

BIOGRAPHICAL SKETCH

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NAME Carlos N. Pato, MD		POSITION TITLE Co - Director, Center for Neuropsychiatric Genetics Professor, Department of Psychiatry SUNY Upstate Medical University	
eRA COMMONS USER NAME PATO CN			
EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)</i>			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
Brown University, Providence, RI	A.B.	1979	Comp. Literature
Brown University, Providence, RI	Sc.B.	1979	Biology
U of Cincinnati College of Medicine, Cincinnati, OH	M.D.	1983	Medicine

A. Positions and Honors**Professional Experience:**

1980 - 1983 Biochemist, Dept of Molecular Genetics, Biochemistry & Microbio, U of Cincinnati Coll. of Med.
 1986 - 1990 Research Psychiatrist, Clinical Center, National Institute of Mental Health
 1988 - 1990 Research Psychiatrist, Chief, Genetics Research Program and Acting Chief, Pharmacologic and Somatic Treatments Program, Schizophrenia Research Branch, NIMH
 1990 - 1992 Asst. Professor of Psychiatry, Dept. of Psychiatry and Behavioral Sciences SUNY at Stony Brook
 1994 - 1996 Director, Division of Adult Psychiatry, Rhode Island Hospital, Providence, RI
 1992 - 1996 Asst. Prof. of Psychiatry, Dept of Psychiatry & Human Behavior, Brown Univ.
 1996 - 2001 Assoc. Professor of Psychiatry, Director of Genetics Research, Dept of Psychiatry, SUNY @Buffalo
 1996 - 2001 Clinical Director, Department of Psychiatry, Buffalo General Hospital, Buffalo, NY
 1999 - 2001 Assoc. Dean of Clinical Affairs, SUNY at Buffalo, Buffalo, NY
 1990 - Adjunct Prof., Center for Neuroscience, U of Coimbra, Portugal
 2001 - Professor of Psychiatry, SUNY Upstate Medical University, Syracuse, NY
 2001 - 2004 Director, Center for Psychiatric and Molecular Genetics, SUNY Upstate Medical University, Syracuse, NY
 2004 - Co-Director, Center for Neuropsychiatric Genetics, SUNY Upstate Medical University
 2003- Associate Chief of Staff for Research and Development, VA Medical Center, Washington DC
 2004- Distinguished Professor of Psychiatry, Georgetown University, Washington DC.

Honors and Awards:

1) National Research Service Awards, 1987,1988 2) NARSAD Young Investigator Award, 1992-1994

B. Selected Publications (selected from 120 publications)

Azevedo MH, Valente J, Macedo A, Dourado A, Coelho I, Pato MT, **Pato CN**: "Versao Portuguesa da Entrevista Diagnostica para Estudos Geneticos". *Psiqui. Clin.* Vol. 14 (4):213-217, 1993.

Pato CN, Azevedo MH, Pato MT, Kennedy JL, Coelho I, Dourado A, Macedo A, Valente J, Ferreira CP, Madeira J, Moniz M, Correia C: "Selection of Homogeneous Populations for Genetic Study: The Portuguese Genetics of Psychosis Project". *Am. J. of Med. Gen.* 74:286-288, 1997.

