

OHRI ANNUAL REVIEW SELF ASSESSMENT 2005

N.B. Increase spacing as needed.

Scientist Name: Paul Albert OHRI Program: Neuro
 Date: Jan 19, 2006

Publications (last 3 years, including the journal Impact Factor)

1. [5.1] Kushwaha, N., Harwood, S.C., Wilson, A.M. and Albert, P.R. (2006) Molecular determinants in the second intracellular loop of the 5-hydroxytryptamine(1A) (5-HT_{1A}) receptor for G-protein coupling. *Mol. Pharmacol.*, in press.
2. [7.9] *Czesak, M., *Lemonde, S., Peterson, E.A., Rogaeva, A. Albert, P.R. (2006) Cell-specific repressor or enhancer activities of NUDR/Deaf-1 at a 5-HT_{1A} receptor gene polymorphism. *J. Neuroscience* 26, *in press*.
3. [7.9] O'Hare, M.J., Kushwaha, N., Zhang Y., Aleyasin H., Callaghan, S.M., Slack, R.S., Albert, P.R., Vincent, I., Park D.S. (2005) Differential roles of nuclear and cytoplasmic cdk5 in apoptotic and excitotoxic neuronal death. *J. Neuroscience* 25, 8954-66.
4. [3.9] Kushwaha, N. and Albert, P.R. (2005) Novel coupling of 5-HT_{1A} autoreceptors to inhibition of mitogen-activated protein kinase activation via second intracellular loop/Gβγ subunit signaling. *Eur. J. Neuroscience* 21, 721-32..
5. [2.8] Albert, P.R. and Lemonde, S. (2004) 5-HT_{1A} receptors, gene repression and depression: guilt by association. *Neuroscientist* 10: 575-593.
6. [4.0] Lemonde, S., Du, L., Bakish, D., Hrdina, P. D., Albert, P.R. (2004) Association of the C(-1019)G 5-HT_{1A} functional promoter polymorphism with antidepressant response. *Int. J. Neuropsychopharmacol.* 7, 501-506.
7. [7.3] Fortin, A., MacLaurin, J.G., Arbour N., Cregan, S.P., Kushwaha, N., Callaghan, S.M., Park, D.S., Albert, P.R., and Slack, R.S. (2004) The proapoptotic gene Siva is a direct transcriptional target for the tumor suppressor p53 and E2F1. *J. Biol. Chem.* 279, 28706-14.
8. [7.3] Mao, H., Zhao, Q., Daigle, M., Ghahremani, M.H., Chidiac, P., Albert, P.R. (2004) RGS17, a novel Rz family regulator of Gi/o, Gz, and Gq signaling. *J. Biol. Chem.* 279, 26314-22.
9. [2.6] Rui, X., Al-Hakim, A., Tsao, J., Albert, P.R. and Schimmer, B.P. (2004) Expression of adenylyl cyclase-4 (AC-4) in Y1 and forskolin resistant adrenal cells. *Mol. Cell. Endocrinol.* 215: 101-108.
10. [5.0] Lemonde, S., Rogaeva, A., Albert, P.R. (2004) Cell type-dependent recruitment of trichostatin A-sensitive repression of the human 5-HT_{1A} receptor gene. *J. Neurochem.*, 88, 857-868.
11. [2.6] Al-Hakim, A., Rui, X., Tsao, J., Albert, P.R. and Schimmer, B.P. (2004) A role for type 4 adenylyl cyclase in the forskolin-response pathway of Y1 mouse adrenocortical tumor cells. *Mol. Cell. Endocrinol.* 214, 155-165.
12. [2.8] Abdouh, M., Albert, P. R., Drobetsky, E., Filep, J.G. and Kouassi, E. (2004) 5-HT_{1A}-mediated promotion of mitogen-activated T and B cell survival and proliferation is associated with increased translocation of NF-κB to the nucleus. *Brain, Behav. and Immunity* 18, 24-34.

