, to engage this neural circuitry in order to modulate sensory phenomena. As an internationally recognized specialist in the evaluation and treatment of Tourette’s Disorder (TD) and related conditions, I have been an active member of the Tourette Syndrome Association (TSA) Clinical Trials Consortium since 1996, which expanded in the past several years to foster development of novel treatments and translational approaches. My faculty positions at Harvard Medical School and New York University School of Medicine over the past two decades provided the opportunity to take on new leadership roles in the development of collaborations which have produced new research in the area of novel treatments. I was recruited in July 2012 to Icahn School of Medicine at Mount Sinai to develop both translational research and active clinical and research programs in Tics, OCD and Related problems. I have maintained my position as a Research Psychiatrist at Nathan Kline Institute for Psychiatric Research, which has facilitated recruitment of subjects for studies at both sites. As Associate Editor for Advanced Pediatric Psychopharmacology for the Journal of Child and Adolescent Psychopharmacology, and former Director of Pediatric Psychopharmacology at McLean Hospital (1992-2001), I am also an internationally recognized specialist in pediatric psychopharmacology, with extensive experience with clinical trials in children and adolescents. I have served as principal, co-principal or site investigator on multiple studies with federal, foundation or investigator-initiated industry funding; including NIMH, NINDS, TSA, Bristol Myers Squibb/Otsuka, Eli Lilly, Boehringer Ingelheim, and Shire. Given my clinical expertise in TD, development and execution of clinical trials involving novel agents, and under my leadership, recent designation of my program as a Tourette Syndrome Association Center of Excellence and track record of obtaining funding, I am very well positioned to carry out this important research.

**B. Positions and Honors**

**Positions and Employment**

1981-1992	Assistant Professor, Tufts University School of Medicine, Department of Psychiatry
1982-1987	Director, General Child Psychiatry Clinic, New England Medical Center Hospital (NEMCH) Associate Director, Ambulatory Services, Division of Child Psychiatry, NEMCH
1982-1992	Director, Pediatric Psychopharmacology, Division of Child Psychiatry, NEMCH
1985-1992	Co-Director, Tourette's and Movement Disorder Clinic, New England Medical Center Hospital

- 1987-1992 Director of Training, Division of Child Psychiatry, Department of Psychiatry, Tufts-New England Medical Center
- 1992-2001 Director, Pediatric Psychopharmacology, Director, Tourette's Clinic, McLean Hospital
- 1996-2001 Assistant Professor, Harvard Medical School, Department of Psychiatry
- 1995-2001 Director, Tourette's Clinic, MGH, Hospital Center for Psychiatric Neuroscience
- 2001-2012 Director, Tics and Tourette's Clinical and Research Program, NYU Child Study Center
- 2001-2012 Associate Professor, Department of Psychiatry, New York University School of Medicine
- 2006- Research Psychiatrist, Nathan Kline Institute for Psychiatric Research
- 2007-2012 Associate Professor, Department of Child and Adolescent Psychiatry, New York University School of Medicine (NYUSOM)
- 2012- Adjunct Associate Professor, Department of Child and Adolescent Psychiatry, NYUSOM
- 2012 - Professor, Department of Psychiatry, Icahn School of Medicine at Mount Sinai
- 2012 - Chief, Tics and Tourette's Clinical and Research Program, Icahn School of Medicine at Mount Sinai
- 2015- Director of Education and Training, Child and Adolescent Psychiatry and Pediatrics/General and Child Psychiatry (Triple Board Program) Residency

### **Other Experience and Professional Memberships**

#### National and Regional Major Committee Assignments:

- 1989-2000 Medical Advisory Board, National Tourette Syndrome Association
- 2005 Chair, Steering Committee on Certification in Child and Adolescent Psychiatry, ABPN
- 2008-2009 Ad hoc NIMH Study Section: Child Psychopathology and Developmental Disabilities
- 2010-2012 European Commission Study Section: Brain/Related Diseases
- 2011- Program Committee, American Academy of Child and Adolescent Psychiatry
- 2013- World Psychiatric Association, Child and Adolescent Psychiatry Section, North America Representative
- 2015 Ad hoc NIMH Study Section: Child Psychopathology and Developmental Disabilities

#### Memberships, Offices and Committee Assignments in Professional Societies

- 1993-1996 Executive Council, AACAP, Delegate at Large
- 1996-2005 Chair, Committee on Continuing Education, AACAP
- 1997- The American College of Psychiatrists
- 2008- American Society of Clinical Psychopharmacology
- 2008- International Society for Research in Child and Adolescent Psychopathology (ISRCAP)
- 2011- American Psychiatric Association, Life Member