- Azevedo MH, Soares MJ, Coelho I, Dourado A, Valente J, Macedo A, Pato MT, **Pato C**, "Using consensus OPCRIT diagnoses: An efficient procedure for best estimate lifetime diagnoses" British J of Psych. Vol. 174, pp. 154-157, 1999.
- Schindler K, Dalla Torre C., Bauer A , Medeiros H, Carvalho C, Fernandes LF, Pato MT., **Pato CN**, "Madeira: Identification of a highly homogeneous population for genetic study" CNS Spectrum Vol. 4;5:22-24,1999.
- Schindler KM, Richter MA, Kennedy J.L., Pato MT, and **Pato CN**, "Association between homozygosity at the COMT gene locus and Obsessive Compulsive Disorder" American J. of Medical Genetics (Neuropsychiatric Genetics) 96:6:721-724 (2000).
- Pato CN**, Macedo A, Ambrosio A , Vincent JB, Bauer A, Schindler K, Xu J, Coelho I, Dourado A, Valente J, Pato MT, Azevedo MH, Kennedy J: "Detection of expansion regions in bipolar families." American J. of Medical Genetics (Neuropsychiatric Genetics) 96:6:854-857 (2000)
- Vincent JB, Neves-Pereira ML, Paterson AD, Yakamoto E, Parikh SV, Macciardi F, Gurling HMD, Potkin SG, **Pato CN**, Azevedo MH, Kovacs M, Davies M, Lieberman JA, Meltzer HY, Petronis A, Kennedy JL, " An unstable trinucleotide region on chromosome 13 implicated in spinocerebellar ataxia: A common expansion locus" American J Human Genetics: Mar;66(3):819-829.2000
- Vincent JB, Yuan Q, Schalling M, Adolfsson R, Azevedo MH, Macedo A, Bauer A, DallaTorre C, Medeiros HM, Pato MT, **Pato CN**, Bowen T, Guy CA., Owen MJ., O'Donovan MC, Paterson AD, Petronis A, Kennedy JL, "Long repeat tracts as SCA* are relatively common" American J. of Medical Genetics (Neuropsychiatric Genetics) 96:6:873-876 (2000)
- Xu J, Pato MT, Dalla Torre C, Medeiros H, Carvalho C, Basile VS, Bauer A, Dourado A, Valente J, Soares MJ, Macedo AA, Coelho I, Paz Ferreira C, Azevedo MH, Macciardi F, Kennedy JL , **Pato CN**. "Evidence for linkage disequilibrium between the alpha 7-nicotinic receptor gene (CHRNA7) locus and Schizophrenia in Azorean families" American J. of Medical Genetics (Neuropsychiatric Genetics) 105:669-674 (2001)
- Schindler KM, Pato MT, Dourado A, Macedo A, Azevedo MH, Kennedy JL, **Pato CN**, "Association and linkage disequilibrium between a functional polymorphism of the dopamine-2 receptor gene and schizophrenia in a genetically homogeneous Portuguese population" Molecular Psychiatry 7:1002-1005 (2002)
- Pato M, Mundo E, Medeiros H, Carvalho C, Ferreira CP, Dourado A, Valente J, Soares MJ, Macedo A, Azevedo MH, **Pato CN**. " Low prevalence of schizophrenia in a homogeneous Azorean island population." Am. J of Psychiatry. Submitted.
- Wong AHC, Macciardi F, Buckle C, Trakalo J, Ernie Boffa², Oak J, Azevedo MH, Dourado A, Coelho I, Macedo A, Ferreira CP, Pato MT, **Pato CN**, van Tol HHM, Kennedy JL. "Possible Association between Schizophrenia and the 14-3-3 gene." Molecular Psychiatry in press.
- Sklar P, Pato MT, Kirby A, Petryshen TL, Medeiros H, Carvalho C, Macedo A, Dourado A, Coelho I, Valente J, Soares MJ, Ferreira CP, Lei M, Verner A, Hudson TJ, Morley CP, Kennedy JL, Azevedo MH, Lander E, Daly MJ, **Pato CN**. (2004). Genome-wide scan in Portuguese Island families identifies 5q31-5q35 as a susceptibility locus for schizophrenia and psychosis. Molecular psychiatry, 9(2) 213-218.
- Pato CN**, Pato MT, Kirby A, Petryshen TL, Medeiros H, Carvalho C, Macedo A, Dourado A, Coelho I, Valente J, Soares MJ, Ferreira CP, Lei M, Verner A, Hudson TJ, Morley CP, Kennedy JL, Azevedo MH, Daly MJ, Sklar P (2004). Genome-wide scan in Portuguese Island families implicates multiple loci in bipolar disorder: fine mapping adds support on chromosomes 6 and 11. American Journal of Medical Genetics, May 15;127B(1):30-4.
- Middleton FA, Pato MT, Gentile KL, Morley CP, Zhao X, Eisener AF, Brown A, Petryshen TL, Kirby AN, Medeiros H, Carvalho C, Macedo A, Dourado A, Coelho I, Valente J, Soares MJ, Ferreira CP, Lei M, Azevedo MH, Kennedy JL, Daly MJ, Sklar P, **Pato CN**. (2004). Genomewide Linkage Analysis of Bipolar Disorder by Use of a High-Density Single-Nucleotide–Polymorphism (SNP) Genotyping Assay: A Comparison with Microsatellite Marker Assays and Finding of Significant Linkage to Chromosome 6q22. American Journal of Human Genetics, Am J Hum Genet. 2004 May;74(5):886-97. Epub 2004 Apr 01.

