CURRICULUM VITAE
JEROLD CHUN

Citizenship USA

Education

1988-1991	Postdoctoral Fellow, Whitehead Institute for Biomedical Research/MIT
1981-1988	M.D.-Ph.D. (Neurosciences), Stanford University School of Medicine
1977-1981	B.A. in English and Biology, The University of Hawaii at Manoa

Academic Research and Professional Experience

2006-	Adjunct Professor, Molecular and Integrative Neuroscience Department (MIND), TSRI
2003-	Professor, Department of Molecular Biology, The Scripps Research Institute, Investigator, Helen L. Dorris Child and Adolescent Neuropsychiatric Disorder Institute
2003-	Adjunct Professor of Neuroscience, UC San Diego (UCSD)
2002-	Adjunct Professor of Pharmacology, UCSD
2001-2002	Professor of Pharmacology, UCSD
2000-2001	Acting Director, Neurosciences Graduate Program, UCSD
1999-2001	Associate Director, Neurosciences Graduate Program, UCSD
1998-2001	Associate Professor (with tenure), Department of Pharmacology, and Member, Neurosciences and Biomedical Sciences Programs
1995-	Executive Committee Member, Neurosciences Graduate Program, UCSD
1991-1998	Assistant Professor, Department of Pharmacology and Member, Neurosciences and Biomedical Sciences Programs, UCSD School of Medicine
1988-1991	Postdoctoral Fellow, Whitehead Institute
1981-1988	M.D.-Ph.D. (MSTP) candidate, Department of Neurobiology, Stanford University School of Medicine
1979-1981	Undergraduate honors thesis student, Pacific Biomedical Research Center, University of Hawaii

Academic Review and Advisory Positions

2008	Reviewer, Special Emphasis Panel, Support of Competitive Research (SCORE) Awards, NIGMS
2007-	Editorial Advisory Board, Current Pharmaceutical Design
2007-	Editorial Board Member, Open Neuroscience (ON) Journal
2007-	Associate Editor, “Prostaglandin and Lipid Mediators,” Bentham Science Publishers
2006-	Reviewer, Deutsche Forschungsgemeinschaft (DFG), Germany
2006-	Reviewer, The Wellcome Trust, UK
2006	Byrd Alzheimer’s Reviewer
2006-	Chairman, External Advisory Committee, RCMI/NINDS University of Hawaii
2005-2008	Regular Member, NIH MBPP study section
2004-	March of Dimes, Basil O’Connor Scholars Committee
2004-	External Reviewer, Biotechnology and Biological Sciences Research Council (BBRC), UK
2004	External reviewer, The Netherlands Organisation for Health Research and Development
2004	External reviewer, Genome British Columbia

2004-	Scientific Advisory Committee, Special Neuroscience Research Program (NINDS, University of Hawaii)
2004	External Reviewer, Sass Foundation
2000-2005	Editorial Board Member, Journal of Biological Chemistry
2000-2003	Permanent Member, MDCN-6, NIH
2001-	Editorial Board, Journal of Molecular Medicine
2000-	External reviewer, Human Frontier Sciences Program
2000-	External Advisory Committee, Research Centers in Minority Institutions (RCMI, NCRR/NIH supported), University of Hawaii
2000-	External consultant, University of Hawaii School of Medicine
1998-	Reviewer, Alzheimer's Disease Association
1998-2000	Ad hoc Member, MDCN-6, NIH
1999	NIMH Special Emphasis Panel
1996-1998	Permanent Member, NIMH Molecular, Cellular and Developmental Neuroscience
1990-	Ad Hoc Reviewer, NSF

Ad Hoc Reviewer for: Science/Nature Genetics/PNAS/Development/Neuron/Nature Neuroscience/J. Neuroscience/J. Cell Biology/Mol. Cell. Biol./J. Comp. Neurol./European J. Neurosci./Mol. Cell. Neurosci./J. Neurobio./J. Biol. Chem./Genomics/Oncogene/Mol. Pharm./Exp. Neurol./Exp. Cell Sci./Glia/Develop. Dynam./J. Cell Science/FEBS Letters/TIPS/Neuroscience/J. Neurochem./J. Immunol./Biochim. Biophys. Acta./Analytical Biochem.Science/Natur Wissenschaft/Lipids/Life Sciences/Other

Honors and Awards

2007	Chancellor's Award for Excellence in Neuroscience, LSU Medical School
1999-2006	Independent Scientist Award, NIMH
1994-1999	First Award, NIMH
1993-1995	Basil O'Connor Scholar (March of Dimes Birth Defects Foundation), UCSD
1992-1995	Klingenstein Fellow in the Neurosciences, UCSD
1992-1994	Alfred P. Sloan Research Fellow, UCSD
1988-1991	Helen Hay Whitney Fellow, Whitehead Institute for Biomedical Research
1981-1988	Trainee, Medical Scientist Training Program (MSTP), Stanford University School of Medicine
1983	Grass Fellowship, Cold Spring Harbor Laboratory course in Molecular and Cellular Neurobiology
1981	Dean prize, outstanding senior thesis in the natural sciences, University of Hawaii
1981	B.A. with high honors in English and Biology, University of Hawaii, Manoa