13. [8.3] Lemonde S, Turecki G, Bakish D, Du L, Hrdina PD, Bown CD, Sequeira A, Kushwaha N, Morris SJ, Basak A, Ou XM, Albert PR (2003) Impaired repression at a 5-hydroxytryptamine 1A receptor gene polymorphism associated with major depression and suicide. *J Neuroscience* 23:8788-8799.
14. [3.9] Liu G, Ghahremani MH, Banihashemi B, Albert PR (2003) Diacylglycerol and ceramide formation induced by dopamine D2S receptors via Gbeta gamma -subunits in Balb/c-3T3 cells. *Am J Physiol Cell Physiol* 284:C640-648.
15. [8.3] Ou XM, Lemonde S, Jafar-Nejad H, Bown CD, Goto A, Rogaeva A, Albert PR (2003) Freud-1: A novel calcium-regulated repressor of the 5-HT1A receptor gene. *J Neuroscience* 23:7415-7425.

Total # of Publications **15** # as Sr. Author: **11** # with Impact Factor > 5 **7**.

Grants (last three years)

Neurosciences Program

Albert Paul Dr.

					2003-04	2004-05	2005-06
<i>Peer Reviewed</i>							
2002110	CIHR	01/10/2002 - 30/09/2005 ~	\$387,305.00	Grant	\$124,840.00	\$124,840.00	\$62,420.00
2002551	OMHF	01/04/2003 - 31/03/2005 ~	\$139,980.00	Grant	\$69,990.00	\$69,990.00	
2002565	CIHR	01/04/2003 - 31/03/2006 ~	\$291,255.00	Grant	\$97,085.00	\$97,085.00	\$97,085.00
	RENEWAL	01/04/2006 - 31/03/2011 ~	\$291,255.00	Grant	\$	\$	\$95,000.00
2004138	CIHR	01/03/2004 - 31/03/2007 ~	\$302,466.00	Grant	\$19,044.00	\$81,778.00	\$100,822.00
2004691	NSERC	01/04/2004 - 31/03/2005 ~	\$17,500.00	Studentship		\$17,500.00	\$17,500.00
2004750	NSERC	01/09/2004 - 31/08/2005 ~	\$17,500.00	Studentship Burns		\$17,500.00	\$17,500.00
2005148	OGSST	01/01/2005 - 31/12/2006 ~	\$20,000.00	Studentship Czesak,			\$10,000.00
2005327	OMHF	01/04/2005 - 31/03/2007 ~	\$150,000.00	Grant			\$75,000.00
2005466	CIHR	01/10/2005 - 30/09/2010 ~	\$655,040.00	Grant			\$74,081.00
<i>Non-Peer Reviewed</i>							
2005668	Tomahawk Farms	03/01/2005 - 31/03/2007 ~	\$10,000.00	Grant			\$10,000.00
2005669	Multiple Sources	03/01/2005 - 31/03/2007 ~	\$25,000.00	Grant			\$25,000.00
Sub-Total for Peer Reviewed -					\$310,959.00	\$408,693.00	\$454,408.00
Sub-Total for Non-Peer Reviewed -							\$35,000.00
Total for Albert Paul Dr.-					\$310,959.00	\$408,693.00	\$489,408.00

of active CIHR or NSERC Grants 3 Average Funding last 3 years \$370K/yr
 # of other Peer Reviewed Grants 1 Average Funding last 3 years \$75K/yr

Contracts (last three years)

of active Industry or Government Contracts Average Funding last 3 years \$

Trainees (last three years) graduate and postgraduate

Graduate Students

Completed:

9/01-1/04 Amanda Cockburn, M.Sc.
Thesis: Estrogen regulation of the human 5-HT1A receptor gene.
Dept. of Cellular and Molecular Medicine, University of Ottawa
Present position: Veterinary degree program, University of Montreal

5/97-3/04 Sylvie Lemonde, Ph.D.
Thesis: Transcriptoinal regulation of the human 5-HT1A receptor gene:
implication in major depression and suicide.
Dept. of Cellular and Molecular Medicine, University of Ottawa
Present position: M.D. degree program, University of Ottawa

