## **BIOGRAPHICAL SKETCH**

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

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NAME	POSITION TITLE	
Barbara J. Coffey	Chief, ISMMS Tics and Tourette's Clinical and	
era commons user name	Research Program	
coffeb01	Professor, Department of Psychiatry	
EDUCATION/TRAINING		
	DEGREE	

INSTITUTION AND LOCATION	DEGREE (if applicable)	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 investigatorinitiated 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

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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., Cradock, 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., Spirgel, 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 Dexmethylphenidate 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., Katsovich, 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., Katsovich, 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

Program Director/Principal Investigator (Last, First, Middle): Coffey, Barbara, J.

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

y-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

Program Director/Principal Investigator (Last, First, Middle): Coffey, Barbara, J.

Role: Co-Investigator

Boehringer Ingelheim

Coffey (PI)

01/09-01/10

An open-label, flexible dose, follow-up study to evaluate safety and efficacy of oral pramipexole (0.0625–0.5 mg/day) for 24 weeks in children and adolescents (age 6-17 years) diagnosed with Tourette Syndrome according to DSM-IV criteria and who have completed the double-blind phase of either study 248.641 or 248.644. A study to test the efficacy and safety of Pramipexole in TD.

Role: Site PI, NYU Child Study Center and Nathan S. Kline Institute

Boehringer Ingelheim

Coffey (PI)

10/07-06/09

A Randomized Double Blind, Placebo Controlled, Flexible Dose Study to Evaluate the Efficacy and Safety of Pramipexole IR vs. Placebo for 6 Weeks in Children and Adolescents Diagnosed with Tourette's Disorder. A study to test the efficacy and safety of Pramipexole in TD.

Role: Site PI, NYU Child Study Center and Nathan S. Kline Institute

Bristol Myers Squibb

Coffey (PI)

07/05-12/07

NIH 5R01 MH61940

Leckman (PI)

09/03-08/06

A Prospective Longitudinal Study of PANDAS. The long-term aim of this multi-site study is to validate components of the diagnostic concept of PANDAS by performing a prospective longitudinal study.

Role: Site Investigator