Industrial/Business Experience

2008	Scientific Advisory Board, Amira
2005	Scientific Advisory Board, Cellular Bioengineering, Inc.
2005-	Formal Scientific Advisor, CMX Capital
2003-2005	Formal Scientific Advisor, Novel Bioventures
2001-	Consultant, University Inventions
2000-2003	Merck & Co., Inc. (consultant, Senior Director, founding Department Head, Molecular Neuroscience, Merck Research Labs, San Diego, CA)

Invited Talks (last 5 years)

2004	Hallym University, Korea
2004	University of North Carolina, Chapel Hill

2004 NIH meeting on Lipidomics (speaker, meeting summarizer), Washington, D.C.
2004 University of North Carolina
2004 PABMB/SBBq Symposium, Caxambu, Brazil
2004 UFJR, Rio de Janeiro
2004 Millenium Symposium, Vina del Mar, Chile
2004 8th International Congress, PAF and related lipid mediators, Berlin
2004 77th annual meeting of the Japan Biochemical Society, Tokyo
2005 Department of Genetics, Radiation Effects Research Foundation, Hiroshima
2005 Dept. of Physiology/Neurophysiology, Charite University, Berlin
2005 Novartis Pharmaceuticals, Basel
2005 Kennedy Center, Vanderbilt University
2005 IBC symposium on GPCRs (organizer), San Diego
2005 Dept. Brain and Cognitive Sciences, MIT
2005 Euroglia meeting, Amsterdam
2005 FASEB Summer meeting on Lipids, Snowmass
2005 28th Annual Meeting of the Japan Neuroscience Society, Yokohama
2005 BioScience 2005, from genes to systems, Glasgow
2005 Department of Biological Sciences, University of Delaware
2005 Department of Biology, University of Iowa
2005 Vascular Biology Program, University of Connecticut
2005 University of Hawaii, SNRP Symposium
2006 Hallym University, South Korea
2006 Federation of European Neuroscience Societies, Vienna
2006 Federação de Sociedades de Biologia Experimental, Sao Paulo
2006 Federal University of Rio de Janeiro, Rio
2006 American Society for Human Genetics, New Orleans
2007 Gordon Research Conference on Molecular Pharmacology, Ventura
2007 Keystone Symposium on Bioactive Lipids, Taos
2007 Keystone Symposium on Reproduction Advances, Santa Fe
2007 Cincinnati Children's Hospital Medical Center
2007 3rd International Conference on Phospholipases A_2 and Lipid Mediators, Sorrento, Italy
2007 FASEB Summer Research Conference Keynote Speaker, "Lysophospholipid Mediators in Health and Disease," Tucson
2007 Eicosanoid Research Foundation, "Bioactive Lipids in Cancer, Inflammation and Related Diseases," Montreal
2007 Louisiana State University Neuroscience Center Chancellor's Award Lecture in Neuroscience, New Orleans
2007 European Committee for Treatment and Research in Multiple Sclerosis (ECTRIMS), Prague, Czech Republic
2007 Carla Shatz Symposium, La Jolla, CA
2008 World Congress on Treatment and Research in Multiple Sclerosis, Fingolimod (FTY720) Satellite Symposium, Montreal
2008 British Pharmacological Society, "Lysophospholipid receptors, role in health and disease," West Sussex, UK
2009 Biogen Idec S1P Symposium, Cambridge, MA (scheduled)
2009 ASBMB 2009 Annual Meeting, New Orleans (scheduled)
2009 Keystone Symposium on Complex Lipids in Biology: Signaling, Compartmentalization and Disease, Squaw Creek, Olympic Valley (scheduled)
2009 5th International Conference on the Female Reproductive Tract, Frauenchiemsee, Germany (scheduled)

2009 The 5th Takeda Science Foundation Symposium on PharmaSciences, Tokyo, Japan (scheduled)
2009 FASEB Summer Research Conference Co-Organizer, "Lysophospholipid Mediators in Health and Disease," Carefree, Arizona
2009 11th International Conference on Bioactive Lipids in Cancer, Inflammation and Related Diseases, Cancun, Mexico (scheduled)
2009 Southeastern Regional Lipid Conference Keynote Speaker, Cashiers, North Carolina (scheduled)

Memberships

1982- Society for Neuroscience
1998- Federation of American Societies for Experimental Biology
2003 Society for Cell Biology

Current NIH Grant Support

NIH R01 MH051699 Chun (PI) 05/01/94 – 03/31/09
"**Receptor-mediated LPA signaling in cortical development**"
Role: Principal Investigator

NIH R01 NS048478 Chun (PI) 09/15/04 – 04/30/09
"Lysophospholipids: Roles for Schwann cells and myelination"
Role: Principal Investigator

NIH R01 HD050685 Chun (PI) 05/01/06 – 02/28/11
"**Interactions of LPA & Prostaglandins in Implantation**"
Role: Principal Investigator

NIH R01 DA019674 Chun (PI) 08/01/06 - 07/31/11
"**Receptor-Mediated S1P Signaling in the Embryonic Brain**"
Role: Principal Investigator