Continuing Graduate Students

1/99 - Neena Kushwaha, Ph.D. Candidate, CIHR Scholar
9/00- Mahmoud Hadjighassem, Ph.D. Candidate, Iranian Scholarship
5/01- Anastasia Rogaeva, Ph.D. Candidate, CIHR Scholar
1/03- Margaret Czesak, Ph.D. Candidate.
1/04- Kirsten Jacobsen. Ph.D. Candidate NSERC Scholar
9/04- Ariel Wilson, M.Sc, Candidate
9/04- Ariel Burns, M.Sc. Candidate, NSERC Scholar
9/04- Federice Remes Lenicov, M.Sc. Candidate, U of Ottawa Scholarship
6/05- Houman Nafisi
6/05- Kimberly Galaraga

Post-doctoral Fellow:

6/00-9/03 Helen Mao, M.D., Ph.D.
Present position: TPD, Health Canada.
9/00-6/03 Gele Liu, Ph.D.
Present position: Post-doctoral fellow, Dr. Vance Trudeau, U. of Ottawa.
1/02-2/04 Christopher Bown, Ph.D., OMHF Fellow
Present position: Patent Law, G. Ronald Bell & Assoc., Ottawa.
3/03-2/04 Mohammad Farajollahi, M.D., Ph.D., Iranian Fellowship
Present position: Professor, University of Tehran, Iran
6/04-present Irit Itzhaki Van-Ham, Ph.D.

of Grad Students 12__ # of Post Docs _5_ # of other Trainees last 3 years _17_

Courses/Lectures (last three years) graduate, undergraduate, Medical students and residents

Graduate Courses: University of Ottawa

2003	NSC 5402	Cellular and Molecular Neuroscience (Coordinator)	60 h	Rating 1.5
2003	CMM 5211	Physiology	10 h/yr	
2004	CMM 8112	Molecular Pharmacology (Coordinator)	60 h	Rating 1.5
2004	NSC 5402	Cellular and Molecular Neuroscience (Coordinator)	60 h	Rating 2.0
2004	CMM 5211	Physiology	10 h/yr	
2005	NSC 5402	Cellular and Molecular Neuroscience (Coordinator)	60 h	Rating 1.5
2006	NSC 5402	Cellular and Molecular Neuroscience (Coordinator)	60 h	

External Invited Presentations (last three years)

1. 2/16-17/03 Participant, Consultation on Psychiatric Genetics, Neurogenetics, and Brain Genomics, Toronto, ON.
2. 03/07/03 Finding functional polymorphisms for depression and schizophrenia. Institute of Mental Health Research, Royal Ottawa Hosp., Ottawa, ON.
3. 03/06/03 Dopamine-D2 receptors: signaling and desensitization. Dept. Physiology, U. de Montreal.
4. *5/4/03 Chairperson, Theme I. Neurobiology of severe mental disorders: from cell to bedside. 25th annual symposium, Centre for Neuroscience Research, Université de Montréal.
5. 5/23/03 G-proteins as mitogens or mitogenic inhibitors: depends on whom you talk to. Robarts Research Institute, London, ON.
6. *5/24/03 Novel transcriptional regulators of the 5-HT1A receptor. Southwestern Ontario Neuroscience Group Annual Meeting, London, ON.
7. *6/01/03 Dopamine-D2 receptors: novel aspects of signaling, regulation, and implications for schizophrenia. CCNP Annual Meeting, Montreal, QC.
8. *6/20/03 G protein specificity of dopamine D2 receptor inhibition of lactotroph function. Endocrine Soc. Meeting, Philadelphia, PA.
9. *8/7/03 Decoding receptor-G protein-effector specificity. Tularik, San Francisco, CA.
10. *10/21/03 Decoding receptor-G protein-effector specificity. IBC 8th International G protein-coupled receptors. Boston, MA.
11. *11/17/03 Quest. Diagnostics and Therapeutics for Depression. Bionorth Business Case competition. Ottawa, ON.
12. *1/28/04 Repression and depression: the role of transcriptional repressors of the 5-HT1A receptor gene in major depression and suicide. Dept. of Neuroscience, Karolinska Institute, Sweden.
13. *2/3/04 G protein specificity in prolactin and growth hormone regulation. 2004 Prolactin Gordon Conference. Ventura, CA.
14. 4/13/04 Transcriptional regulation of the Serotonin-1A receptor in mental illness and antidepressant action. Department of Pharmacology, Weill Medical College of Cornell University, N.Y., N.Y.

