

## BIOGRAPHICAL SKETCH

NAME		POSITION TITLE	
Dean F. Wong, M.D., Ph.D.		Professor	
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
Univ. Western Ontario, London, Canada	B.Sc.	1970	Physics
Univ. of Wisconsin, Madison, WI			Biophysics
Univ. of Toronto Fac. Med., Canada	M.D.	1977	Medicine
Johns Hopkins University	Ph.D.	1990	Rad. Hlth Sci.

### A. Honors and Positions

#### Professional Experience:

1968-1972	Department of Physics, Univ. of Western Ontario, London, Canada (Honors B.Sc. Degree)
1972-1973	Univ. of Wisconsin, Dept of Biophysics (Ph.D. grad. Work and year 1 MD/PhD Med Sci Tng Program)
1973-1977	Univ. of Toronto, Fac of Med, Ontario (M.D. degree program)
1977-1978	Univ. of Toronto, Internal Med Program, Straight Internship, Sunnybrook Med Ctr, Toronto, Ontario
1978-1979	Univ. of Toronto, Anatomic Pathology, Residency, Princess Margaret Hosp. Of Ontario Cancer Inst. And Wellseley Hosp., Toronto, Ontario
1979-1980	Univ. of Toronto, Diagnostic Radiology Residency, Toronto General Hosp., Toronto, Ontario
1980-1983	Johns Hopkins Univ., Sch of Med, Research and Clinical Fellow, Div of Nuc Med, Dept of Radiology, Johns Hopkins Hospital
1983-1987	Johns Hopkins Univ., Sch of Med, Asst Prof of Radiology, Div of Nuc Med, Active Staff, Johns Hopkins Hosp
1987-1993	Johns Hopkins Univ., Assoc Prof of Radiology
1990-1997	Johns Hopkins Univ./Kennedy Krieger Inst., Dir, Neuroimaging Core, Mental Retard Res Ctr
1991-1994	Johns Hopkins Univ., Sch of Hygiene and Pub Health, Asoc Prof of Env Health Sci (Radiation Health)
1992-1994	Johns Hopkins Univ., Sch of Med, Acting Co-Dir, Ofc of the Dir, Div of Nuc Med, Dept of Radiology
1993-present	Johns Hopkins Univ., Sch of Med, Professor of Radiology
1994-present	Johns Hopkins Univ., Sch of Hygiene and Pub Health, Professor of Env Health Sci, Joint Appt
1999-present	Johns Hopkins Univ., Sch of Med, Professor of Psychiatry, Joint Appt
2000-present	Johns Hopkins Univ., Sch of Med, Radiology Vice Chair for Research Administration and Training

#### Honors:

1969-72	Dean's Honors List, Univ. of Western Ontario, London, Canada
1970	Board of Governor's Award, Univ. of Western Ontario, London, Canada

1972	Veeco Prize (Physics), Univ. of Western Ontario, London, Canada
1975	Summer Scholarship, Hospital for Sick Children, Toronto, Canada
1982	Second Prize, Scientific Papers Session, Mid-Eastern Meeting of Soc of Nuc Med, Fredericksburg, MD
1991	Established Investigator Award, National Alliance for Research on Schizophrenia and Depression
2001	Fellow, American College of Neuropsychopharmacology
2003	Kuhl Lassen Award, Society of Nuclear Medicine, Brain Imaging Council

#### **Professional Affiliations:**

1981	Society of Nuclear Medicine
1985	American Association for the Advance of Science
1988	International Society of Cerebral Blood Flow and Metabolism
1989	American College of Neuropsychopharmacology

#### **Medical Licensure:**

State of Maryland

#### **Board Certification:**

1980	National Board of Medical Examiners
1982	American Board of Nuclear Medicine

#### **Selected Publications:**

Wagner HN Jr, Burns HD, Dannals RF, Wong DF, et al. Imaging dopamine receptors in the human brain by positron emission tomography. *Science* 221:1264-1266, 1983.