NIH UL RR025744 Chun (PI) 12/01/08 – 11/30/09
"**LPA signaling in hydrocephalus**"
Role: Principal Investigator

NIH R21 DC009505 Chun (PI) 02/18/09 – 1/31/11
"**Targeting S1P receptors to prevent hearing loss**"
Role: Principal Investigator

Patents

U.S. Patent No.: 6,057,126
Date: May 2, 2000
Title: Mammalian EDG-5 Receptor Homologs
Inventors: Munroe, Donald; Gupta, Ashwani; Vyas, Tejal; Chun, Jerold
Application No.: 997,803
Filed: December 24, 1997

U.S. Patent No.: 6,140,060
Date: October 31, 2000
Applicant: Jerold Chun et al.
US Application S.N.: 08/763,938; S/N 09/153,464
Filed: December 12, 1996
Title: Cloned Lysophosphatidic Acid Receptors

U.S. Patent No.: 6,150,345
Date: November 21, 2000
Applicant: Jerold J.M. Chun et al. Examiner: Michael Borin
Serial No.: 09/153,464Group Art Unit: 1654
Filed: September 15, 1998 Docket: 1133.006US1
Title: Method for Promoting Survival of Myelin Producing Cells

Two patents pending.

Articles/Letters

1. Chun JJM, Nakamura MJ, Shatz CJ. Transient cells of the developing mammalian telencephalon are peptide-immunoreactive neurons. **Nature** 1987;325:617-620.

2. Chun JJM, Shatz CJ. A fibronectin-like molecule is present in the developing cat cerebral cortex and is correlated with subplate neurons. **J Cell Biol** 1988;106:857-872.

3. Chun JJM, Shatz CJ. Redistribution of synaptic vesicle antigens is correlated with the disappearance of a transient synaptic zone in the developing cerebral cortex. **Neuron** 1988;1:297-310.

4. Chun JJM, Shatz CJ. Interstitial cells of the adult neocortical white matter are the remnant of the early generated subplate neuron population. **J Comp Neurol** 1989;282:555-569.

5. Chun JJM, Shatz CJ. The earliest-generated neurons of the cat cerebral cortex: characterization by MAP2 and neurotransmitter immunohistochemistry during fetal life. **J Neurosci** 1989;9:1648-1667.

6. Chun JJM, Schatz DG, Oettinger MA, Jaenisch R, Baltimore D. The Recombination activating gene-1 (RAG-1) transcript is present in the murine central nervous system. **Cell** 1991;64:189-200.

7. Turka LA, Schatz DG, Oettinger MA, Chun JJM, Gorka C, Lee K, McCormack WT, Thompson CB. Thymocyte expression of the recombination activating genes RAG-1 and RAG-2 can be terminated by T-cell receptor stimulation in vitro. **Science** 1991;253:778-781.

8. Chun JJM. A protocol using retrovirally-introduced multiple oncogenes in the production of neuron-like cell lines from the murine central nervous system. **NeuroProtocols** 1993;3:214-221.

9. Blaschke AJ, Staley K, Chun J. Widespread programmed cell death in proliferative and postmitotic regions of the fetal cerebral cortex. **Development** 1996;122:1165-1174 (see comment in **Neuron** 1996;16:693).

10. Chun J, Jaenisch R. Clonal cell lines produced by birth-date targeting of neocortical neuroblasts using multiple oncogenes transduced by retroviruses. **Mol Cell Neurosci**

1996;7:304-321.

11. Hecht JH, Weiner JA, Post SR, Chun J. Ventricular zone gene -1 (Vzg-1) encodes a lysophosphatidic acid receptor expressed in neurogenic regions of the developing cerebral cortex. **J Cell Biol** 1996;135:1071-1083.

12. Staley K, Blaschke AJ, Chun J. Apoptotic DNA fragmentation is detected by a semi-quantitative ligation-mediated PCR of blunt DNA ends. **Cell Death and Differen** 1997;4:66-75.

13. Huang LJ, Durick K, Weiner JA, Chun J, Taylor SS. Identification of a novel protein kinase A anchoring protein that binds both type I and type II regulatory subunits. **J Biol Chem** 1997;272:8057-8064.

14. Weiner JA, Chun J. Png-1, a nervous system-specific zinc finger gene, identifies regions containing postmitotic neurons during mammalian embryonic development. **J Comp Neurol** 1997;381:130-142.

15. Weiner JA, Chun J. Maternally-derived immunoglobulin light chain is present in the fetal mammalian CNS. **J Neurosci** 1997;17:3148-3156.

16. Bain G, Engel I, Maandag ECR, te Riele HPJ, Voland JR, Sharp LL, Chun J, Huey B, Pinkel D, Murre C. E2A deficient mice rapidly develop T cell leukemias. **Mol Cell Biol** 1997;17:4782-4791.

17. McWhirter JR, Goulding M, Weiner J, Chun J, Murre C. A novel fibroblast growth factor gene expressed in the developing nervous system is a downstream target of the chimeric homeodomain oncoprotein E2A-Pbx1. **Development** 1997;124:3221-3232.