- Freedman ML, Reich DE, Penney K, McDonald G, Patterson N, Gabriel S, Topol EJ, Smoller JW, **Pato CN**, Pato MT, Petryshen T, Kolonel L, Sklar P, Lander ES, Henderson B, Hirschhorn J, Altshuler D, “The impact of population stratification on genetic association studies” Nature Genetics, 2004 Apr;36(4):388-93. Epub 2004 Mar 28
- Ambrosio AM, Kennedy JL, Macciardi F, Macedo A, Valente J, Dourado A, Oliveira CR, **Pato C.**, Family association study between DRD2 and DRD3 gene polymorphisms and schizophrenia in a Portuguese population. *Psychiatry Res.* 2004 Mar 15;125(3):185-91.
- Ambrosio AM, Kennedy JL, Macciardi F, Coelho I, Soares MJ, Oliveira CR, Pato MT, **Pato CN.** Nonparametric linkage analysis between schizophrenia and candidate genes of dopaminergic and serotonergic systems. *CNS Spectr.* 2004 Apr;9(4):302-8.
- Albert H.C. Wong AHC, Trakalo J, Likhodi O, Yusuf M, Macedo A, Azevedo MH, Klempen T, Pato MT, Honer WG⁷, **Pato CN**, Van Tol HHM, Kennedy JL, “Association between schizophrenia and the Syntaxin 1a gene” *Biol Psychiatry.* 2004 Jul 1;56(1):24-9.
- Ambrosio AM, Kennedy JL, Macciardi F, Coelho I, Soares MJ, Oliveira CR, **Pato CN.** Lack of association or linkage disequilibrium between schizophrenia and polymorphisms in the 5-HT1Dalpha and 5-HT1Dbeta autoreceptor genes: family-based association study. *Am J Med Genet.* 2004 Jul 1;128B(1):1-5.
- Pato CN**, Middleton FA, Gentile KL, Morley CP, Medeiros HM, Macedo A, Azevedo MH, Pato MT, “Genetic linkage to chromosome 6q22 is a consistent finding in Portuguese subpopulations and may generalize to broader populations. *Am J Med Genet.* In press.
- Middleton FA, Pato MT, Gentile KL, McGann L, Brown AM, Trauzzi M, Diab H, Morley CP, Medeiros HM, Macedo A, Azevedo MH, **Pato CN**, “Gene expression analysis of peripheral blood leukocytes from discordant sib-pairs with schizophrenia and bipolar disorder reveals points of convergence between genetic and functional genomic approaches”. *Am J Med Genet.* In press.
- Petryshen TL, Middleton FA, Kirby A, Aldinger KA, Purcell S, Tahl AR, Morley CP, McGann L, Gentile KL, Rockwell GN, Medeiros HM, Carvalho C, Macedo A, Dourado A, Valente J, Ferreira CP, Patterson NJ, Azevedo MH, Daly5 MJ, Pato **CN**, **Pato MT**, Sklar P,” Support for involvement of neuregulin 1 in schizophrenia pathophysiology”, *Molecular Psychiatry*, In press.

C. Current Grants, or Grants completed within the past three years

- NIMH** - RO1-MH52618 - “Genetic Analysis of Psychosis” (1997-2004). Principal Investigator. Collection and analysis of over 100 families, trios, and sib duos with schizophrenic/psychotic members from the Portuguese Azores archipelago.
- NIMH** - RO1 –MH58693 “Genetic Analysis of Bipolar Mood Disorder” [1999-2005]. Principal Investigator. Collection and analysis of over 100 families, trios, and sib duos with Bipolar members from the Portuguese Azores archipelago.
- VA MERIT**- Convergent Genetic and Genomic analysis of Bipolar Disorder – (2005-2010) Principal Investigator. Gene expression studies on 250 bipolar subjects and discordant sibs