Wong DF, Wagner HN Jr, Dannals RF, et al. Effects of age on dopamine and serotonin receptors measured by positron emission tomography in the living human brain. *Science* 226:1393-1396, 1984.

Wong DF, Gjedde A, Wagner HN Jr. Quantification of neuroreceptors in the living human brain. Part I. Irreversible binding of ligands. *JCBF&M* 6:137-146, 1986.

Wong DF, Gjedde A, Wagner HN Jr. Quantification of neuroreceptors in the living human brain. Part II. Assessment of receptor density and affinity using inhibition studies. *JCBF&M* 6:147-153, 1986.

Wong DF, Wagner HN Jr, Tune LE, et al. Positron emission tomography reveals elevated D2 dopamine receptors in drug-naive schizophrenics. *Science* 234:1558-1563, 1986.

Wong DF, Lever JR, Hartig PR, et al. Localization of serotonin 5-HT<sub>2</sub> receptors in living human brain by positron emission tomography using N1-([<sup>11</sup>C]-methyl)-2-Br-LSD. *Synapse* 1:393-398, 1987.

London ED, Broussolle EPM, Links JM, Wong DF, Cascella NG, et al. Morphine-induced metabolic changes in human brain. *Archives of General Psychiatry* 47:73-81, 1990.

London ED, Cascella NG, Wong DF, et al. Cocaine-induced reduction of glucose utilization in human brain. A study using positron emission tomography and [fluorine 18]fluorodeoxyglucose. *Arch of General Psychiatry* 47:567-574, 1990.

Young LT, Wong DF, Goldman S, Minkin E, Chen C, Matsumura K, Scheffel U, Wagner HN Jr. Effects of endogenous dopamine on kinetics of [<sup>3</sup>H]N-methylspiperone and [<sup>3</sup>H]raclopride binding in rat brain. *Synapse* 9:188-194, 1991.

Shaya EK, Scheffel U, Dannals RF, Wong DF. In vivo imaging of dopamine reuptake sites in the primate brain using single photon emission computed tomography (SPECT) and iodine-123 labeled RTI-55. *Synapse* 10(2):169-172, 1992.

Wong DF, Wilson AA, Chen C, Minkin E, Dannals RF, et al. In vivo studies of [125I] iodobenzamide and [11C]iodobenzamide: A ligand suitable for PET and SPECT imaging of cerebral D2 dopamine receptors. *Synapse* 12:236-241, 1992.

Wong DF, Yung B, Dannals RF, et al. In vivo imaging of baboon and human dopamine transporters by positron emission tomography using [11C]WIN 35,428. *Synapse* 15:130-142, 1993.

Pearlson GD, Tune LE, Wong DF, et al. Quantitative D2 Dopamine Receptor PET and Structural MRI Changes In Late Onset Schizophrenia: A Preliminary Report. *Schizophrenia Research* 19 4:783-795, 1993.

Tune LE, Wong DF, Pearlson GD, et al. Dopamine D2 Receptor Density Estimates in Schizophrenia: A Positron Emission Tomography Study with [11C]-N-methylspiperone. *Psy Research* 49:219-237, 1993.

Reith J, Benkelfat C, Sherwin A, Yasuhara Y, Kuwabara H, Andermann F, Bachneff S, Cumming P, Diksic M, Dyve SE, Etienne P, Evans AC, Lal S, Shevell M, Savard G, Wong DF, Chouinard G, Gjedde A. Elevated Dopa Decarboxylase Activity in Living Brain of Patients With Psychosis. *Proc. Natl. Acad. Sci. USA*. 91:11651-11654, 1994.

Pearlson GD, Wong DF, Tune LE, Ross CA, Chase GA, Links JM, Dannals RF, Wilson AA, Ravert HT, Wagner Jr. HN, et al.. In vivo D2 Dopamine Receptor Density in Psychotic and Nonpsychotic Patients with Bipolar Disorder. *Arch. Gen. Psychiatry*, 52:471-477, 1995.