18. Huang LJ, Durick K, Weiner JA, Chun J, Taylor SS. D-AKAP2, a novel protein kinase A anchoring protein that contains a potential RGS domain. **Proc Natl Acad Sci USA** 1997;94:11184-11189.

19. Blaschke AJ, Weiner JA, Chun J. Programmed cell death is a universal feature of embryonic and postnatal neuroproliferative regions throughout the CNS. **J Comp Neurol** 1998;396:39-50.

20. Fukushima N, Kimura Y, Chun J. A single receptor encoded by vzg-1/lpa1/edg-2 couples to G-proteins and mediates multiple cellular responses to lysophosphatidic acid (LPA). **Proc Natl Acad Sci USA** 1998;95:6151-6156.

21. Pompeiano M, Hvala M, Chun J. Onset of apoptotic DNA fragmentation can precede cell elimination by days in the small intestinal vilus. **Cell Death and Diff** 1998;5:702-709.

22. Weiner JA, Hecht JH, Chun J. The lysophosphatidic acid receptor gene vzg-1/lpA1/edg-2 is expressed by mature oligodendrocytes during myelination in the postnatal murine brain. **J Comp Neurol** 1998;398:587-589.

23. Contos JJA, Chun J. Complete cDNA sequence, genomic structure and chromosomal localization of the LPA receptor gene, vzg-1/lpA1/Gpcr26. **Genomics** 1998;51:364-378.

24. Zhang G, Contos JJA, Weiner JA, Fukushima N, Chun J. Comparative analysis of three

murine G-protein coupled receptors activated by sphingosine-1-phosphate. **Gene** 1999;227:89-99.

25. Nagai Y, Onodera O, Chun J, Strittmatter WJ, Burke JR. Expanded polyglutamine domain proteins bind neurofilament and alter the neurofilament network. **Exp Neurol** 1999;155:195-203.

26. Dubin AE, Bahnson T, Weiner JA, Fukushima N, Chun J. Lysophosphatidic acid (LPA) stimulates neurotransmitter-like conductance changes that precede GABA and L-glutamate in early, presumptive cortical neuroblasts. **J Neurosci** 1999;19:1371-1381.

27. Weiner JA, Chun J. Schwann cell survival mediated by the signaling phospholipid lysophosphatidic acid. **Proc Natl Acad Sci** 1999;96:5233-5238.

28. Marszalek JR, Weiner JA, Farlow SJ, Chun J, Goldstein LSB. Novel dendritic kinesin sorting identified by different process targeting of two related kinesins: KIF21A and KIF21B. **J Cell Biol** 1999;145:469-479.

29. Gu Y, Sekiguchi J, Gao Y, Dikkes P, Frank K, Ferguson D, Hasty P, Chun J, Alt FW. Defective embryoic neurogenesis in ku, but not DNA-PKcs, deficient mice. **Proc Natl Acad Sci USA** 2000;97:2668-2673.

30. Contos JJA, Chun J. Genomic characterization of the lysophosphatidic acid receptor gene, lpA2/Edg4, and identification of a frameshift mutation in a previously characterized cDNA. **Genomics** 2000;64:155-169.

31. Pompeiano M, Blaschke AJ, Flavell RA, Srinivasan A, Chun J. Decreased apoptosis in proliferative and postmitotic regions of the caspase 3 deficient embryonic CNS. **J Comp Neurol** 2000;423:1-12.

32. Ishii I, Contos JJA, Fukushima N, Chun J. Functional comparisons of the lysophosphatidic acid receptors LP_{A1}, LP_{A2} and LP_{A3} in neuronal cell lines using a retrovirus expression system. **Mol Pharmacol** 2000;58:895-902.

33. Fukushima N, Weiner JA, Chun J. Lysophosphatidic acid (LPA) is a novel extracellular regulator of cortical neuroblast morphology. **Dev Biol** 2000;228:6-18.

34. Contos JJA, Fukushima N, Weiner JA, Kaushal D, Chun J. Requirement for the lp_{A1} lysophosphatidic acid receptor gene in normal suckling behavior. **Proc Natl Acad Sci USA** 2000;97:13384-13389.

35. Contos JJA, Ishii I, Chun J. Lysophosphatidic acid receptors. **Mol Pharmacol** 2000;58:1188-1196.

36. Hagihara K, Watanabe K, Chun J, Yu Yamaguchi Y. Glypican-4 is an FGF2-binding heparan sulfate proteoglycan expressed in neural precursor cells. **Dev Dyn** 2000;219:353-367.

37. Kimura Y, Schmitt A, Fukushima N, Ishii I, Kimura H, Nebreda AR, Chun J. Two novel Xenopus homologs of mammalian LP_{A1}/edg-2 function as lysophosphatidic acid receptors in Xenopus oocytes and mammalian cells. **J Biol Chem** 2001;276:15028-15215.

38. Contos JJA, Chun J. The mouse lpA3/Edg7 lysophosphatidic acid receptor gene: sequence, genomic structure, chromosomal location and expression pattern. **Gene** 2001;267:243-253.

39. Moeller T, Contos JJ, Musante DB, Chun J, Ransom BR. Expression and function of lysophosphatidic acid receptors in cultured rodent microglial cells. **J Biol Chem** 2001;276:25946-25952.