### **Honors**

- 1988- American Academy of Child and Adolescent Psychiatry, Fellow
- 1994 Tourette Syndrome Association, Massachusetts Chapter Recognition Award
- 1997 Best Doctors, Boston Magazine
- 2003-2007 Best Doctors, New York Magazine
- 2009 Best Doctors in America
- 2009-2012 New York Super Doctors
- 2011 Castle Connolly's America's Top Doctors
- 2012 Woman of the Year, Medicine and Healthcare, American Biographical Institute
- 2013 New York's Best Doctors
- 2015 New York's Best Doctors
- 2014 Tourette Association, Center of Excellence, Icahn School of Medicine at Mount Sinai

### **C. Selected Peer-reviewed Publications** (Selected from 106 peer-reviewed publications)

- Coffey, B., Biederman, J., Spencer, T., Geller, D., Faraone, S., Bellordre, C. (2000). Informativeness of Structured Diagnostic Interviews in the Identification of Tourette's Disorder in Referred Youth. *Journal of Nervous and Mental Disease*, 188, 583-588.

- Coffey, B., Biederman, J., Geller, D., Spencer, T., Kim, G., Bellordre, C., Frazier, J., Craddock, K., Magovcevic, M. (2000). Distinguishing Illness Severity from Tic Severity in Children and Adolescents with Tourette's Disorder. *Journal of the American Academy of Child and Adolescent Psychiatry*, 39(5), 556-561.
- The Tourette's Syndrome Study Group. (2002). Treatment of ADHD in Children with Tics. A randomized controlled trial. *Neurology*, 58, 527-536,
- Coffey, B., Biederman, J., Geller, D., Frazier, J., Spencer, T., Doyle, R., Gianini, L., Small, A., Frisone, D., Magovcevic, M., Stein, N., Faraone, S. (2004). Re-examining Tic Persistence and Tic-Associated Impairment in Tourette's Disorder: Findings from A Naturalistic Follow-up Study. *Journal of Nervous and Mental Disease*, 192(11), 776-780.
- Kurlan, R., Kaplan, E., McDermott, M., and the Tourette Syndrome Study Group. (2008). Streptococcal Infection and Exacerbations of Childhood Tics and Obsessive-Compulsive Symptoms: A Prospective Blinded Cohort Study. *Pediatrics*, 121, 1188-1197.
- Gabbay, V., Coffey, B., Babb, J., Meyer, L., Wachtel, C., Anam, S., Rabinovitz, B. (2008). Pediatric Autoimmune Neuropsychiatric Disorders Associated with Streptococcus (PANDAS): A Comparison of Diagnosis and Treatment in the Community and a Specialty Clinic. *Pediatrics*, 122(2), 1-6.
- Gabbay, V., Coffey, B.J., Guttman, L.E., Gottlieb, L., Katz, Y., Babb, J.S., Hamamoto, M., Gonzalez, C. (2009). A Cytokine Study in Children and Adolescents with Tourette's Disorder. *Progress in Neuro-Psychopharmacology & Biological Psychiatry*, 33, 967-971.
- Lyon, G., Coffey, B., Samar, S., Jummani, R., Hirsch, S., Spigel, A., Goldman, R. (2009). Aripiprazole in Children and Adolescents with Tourette's Disorder: An Open Label Safety and Tolerability Study. *Journal of Child and Adolescent Psychopharmacology*, 19(6), 623-633.
- Lyon, G.J., Samar, S.M., Conelea, C., Trujillo, M.R., Lipinski, C.M., Bauer, C.C., Brandt, B.C., Kemp, J.J., Lawrence, Z.E., Howard, J., Castellanos, F.X., Woods, D., Coffey, B.J. (2010). Testing Tic Suppression: Comparing the Effects of Dexamethylphenidate to No Medication in Children and Adolescents with Attention-Deficit/Hyperactivity Disorder and Tourette's Disorder. *Journal of Child and Adolescent Psychopharmacology*, 20(4), 283-289.
- Leckman, J.F., King, R.A., Gilbert, D.L., Coffey, B.J., Singer, H.S., Dure, L.S., Grantz, H., Katsoyich, L., Lin, H., Lombroso, P.J., Kawikova, I., Johnson, D.R., Kurlan, R.M., Kaplan, E.L. (2011). Streptococcal upper respiratory tract infections and exacerbations of tic and obsessive-compulsive symptoms: A prospective longitudinal study. *JAACAP*, 50(2), 108-118.
- Kurlan, R., Crespi, G., Coffey, B., Mueller-Vahl, K., Koval, S., Wunderlich, G. (2011). A Multicenter Randomized Placebo Controlled Clinical Trial of Pramipexole for Tourette Syndrome. *Movement Disorders*, 27, 775-778.
- Gabbay, V., Babb, J., Klein, R., Panzer, A., Katz, Y., Alonso, C., Petkova, E., Wang, J., Coffey, B. (2012). A Double Blind, Placebo Controlled Trial of Omega 3 Fatty Acids in Tourette's Disorder. *Pediatrics*, 129, e1493-1500.
- Lebowitz, E., Motlagh, M., Katsoyich, K., King, R., Lombroso, P., Grantz, H., Lin, H., Bentley, M., Gilbert, D., Singer, H., Coffey, B., The Tourette Syndrome Study Group, Kurlan, R., Leckman, J. Tourette Syndrome in Youth with and Without Obsessive Compulsive Disorder and Attention Deficit Disorder.(2012) *Eur Child and Adolesc Psych*, 21(8), 451-457.
- Samar, S.M., Moyano, M.B., Braña-Berríos, M., Irazoqui, G., Matos, A., Kichic, R., Gellatly, R., Ibanez-Gomez, L., Zwilling, A.L., Petkova, E., Coffey, B.J. (2013). Children and adolescents with Tourette's disorder in the USA versus Argentina: behavioral differences may reflect cultural factors. *Eur Child and Adoles Psych*, 22(11), 701-707
- Dietrich, A., Fernandez, T.V., King, R.A., State, M.W., Tischfield, J.A., Hoekstra, P.J., Heiman, G.A.; The TIC Genetics Collaborative Group. (2014). The Tourette International Collaborative Genetics (TIC Genetics) study, finding the genes causing Tourette syndrome: objectives and methods. *Eur Child Adolesc Psychiatry*, Published online, DOI: 10.1007/s00787-014-0543-x. PMC Journal- n Process.