15. *4/29/04 Symposium: 5-HT_{1A} Receptors: New Roles for an Established Player in the Pathogenesis and Treatment of Major Depression [Chair: Bernard Lerer; Co-Chair: Paul R. Albert], Society of Biological Psychiatry, N.Y., N.Y.
16. *6/2/04 Symposium: 5-HT and depression. The C(-1019)G 5-HT_{1A} functional polymorphism: association with depression, suicide and antidepressant response. CCNP Meeting, Kingston ON.
17. 9/28/04 5-HT_{1A} receptors, repression and depression: guilt by association. Dept. of Pharmacology, Wayne State University, Detroit, MI.
18. 10/29/04. Transcriptional regulation of the 5-HT_{1A} receptor gene in depression. Oregon National Primate Research Center, Portland, OR.
19. 12/12-16/04. Gene regulation at the C(-1019)G serotonin_{1A} receptor promoter polymorphism and its association with major depression and suicide. ACNP Annual Meeting, Puerto Rico.
20. 1/12/05. Finding functional promoter polymorphisms for mental illness. CAMH, University of Toronto, Toronto ON.
21. 2/09/05. Genetic regulation of serotonin receptor function and its association with affective disease and treatment outcome. Centre Pierre Janet, Gatineau, Quebec.
22. 3/15/05. Finding functional promoter polymorphisms for mental illness. Dept. of Pharmacology, McGill University, Montreal.
23. 4/11/05. Transcriptional regulators of the 5-HT_{1A} receptor gene: association with depression. Loeb Seminar Series, OHRI, Ottawa, Canada.
24. 1/12/05. Finding functional promoter polymorphisms for mental illness. CAMH, University of Toronto, Toronto ON.
25. 2/09/05. Genetic regulation of serotonin receptor function and its association with affective disease and treatment outcome. Centre Pierre Janet, Gatineau, Quebec.
26. 3/15/05. Gene repressor mechanisms in the serotonin system implicated in major depression. Department of Pharmacology, McGill Univ., Montreal, Quebec.
27. 4/11/05. Transcriptional regulators of the 5-HT_{1A} receptor gene: association with depression. Loeb Seminar Series, OHRI, Ottawa, Canada.
28. 6/14/05. Regulation of serotonin and dopamine systems in health and disease. Canadian Congress of Neurological Sciences. Ottawa, ON.
29. 6/17/05. Genetic mechanisms of serotonin-1A autoreceptor regulation in major depression. Univ. of Mississippi, Jackson, MS.
30. 11/7/05. Transcriptional regulation in the serotonin system implicated in mental illness and antidepressant action. Columbia University, N.Y.
31. 3/6/06. Association of the 5-HT_{1A} C(-1019)G functional promoter polymorphism with affective disease and response to antidepressants. Symposium: "Pharmacogenetics of Antidepressants and Mood-Stabilisers", International Soc. of Affective Disorders Meeting, Lisbon, Portugal
32. 5/18-20/06. Altered regulation of the 5-HT_{1A} receptor gene at the C(-1019)G polymorphism: association with reduced response to antidepressants. Symposium: **Genetic, Imaging, and Biological Studies of the Serotonin 5-HT_{1A} Receptor**. Soc. for Biol. Psych., Toronto. May 18-20.

Memberships (last three years) on committees, grant panels, editorial boards, etc.

Editorial Board Membership

7/03-7/08 J. Biol. Chem. (5 ms/month)

1/04-1/07 Int. J. Neuropsychopharmacol. (6 ms/yr)

Organizing Committee

1998-present Great Lakes GPCR Retreat

Organizer

2005 Great Lakes GPCR Retreat, Chateau Montebello, Quebec

Grant Review Committees:

2005- CIHR, Pharmacology Panel, Member
2003-4 Ontario Mental Health Foundation, Special Initiative Review
2000-04 CIHR, Neuroscience B Panel, Member
1998-2003 Ontario Mental Health Foundation, Grant Committee

CIHR Special Committees

2003 Participant, Canadian research consultation on Psychiatric Genetics, Neurogenetics, and Brain Genomics, Toronto, ON
2005-7 Endocrine Society, Publications Managing Subcommittee