40. Weiner JAW, Fukushima N, Contos JJA, Scherer SS, Chun J. Regulation of Schwann cell morphology and adhesion by receptor-mediated lysophosphatidic acid signaling. **J Neurosci** 2001;21:7069-7078.

41. Ishii I, Friedman B, Ye X-Q, Kawamura S, McGiffert C, Contos JJA, Kingsbury M, Zhang G, Brown JH, Chun J. Selective loss of sphingosine 1-phosphate signaling with no obvious phenotypic abnormality in mice lacking its G protein-coupled receptor, LPB3/EDG-3. **J Biol Chem** 2001;276:33697-33704.

42. Rehen SK, McConnell MJ, Kaushal D, Kingsbury MA, Yang AH, Chun J. Chromosomal variation in neurons of the developing and adult mammalian nervous system. **Proc Natl Acad Sci USA,** 2001;98:13361-13366. (See comments in *Nature Reviews Neuroscience* 2001;2:853, *The Scientist* 2002;16:35, *Revista Ciencia Hoje* 2002:19-21, *Clinical Genetics* 2002;61:169-175, http://www.nature.com/nsu/021216/021216-2.html, http://in.news.yahoo.com/021217/139/1z72u.html, http://www.wetheliving.com/pipermail/psychology/2002-December/000245.html, http://www.facultyof1000.com/about/biography/1770529409296342).

43. Ishii I, Chun J. Anandamide-induced neuroblastoma cell rounding via the CB1 cannabinoid receptors. **Neuroreport** 2002;13:593-596.

44. Fukushima N, Weiner JA, Kaushal J, Contos JJA, Rehen SK, Kingsbury MA, Kim KY, Chun J. Lysophosphatidic acid influences the morphology and motility of young, postmitotic cortical neurons. **Mol Cell Neurosci** 2002;20:271-282.

45. Fukushima N, Ishii I, Habara Y, Allen CB, Chun J. Dual regulation of actin rearrangement through lysophosphatidic acid receptor in neuroblast cell lines. **Mol Biol Cell** 2002;13:2692-2705.

46. Ishii I, Ye X, Friedman B, Kawamura S, Contos JJA, Kingsbury MA, Yang AH, Zhang G, Brown JH, Chun J. Marked perinatal lethality and cellular signaling deficits in mice null for the two sphingosine 1-phosphate receptors, S1P2/LPB2/EDG-5 and S1P3/LPB3/EDG-3. **J Biol Chem** 2002;277:25152-25159.

47. Contos JJA, Ishii I, Fukushima N, Kingsbury MA, Ye X, Kawamura S, Brown JH, Chun J. Characterization of LPA2 (EDG-4) and LPA1/LPA2 (EDG-2/EDG-4) lysophosphatidic acid receptor knockout mice: signaling deficits without obvious phenotypic abnormality attributable to LPA2. **Mol Cell Biol** 2002;22:6921-6929.

48. Contos JJA, Ye X, Sah V, Chun J. Tandem genomic arrangement of a G protein (Gna15) and G protein-coupled receptor (s1p4/lpC1/Edg6) gene. **FEBS Lett** 2002;531:99-102.

49. McGiffert C, Contos JJA, Friedman B, Chun J. Embryonic brain expression analysis of

lysophospholipid receptor genes suggests roles for s1p1 in neurogenesis and s1p1-3 in angiogenesis. **FEBS Lett** 2002;531:103-108.

50. Kaushal D, Contos JJA, Treuner K, Yang AH, Kingsbury MA, Rehen SK, McConnell MJ, Okabe M, Barlow C, Chun J. Alteration of gene expression by chromosome loss in the postnatal mouse brain. **J Neurosci** 2003;23:5599-5606.

51. Zhao X, Ueba T, Christie BR, Barkho B, McConnell MJ, Nakashima K, Lein ES, Eadie BD, Willhoite AR, Muotri AR, Summers RG, Chun J, Lee K-F, Gage FH. Mice lacking methyl-CpG binding protein 1 have deficits in adult neurogenesis and hippocampal function. **Proc Natl Acad Sci USA** 2003;100:6777-6782.

52. Liu H, Toman RE, Goparaju S, Maceyka M, Nava VE, Sankala H, Payne SG, Bektas M, Ishii I, Chun J, Milstien S, Spiegel S. Sphingosine kinase type 2 is a putative BH3-only protein that induces apoptosis. **J Biol Chem** 2003;278:40330-40336.

53. Rao TS, Lariosa-Willingham KD, Lin F-F, Palfreyman EL, Yu N, Chun J, Webb M. Pharmacological characterization of lysophospholipid receptor signal transduction pathways in rat cerebrocortical astrocytes. **Brain Res** 2003;990:182-194.

54. Olivera A, Rosenfeldt H, Bektas M, Wang F, Ishii I, Chun J, Milstien S, Spiegel S. Sphingosine kinase type 1 induces $G_{12/13}$-mediated stress fiber formation yet promotes growth and survival independent of G protein coupled receptors. **J Biol Chem** 2003;278:46452-46460.