Wong DF, Harris JC, Naidu S, Yokoi F, Marengo S, Dannals RF, Ravert HT, Yaster M, Evans A, et al. Dopamine transporters are markedly reduced in Lesch-Nyhan disease in vivo. *Proc Natl Ac Sci. USA* 83:5539-5543. 1996.

Wong DF, Young D, Wilson PD, Meltzer CC, Chan B, Dannals RF, Ravert HT, Kuhar MJ, Gjedde A. Quantification of Neuroreceptors in the Living Human Brain III D2-like Dopamine Receptors; Theory, Validation and Results of Normal Aging. *JCBF&M* 17:316-330, 1997.

Wong DF, Pearlson GD, Tune LE, et al. Quantification of Neuroreceptors in the Living Human Brain IV Validation Effects of Aging and Density Elevations of D2-like Receptors in Schizophrenia and Bipolar Illness. *JCBF&M* 17:331-342, 1997.

Wong DF, Singer HS, Brandt J, Shaya E, Chen C, Brown J, Kimball AW, Gjedde A, Dannals RF, Ravert HT, Wagner HN. D2-like Dopamine Receptor Density in Tourette Syndrome Measured by PET. *J Nuclear Medicine* 38:1243-1247, 1997.

Schlaepfer TE, Pearlson GD, Wong DF, Marengo S, Dannals RF. Competition of Intravenous Cocaine with [11C]-Raclopride at Dopamine D2 Receptors: A PET Study. *American Journal of Psychiatry* 154(9):1209-1213, 1997.

Grunder G, Yokoi F, Offord S, Ravert RT, Dannals RF, Salzman JK, Szymanski S, Wilson D, Howard DR, Wong DF. Time Course of 5-HT<sub>2A</sub> Receptor Occupancy in the Human Brain after a Single Oral Dose of the Putative Antipsychotic Drug MDL 100,907 Measured by Positron Emission Tomography. *Neuropharmacology* 17(3):175-185, 1997.

Villemagne VL, Rothman RB, Yokoi F, Rice KC, Matecka D, Dannals RF, Wong DF. Doses of GBR12909 which suppress cocaine self-administration in non-human primates substantially occupy dopamine transporters as measured by [11C]WIN 35,428 PET scans. *Synapse*, 32:44-50, 1999 .

Villemagne VL, Wong DF, Yokoi F, Stephane M, Rice KC, Matecka D, Clough DJ, Dannals RF, Rothman RB. GBR12909 Attenuates Amphetamine-Induced Striatal Dopamine Release as Measured by [11C]Raclopride Continuous Infusion PET Scans. *Synapse*, 33:268-273, 1999.

Cumming P, Yokoi F, Chen A, Deep P, Dagher A, Reutens D, Kapczinski F, Wong DF, Gjedde A. Pharmacokinetics of radiotracers in human plasma during positron emission tomography. *Synapse*, 34(2):124-134, 1999.

Hilton J, Yokoi F, Dannals RF, Ravert HT, Szabo Z, Wong DF. Column-Switching HPLC for the Analysis of Plasma in PET Imaging Studies. *Nuc Med & Biol*, 27:627-630, 2000.

Gjedde A, Wong DF. Quantification of Neuroreceptors in Living Human Brain V: Endogenous Neurotransmitter Inhibition of Haloperidol Binding in Psychosis. *Journal of Cerebral Blood Flow and Metabolism*. 21:982-994, 2001.

Wong DF, Brasic JR. In vivo imaging of neurotransmitter systems in neuropsychiatry. *Clin Neurosci Res* 1:35-45, 2001.

Kassiou M, Eberl S, Meikle SR, Birrell A, Constable C, Fulham MJ, Wong DF, Musachio JL. In vivo imaging of nicotinic receptor upregulation following chronic (-)-nicotine treatment in baboon using SPECT. *Nuclear Medicine and Biology* 28:165-175, 2001.

Villemagne PM, Naidu S, Villemagne VL, Yaster M, Wagner HN Jr, Harris JC, Moser JW, Johnston MC, Dannals RF, Wong DF. Brain glucose metabolism in Rett syndrome. *Ped Neurol* 27(2): 117-122, 2002.