Contributions (to the Institute, the Hospital and the University)

Contributions (to the Institute, Hospital and University)

1996-2004 Application coordinator, Centre for Brain Recovery CFI Proposals
1996- Coordinator, NEB, Wisent, Clontech, FisherFast Biobars
2000-2004 Member and Contact Person, Faculty of Medicine Wellness Committee
2001-4 Chair, OHRI Seminar Committee
2001-4 Coordinator, OHRI Pfizer Institute-wide Seminar Series
2001-4 Member, OHRI Training Committee
2002 Member, Institutional Self-Study Research Panel, Faculty of Medicine
2002- Member, University of Ottawa, Poster Evaluation Committee
2002- Site Leader, OHRI, Neuroscience East
2002- Recruitment Chair, HSFO Centre of Excellence: Centre for Stroke Recovery
2004-2005 Organizer, OHRI/CHEO/Univ. of Ottawa Distinguished Professor series
2004- Director, Neuroscience Graduate Program
2004- Member, Neuroscience Graduate Committee
2005- Deputy Director, OHRI Neuroscience

Commercialization Activities

ALBERT, Paul R.; LEMONDE, Sylvie

Canadian Patent Application No. 2,269,199 August 24, 1999

Mutations of the 5' region of the human 5-HT1A gene, associated proteins of the 5' region and a diagnostic test for major depression and related mental illness.

ALBERT, Paul R.; LEMONDE, Sylvie

U.S. Patent Application No. 11/181,374. October 29, 1999

Submission of missing parts: July 13, 2005

Mutations of the 5' region of the human 5-HT1A gene, associated proteins of the 5' region and a diagnostic test for major depression and related mental illness.

2003 Quest. Diagnostics and Therapeutics for Depression. Bionorth Business Case competition. Ottawa, ON.

Other Accomplishments (anything not covered above that you would like to highlight)

Thesis examiner (last 3 years)

1. Sy, C. M.Sc. CHAIR. The cloning of NOTCH1 and GROOVE in NOTOPHTHALMUS VIRIDESCENS, the red spotted newt, and an examination of the expression profiles of both genes in the regenerating forelimb through real time RT-PCR. Dept. of Cellular and Molecular Medicine, University of Ottawa, 8/20/03.
2. Guzzo, R. Ph.D. INTERNAL EXAMINER. Sarcolemmal membrane associated proteins: Structure function analyses and localization studies. Dept. of Cellular and Molecular Medicine, University of Ottawa, 11/03.
3. Rahbar, R. M.Sc. INTERNAL EXAMINER Claudin tight junction: what is your function? . Dept. of Cellular and Molecular Medicine, University of Ottawa, 11/03.
4. Bissoon-Haqqani, S. Ph.D. CHAIR. Mechanisms of resistance to anti-thymidylate synthase chemotherapeutic agents in colon cancer. Dept. of of Biochemistry, Microbiology, Immunology, University of Ottawa 12/03.
5. Anton Terasmaa, Ph.D. EXTERNAL EXAMINER. Dopamine D2 receptor G protein coupling and its regulation. Karolinka Institute, Stockholm, Sweden. 1/04.
6. Sami S. Qutob, Ph.D. INTERNAL EXAMINER Isolation and characterization of colorectal cancer cell clones with a wide range of X-radiation responses. 5/11/05
7. Rafal M. Iwaszow, Ph.D. INTERNAL EXAMINER Delineating the molecular basis of subtype-specific ligand binding, G protein coupling, and signaling properties of D1 and D5 dopaminergic receptors. 10/1/04.
8. Karine Lortie, M.Sc. INTERNAL EXAMINER The growth-arrest-specific gas7 protein potentiates neuronal differentiation. 8/24/04.
9. Yinglun Sheng, Ph.D. INTERNAL EXAMINER. G protein signalling and G protein coupled receptor (GPCR) pathway in Xenopus oocyte maturation. 2/14/05.
10. Ken Ma, Ph.D. INTERNAL EXAMINER. Brain natriuretic peptide gene expression and secretion following stimulation with pro-inflammatory cytokines and conditioned medium from all-activated mixed lymphocyte reactions. 12/2/04.