55. Yang AH, Kaushal D, Rehen SK, Kriedt K, Kingsbury MA, McConnell MJ, Chun J. Chromosome segregation defects contribute to aneuploidy in normal neural progenitor cells. **J Neurosci** 2003;23:10454-10462.

56. Kingsbury MA, Rehen SK, Contos JJA, Higgins C, Chun J. Non-proliferative effects of lysophosphatidic acid enhance cortical growth and folding. **Nature Neurosci** 2003;6:1292-1299. (See also News & Views).

57. Baudhuin LM, Ying J, Zaslavsky A, Ishii I, Chun J, Yan Xu Y. $S1P_3$-mediated Akt activation and crosstalk with platelet-derived growth factor receptor (PDGFR). **FASEB J** 2004;18:341-343.

58. Nofer J-R, van der Giet M, Tölle M, Wolinska I, Sokoll A, von Wnuck-Lipinski K, Baba HA, Gödecke A, Ishii I, Kleuser B, Volker W, Fobker M, Zidek W, Assmann G, Chun J, Levkau B. HDL induces NO-dependent vasorelaxation via the lysophospholipid receptor $S1P_3$: role of HDL-associated lysophospholipids. **J Clin Invest** 2004;113:569-581.

59. Sanna G, Alfonso A, Liao J, Ahn M-Y, Peterson MS, Jo E, Webb B, Lefebvre S, Chun J, Gray N, Rosen H. Sphingosine 1-phosphate (S1P) receptor subtypes S1P1 and S1P3, respectively, regulate lymphocyte recirculation and heart rate. **J Biol Chem** 2004;279:13839-13848.

60. Hama K, Aoki J, Fukay M, Kishi Y, Ohta H, Sakai T, Suzuki R, Watanabe M, Chun J, Arai H. Lysophosphatidic acid and autotaxin stimulate cell motility of neoplastic and non-neoplastic cells through LPA_1. **J Biol Chem** 2004;279:17634-17639.

61. Rao TS, Lariosa-Willingham KD, Lin F-F, Yu N, Tham C-S, Chun J, Webb M. Growth factor

pre-treatment differentially regulates phosphoinositide turnover downstream of lysophospholipid receptor and metabotropic glutamate receptors in cultured rat cerebrocortical astrocytes. **Int J Devel Neurosci** 2004;22:131-135.

62. Inoue M, Rashid H, Ryousuke Fujita R, Contos JJA, Chun J, Ueda H. Initiation of neuropathic pain requires lysophosphatidic acid receptor signaling. **Nature Med** 2004;10:712-718.

63. Webb M, Tham C-S, Lin F-F, Lariosa-Willingham K, Yu N, Hale J, Mandala S, Chun J, Rao TS. Sphingosine 1-phosphate receptor agonists attenuate relapsing-remitting experimental autoimmune encephalitis in SJL mice. **J Neuroimmunol** 2004;153:108-121.

64. McConnell MJ, Kaushal D, Yang AH, Kingsbury MA, Rehen SK, Treuner K, Helton R, Annas EG, Chun J, Barlow C. Failed clearance of aneuploid embryonic neural progenitor cells leads to excess aneuploidy in Atm-deficient but not the Trp53-deficient adult cerebral cortex. **J Neurosci** 2004;24:8090-8096.

65. Levkau B, Hermann S, Theilmeier G, van der Giet M, Chun J, Schober O, Schäfers M. HDL stimulates myocardial perfusion *in vivo*. **Circulation** 2004;110:3355-3359.

66. Girkontaite I, SakkV, Wagner M, Borggrefe T, Tedford K, Chun J, Fischer K-D. The sphingosine-1-phosphate lysophospholipid receptor $S1P_3$ regulates MAdCAM-1+ endothelial cells in splenic marginal sinus organization. **J Exp Med** 2004;200:1491-1501.

67. Simon MF, Daviaud D, Pradere JP, Gres S, Guigne C, Wabitsch M, Chun J, Valet P, Saulnier-Blache JS. Lysophosphatidic acid inhibits adipocyte differentiation via lysophosphatidic acid 1 receptor-dependent down-regulation of peroxisome proliferator-activated receptor gamma2. **J Biol Chem** 2005;280:14656-14662.

68. Li H, Ye X, Mahanivong C, Bian D, Chun J, Huang S. Signaling mechanisms responsible for lysophosphatidic acid-induced urokinase plasminogen activator expression in ovarian cancer cells. **J Biol Chem** 2005;280:10564-10571.

69. Goparaju SK, Jolly PS, Watterson KR, Bektas M, Alvarez S, Sarkar S, Mel L, Ishii I, Chun J, Milstien S, Spiegel S. The $S1P_2$ receptor negatively regulates PDGF-induced motility and proliferation. **Mol Cell Biol** 2005;25:4237-4249.

70. Tölle M, Levkau B, Keul P, Brinkmann V, Giebing G, Schönfelder G, Schäfers M, von Wnuck Lipinski K, Jankowski J, Jankowski V, Chun J, Zidek W, van der Giet M. The immunomodulator FTY720 induces eNOS-dependent arterial vasodilation via the lysophospholipid receptor S1P3. **Circ Res** 2005;96:913-920.