**D. Research Support**  
**Current Research Support**  
R01 MH092292 (Coffey)

9/15/11-6/30/15

Collaborative Genomic Studies of Tourette Disorder

This collaborative study unites an international group of highly expert clinicians specializing in TD with statistical and molecular geneticists to develop an increased understanding of the genetic etiology of TD, which will translate into novel and more effective approaches to treating this often-debilitating disorder.

(Coffey) 9/19/14-9/18/15  
Auspex Pharmaceuticals  
A Pilot Study of SD-809 (deutetrabenazine) in Moderate to Severe Tourette Syndrome  
To evaluate the safety, tolerability, and preliminary efficacy of SD-809 in adolescents with Tourette's Disorder.

(Coffey) 12/4/14-11/17/15  
Neurocrine Biosciences, Inc.  
A Phase 1b, Open-Label, Multiple-Dose Study to Evaluate the Safety, Tolerability, Pharmacokinetics, and Pharmacodynamics of NBI-98854 in Children and Adolescents with Tourette Syndrome  
To evaluate the safety, pharmacokinetics, and pharmacodynamics effects of NBI-98854 in a pediatric subjects with Tourette Syndrome.

(Coffey) 9/1/12-7/16/15  
Catalyst Pharmaceuticals  
Proof-of-Concept Study of CPP-109 (Vigabatrin) for Treatment Refractory Tourette's Disorder  
To explore proof of concept that vigabatrin will reduce tics and obtain systematic data regarding dosing, safety and tolerability of vigabatrin in young adults with treatment refractory Tourette's Disorder.

(Scahill) 6/1/12-9/30/15  
Yale – Shire SC (Coffey: Subcontract PI)  
Guanfacine in Children with Tic Disorders: A Multi-Site Study  
To evaluate the benefits of flexibly dosed, extended release guanfacine on tic severity in children with Tourette's Disorder.

(Coffey) 11/4/13-9/30/15  
AstraZeneca Pharmaceuticals  
A 6-Month, Multicenter, Randomized, Safety, Tolerability, Pharmacokinetic, and Preliminary Efficacy Study of AZD5213 in Adolescents with Tourette's Disorder  
To assess the safety, tolerability, pharmacokinetics, and preliminary efficacy of AZD5213 in adolescents with Tourette's Disorder.

(Gabbay) 1/1/13-6/30/15  
Tourette's Syndrome Association  
γ-Aminobutyric Acid in Tourette's Disorder: An MR Spectroscopy Study  
To obtain preliminary data on γ-aminobutyric acid (GABA) concentrations in Tourette's Disorder, using proton magnetic resonance spectroscopy (1H MRS).

**Completed Research Support (recent)**

Otsuka Pharmaceuticals Coffey (PI) 2/7/13-1/21/14  
A Multicenter, Randomized, Double-blind, Placebo-controlled Studies Evaluating the Safety and Efficacy of Fixed-Dose Once Daily Oral Aripiprazole in Children and Adolescents with Tourette's Disorder - 293  
To compare the efficacy of aripiprazole with placebo in suppression of tics in children and adolescents with a diagnosis of Tourette's Disorder.

Tourette Syndrome Association Castellanos (PI) 06/08-06/09  
Functional and Structural Connectivity of Tourette Syndrome: A Pilot Study to explore spatial coherence maps and functional Neuroimaging of Tourette's Disorder with and without ADHD