11. Damiano Conte, Ph.D. CHAIR. The role of the X-linked inhibitor of apoptosis (XIAP) and the cellular inhibitor of apoptosis (CIAP2) in T cell development and in an innate immune response. 10/15/04
12. Leonard, Kevin, M.Sc. INTERNAL EXAMINER. XIAP/X-linked inhibitor of apoptosis gene therapy protects photoreceptors in animal models of retinitis pigmentosa. 7/22/05
13. Tania F. Gendron, Ph.D. INTERNAL EXAMINER. The role of cyclooxygenase-2 in neurotoxicity and preconditioning-induced neuroprotection. 8/05
14. Patrice D. Smith, Ph.D. INTERNAL EXAMINER. Mechanisms of dopaminergic neuron loss in models of Parkinson's disease. Implication for novel therapeutic intervention. 8/05
15. Astra Chang, M.Sc. INTERNAL EXAMINER. Intracellular signalling involved in the regulation of atrial natriuretic factor secretion. 3/06
16. Ian Hester, M.Sc. INTERNAL EXAMINER. HALO, a novel Bhlh-PAS protein induced by neuronal preconditioning and ischemia, mediates cytotoxicity through BAX gene upregulation. 3/06

Ph.D. Committees (1 meeting/yr):

1. Sami Qutob, Dept. of Cellular and Molecular Medicine, 2/25/99-5/05
2. Arsalan Haqqani, Dept. of Biochem., Microbiol., Immunol. 3/30/99-2003
3. Lindsay Angus, Dept. of Cellular and Molecular Medicine, 11/3/99-present
4. Michael O'Hare, Dept. of Cellular and Molecular Medicine, 8/00-present
5. Jing Wang, Dept. of Biochem., Microbiol., Immunol. 5/02-present
6. Brice Le Francois, Dept. of Biochem., Microbiol., Immunol. 8/02-present

Ph.D. Comprehensive Exam Committees:

1. Tania Gendron, Dept. of Cellular and Molecular Medicine, Univ. of Ottawa, 3/03
2. Ken Ma, Dept. of Cellular and Molecular Medicine, Univ. of Ottawa, 10/03
3. Sami Qutob, , Dept. of Cellular and Molecular Medicine, Univ. of Ottawa, 10/03
4. Patrice Smith, Dept. of Cellular and Molecular Medicine, Univ. of Ottawa, 04/05

MSc./Ph.D. Committees (1 meeting/yr):

1. Julie Deschenes, Dept. of Cellular and Molecular Medicine, 11/99-present
2. Andre Fortin, Dept. of Cellular and Molecular Medicine, 5/00-present
3. Patrice Smith, Dept. of Cellular and Molecular Medicine, 1/02-present
4. Ally Pen, Dept. of Cellular and Molecular Medicine, 1/03-present
5. Simona Wagner, Dept. of Cellular and Molecular Medicine, 12/03-present
6. Hossein Aleyasin, Dept. of Cellular and Molecular Medicine, 12/03-present
7. Astra Chang, Dept. of Cellular and Molecular Medicine, 2/04-present

8. Yasmilde Rodriguez, Dept. of Cellular and Molecular Medicine, 12/04-present
9. Keyvan Sedaghat, Dept. of Cellular and Molecular Medicine, 07/05-present

Appendix B
OHRI Annual Evaluation
For the three year period ending March 31, 2005

Please comment on the Scientists performance in the following areas during the last 3 years using the following ratings: Expectations (Does not meet, meets some, met most, met or exceeded most, exceeded virtually all) or not applicable. Please add comments for all criteria that are not rated as met most expectations

Publications:

Grants:

Salary Awards:

Industry of Government Contracts (if Applicable):

Trainees:

Courses/Lectures:

External Invited Presentations:

Membership on Committee, grant panels, editorial boards:

Contributions to the Institute, Hospital, and University:

Commercialization Activities (if Applicable):

Other Accomplishments (anything not covered above that you would like to highlight):

Scientist Comments:

Program Director Comments:

Overall Assessment: Dr. _____

Expectations (Does not meet, meets some, met most, met or exceeded most, exceeded virtually all)

Program Director Name

Program Director Signature

Date

Scientist Name

Scientist Signature

Date