71. Rehen SK, Yung YC, McCreight MP, Yang AH, Almeida BSV, Kingsbury MA, Cabral KMS, Kaushal D, McConnell MJ, Anliker B, Fontanoz M, Chun J. Constitutional aneuploidy in the normal human brain. **J Neurosci** 2005;25:2176-2180. (cover art)

72. Kingsbury MA, Friedman B, McConnell MJ, Rehen SK, Yang AH, Kaushal D, Chun J. Aneuploid neurons are functionally active and integrated into brain circuitry. **Proc Natl Acad Sci USA** 2005;102:6143-6147.

73. Barbeito L, Chun J, Binder LI, Neto VM, Perry G, Scazzochio C, Violini G. The end of a

Chilean institute. **Science** 2005;308:792-793.

74. Ye X, Hama K, Contos JJ, Anliker B, Inoue A, Skinner MK, Suzuki H, Amano T, Arai H, Aoki J, Chun J. LPA_3-mediated lysophosphatidic acid signalling in embryo implantation and spacing. **Nature** 2005;435:104-108. (See also News & Views.)

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31. Rivera R, Chun J. Potential therapeutic roles of lysophospholipid signaling in autoimmune related disease. **Future Lipidology** 2007;2(5):535-545.

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and disease relevance. **Prostagland Lipid Mediators**, *in press 2009.*

Edited Book/Book Chapters

1. Zhu L, Chun J, (eds.). Assay Methods for Programmed Cell Death. In BioTechniques Book of Apoptosis Detection: Eaton Publishing, Natick, MA, 1998.

2. Shatz CJ, Chun JJM, Luskin MB. The role of the subplate in the development of the mammalian telencephalon. In: Development of the Cerebral Cortex, Vol. 7. Peters A, Jones EG (eds.). Plenum Publishing Corp., New York, NY, 1988.

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4. Chun J, Blaschke AJ. Unit 3.8, Identification of neural programmed cell death through the detection of DNA fragmentation in situ and by PCR. In Current Protocols in Neuroscience. Gerfen C, Mckay R (eds.). John Wiley and Sons, Inc., 1997.

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6. Chun J. Detection of cells undergoing programmed cell death using in situ end labeling plus (ISEL+). In Apoptosis Detection, CHAPTER 5, pp. 35-45, in "Apoptosis detection and assay methods." Zhu L, Chun J (eds.). BioTechniques Books, Natick, MA, 1998.

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8. Chun J. "Extracellular Lipid Signals." In the Wiley Encyclopedia of Chemical Biology, Tadhg P. Begley (ed.), 2008.

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11. Peterson SE, Westra JW, Paczkowski CM, Chun J. Chromosomal mosaicism in neural stem cells. In Neural Stem Cells Methods and Protocols, Chapter 16, pp. 197-204. Weiner LP (ed.). Humana Press, 2008.

12. Chun J. LPA-1 receptor. In xPharm: The Comprehensive Pharmacology Reference. Enna SJ and Bylund DB (eds.), 2008; DOI: 10.1016/B978-008055232-3.60112-6.

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14. Chun J. LPA-3 receptor. In xPharm: The Comprehensive Pharmacology Reference. Enna SJ and Bylund DB (eds.), 2008; DOI: 10.1016/B978-008055232-3.60117-5.

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16. Chun J. S1P-2 receptor. In xPharm: The Comprehensive Pharmacology Reference. Enna SJ and Bylund DB (eds.), 2008; DOI: 10.1016/B978-008055232-3.60115-1.

17. Chun J. S1P-3 receptor. In xPharm: The Comprehensive Pharmacology Reference. Enna SJ and Bylund DB (eds.), 2008; DOI: 10.1016/B978-008055232-3.60113-8.

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20. Yung YC, Kennedy G, Chun J. Identification of neural programmed cell death through the detection of DNA fragmentation *in situ* and by PCR. In Current Protocols in Neuroscience, Unit 3.8, Taylor G (Ed.), John Wiley & Sons, *in press 2009*.

21. Paczkowski C, Chun J. "Genomic disorder and gene expression in the developing CNS," In Squire LR (eds), Encyclopedia of Neuroscience, vol. 4, pp. 679-684. Oxford: Academic Press, 2009.

Current Trainees	**Funding Source**	**Dates**
Yun Yung BA, UC Berkeley, 2002		2004-
Mu-En (David) Lin BS, Taiwan National University, 2003	Amira Pre-Doctoral Fellowship	2006-
Siew (Keira) Teng Teo BS, University of Michigan, Ann Arbor, 2005	A*STAR (Singapore)	2007-
Alycia Mosley BS, Brown University, 2001	NIDA Diversity Supplement	2008-
Diane Bushman BA, Lewis and Clark College, 2006	UCSD Pharmacology Training Grant	2008-
Kristine Park BS, Korea Advanced Institute of Science and Technology, 2006		2008-

Current Postdoctoral Fellows		
Deron Herr BS, Northeast Missouri State University, 1995 (now Truman) PhD, SDSU, 2004	Expression Drug Design Capita Foundation	2004-

Rich Rivera 2004-
BS, University of New Mexico, 1990
PhD, UCSD, 1998

Chang-Wook Lee 2005-
BS, Tae-Gu University (S. Korea), 1999
MS, Hallym University (S. Korea), 2001
PhD, Hallym University (S. Korea), 2004

Kyoko Noguchi 2006-
MD, Yokohama City University School of Medicine (Japan), 1998
PhD, Tokyo University (Japan), 2007

Ji Woong Choi Novartis Postdoctoral Fellowship 2007-
BS, Seoul National University, College of Pharmacy (Seoul, Korea), 1996
MS, Seoul National University, College of Pharmacy (Seoul, Korea), 2000
PhD, Seoul National University, College of Pharmacy (Seoul, Korea), 2006

Past Trainees (current positions in parentheses)

Anne Blaschke BA, Brown, 1991	MSTP (Asst. Professor, U. Utah Medical School)	1993-1997
Jonathan Hecht BS, UC Irvine, 1989	MSTPPh.D., (Pediatric Neurology Fellow, UCSF)	1993-1996
Joshua Weiner BA, Northwestern, 1992	NSF, NRSA, NIMH (Postodoc, Wash. U., with J. Sanes; Assistant Professor, Department of Biological Sciences, University of Iowa)	1994-1999
James Contos BS, UC Davis, 1992 PhD, UCSD, 1999	NRSA, NIMH (Postdoc, Fred Hutchinson/HHMI, with Linda Buck)	1994-1999
Yuka Kimura BA, U. Tokyo (Tokyo, Japan), 1982 MA, U. Tokyo (Tokyo, Japan), 1984	Neuroplast. Aging NIH training grant (Researcher, Natl. Inst. Of Neurosci., Japan)	1997-2001
Dhruv Kaushal BA, U. New Mexico,1998	NSF Fellowship (Postdoc, Harvard University/HHMI, with Fred Alt)	1999-2004
Christine McGiffert BA, 1995, Long Beach State	NRSA, Minority Award (Postdoc, UCLA, with S. Thomas Carmichael)	1999-2003
Amy Yang BA, 1997, U. British Columbia	Pharmacology Training Grant (Postdoc, Pfizer, Inc.)	1999-2004
Mike McConnell BA, 1992, North Carolina State	Pharmacology Training Grant (Postdoc, Harvard University/HHMI, Dr. Carla Shatz)	1999-2004

Serena Barral — University of Turin — 2007
BS, University of Turin, Italy, 2004
PhD, University of Turin, Italy, 2008

Will Westra — 2004-2008
BA, UCSD, 2002
PhD, UCSD, 2008

Past Postdoctoral Fellows:

Kristina Staley — 1994-1996
BA, Cambridge University, 1989
PhD, Cambridge University, 1993
(Head of Policy/Public Relations Faculty of Public Health Medicine, London)

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BA, Amherst, 1980
PhD, UC San Diego, 1988
(Senior Research Associate, The Scripps Research Institute in the labs of Drs. Chun and Patapoutian)

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BS, Bejing Normal University, 1988
PhD, Inst. of Biophysics Chinese Academy of Sciences, Beijing, China, 1993
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BS, University of Kyoto, 1985
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BS, University of Tokyo, 1988
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BA, SUNY, Stony Brook, 1975
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BS, Fed. Univ. Rio de Janeiro, 1994
MS, Fed. Univ. Rio de Janeiro, 1996
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(Associate Professor (tenured), Dept. of Anatomy, Fed. Univ. Rio de Janeiro)

Eric Birgbauer — 2003-2006
BA, UC Berkeley, 1985
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BA, Swiss Federal Institute of Technology, 1998 (Staff Scientist, Institute for Biochemistry &
PhD, Max-Planck-Institute for Brain Research, 2002 Mol. Bio., University of Dusseldorf)

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BA, Hamilton College, 1993 (Assistant Professor, Dept. Biology
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BS, Rensselaer Polytechnic Institute, 1998
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MD, Beijing Medical University, 1990 (Assistant Professor, Dept. of
MPH, Chinese Academy of Preventive Medicine, Beijing, 1993 Physiology & Pharmacology,
PhD, UC Riverside, 1999 University of Georgia)

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BA, Scripps College/Claremont Colleges, 1995 (Research Associate, The Scripps Research
PhD, University of Southern California, 2003 Institute, Dept. of Chemical Physiology)

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BS, University of Bucharest, Faculty of Biology, Department of Chemistry, 1999
PhD, University of Heidelberg (Germany), Institute of Pharmacology, 2005

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BA, Amherst, 1980 (Scientific Associate,
PhD, UCSD, 1988 Dept. of Cell Biology, The Scripps Research Institute)

Tetsuji Muto — 2006-2009
BS, Shizuoka University (Japan), 1996 (Nara Institute of Science and Technology)
MS, Nagoya University (Japan), 1998
PhD, Graduate University for Advanced Study (Osaka, Japan), 2002

Sabbatical

Kyung Yong Kim — University sabbatical support — 2000-2001
(Professor, Chung-An University, Korea)

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