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**PAUL THOMPSON**


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**EDUCATION/TRAINING:**

INSTITUTION AND LOCATION	Degree	Year(s)	Field of Study
University of California, Los Angeles	Ph.D.	1993-1998	<b>Neuroscience</b>
Oxford University, England	M.A., B.A.	1989-1993	<b>Mathematics</b>
Oxford University, England	B.A.	1989-1991	<b>Greek &amp; Latin Languages (Greats)</b>

**RESEARCH AND PROFESSIONAL EXPERIENCE:**

<b>Professor of Neurology, Step II</b>	<b>July 1 2007-</b>
<b>Professor of Neurology, UCLA School of Medicine</b>	<b>July 1 2007-</b>
Associate Professor of Neurology, UCLA School of Medicine	2003-2007
Assistant Professor of Neurology, UCLA School of Medicine	1998-2003
Ph.D. candidate in Neuroscience, Laboratory of Neuro Imaging, UCLA	1993-1998
Fellow, Howard Hughes Medical Institute	1993-1998
Fulbright Scholar, U.S.-U.K. Fulbright Commission, London, England	1993-1998
Research Grantee, United States Information Agency, Washington, DC	1993-1998

**Ph.D. thesis title** (Advisor: Arthur W. Toga, Ph.D.):

*Mathematical/Computational Strategies for Analyzing 3D Human Brain Image Databases*

**HONORS/AWARDS:**

- **2008 Wiley Young Investigator of the Year Award, Organization for Human Brain Mapping**
- 1997 SPIE Medical Imaging Award, Best Paper
- 1998 Di Chiro Outstanding Scientific Paper Award
- 1998 Eiduson Award for Neuroscience Research
- 1999 Study Sections and Technical Evaluation Group (TEG) Member, National Library of Medicine, NIH; Special Emphasis Panel, Center for Scientific Review, NIH; Reviewer, Small Business Innovation Research (SBIR) Grants Program 1999; Peer-Reviewer, Alzheimer's Disease Association 1999 Grants Program; 2000 Study Sections and Site Visit Reviewer, National Institute for Child Health and Development (NICHD), 2001 Study Sections and Site Visit Reviewer, National Center for Research Resources (NCRR)
- Invited Speaker: International Human Brain Mapping Conference, Montréal, 1998; Howard Hughes Medical Institute, 1998; International Conference on Visualization in Biomedical Computing, Hamburg, 1997; Eiduson Lecture, 1998; National Academy of Sciences, 2001

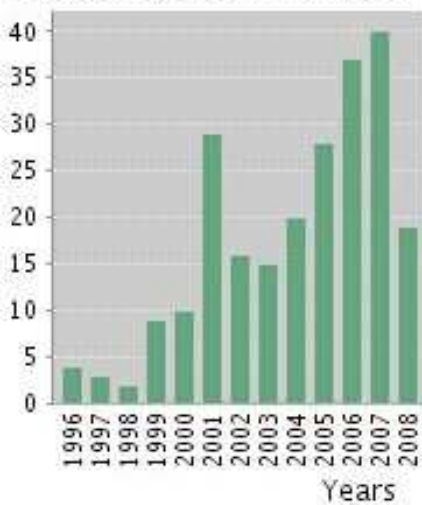
- Outstanding Graduate Student of 1998, UCLA; Chancellor's Service Award, 1998
  - Oxford University Scholar in Mathematics (1991-93), in Classical Languages (1989-91)
  - *Guinness Book of Records* Certificate, 1989: U.K. Record Examination Achievement (9 A-levels)
  - Associate Editor, *IEEE Transactions on Medical Imaging*, 2003-
  - Associate Editor, *Human Brain Mapping*, 2003-
  - Editorial Board, *NeuroImage*, 2005-2007
  - Editorial Board, *Medical Image Analysis*, 2002-
  - Editorial Board, *Cerebral Cortex*, 2005-
  - Editorial Board, *Inverse Problems and Imaging*, 2008-
- 2003 Turken Prize for Alzheimer's Disease Research, Turken Endowment
  - Committee Member, University of California Legislative Assembly (Dept. of Neurology Representative, 2004-2007)
  - Committee Member, Appointments & Promotions Committee (Dept. of Neurology, 2004-)
  - Elected Member, American Neurological Association (ANA), 2007-
  - Peer-Reviewer for Proceedings of the National Academy of Sciences, Nature Genetics, Nature Neuroscience, Neuron, IEEE Transactions on Medical Imaging, Computer Vision and Image Understanding, IEEE Transactions on Biomedical Engineering, NeuroImage, Medical Image Analysis, J. Neuroscience, Elsevier Trends in Pharmacological Science and Technology, IEEE Transactions on Visualization and Computer Graphics, Human Brain Mapping, J. Computer Assisted Tomography, American Journal of Psychiatry, Biological Psychiatry

**I. PUBLICATIONS** (abstracts and PDFs available at: [http://www.loni.ucla.edu/~thompson/thompson\\_pubs.html](http://www.loni.ucla.edu/~thompson/thompson_pubs.html)).

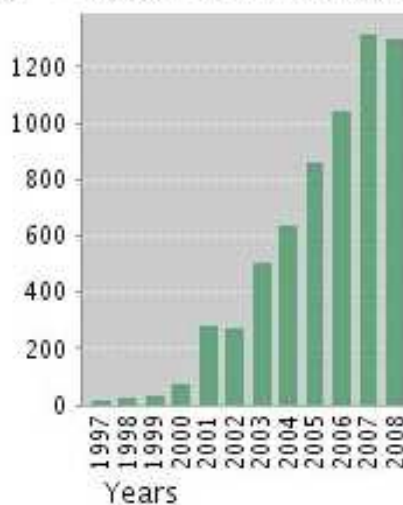
The period 1996-2008 has resulted in **752** research publications, listed below; they are broken down as follows:

Peer-Reviewed Journal Papers	381 (35 as first author, <u>104 as senior or last author</u> ; others collaborative)
Book Chapters	19
Conference Abstracts	263

**Published Items in Each Year**



**Citations in Each Year**



**233 Papers Total**

**h-index: 44**

Sum of the Times Cited [?]: 6,420

Average Citations per Item [?]: 27.55

h-index [?]: 44

These publications appeared in the following journals: *Science*, *Nature*, *Proceedings of the National Academy of Sciences of the USA* (4 papers), *Nature Neuroscience* (3 papers), *Journal of Neuroscience*, *IEEE Transactions on Medical Imaging*, *Annals of Medicine*, *Annals of Biomedical Engineering*, *NeuroImage*, *Journal of Computer Assisted Tomography*, *Neurology*, *Cerebral Cortex*, *American Journal of Psychiatry*, *American Journal of Neuroradiology*, *Image and Vision Computing*, *International Journal of Computer Vision*, *Computer Graphics and Applications*, *NeuroReport*, *Human Brain Mapping*, *Journal of the Royal Society*, and *Medical Image Analysis*. Additional peer-reviewed papers appeared in the *Journal of the American Medical Informatics Association*, *Neuro-Oncology*, *SPIE Medical Imaging*, *Proceedings of the IEEE Conference on Visualization in Biomedical Computing*, and the *SPIE Lecture Notes in Computer Science*. Invited chapters include tutorial articles in: *Nature Encyclopedia*, *Handbook of Medical Image Processing*, *Brain Mapping: The Methods*, *Brain Mapping: The Disorders*, *Brain Warping*, *The Corpus Callosum*, and *Advances in Biomedical Image Databases*.

Reprints of published papers are available on request.

### Refereed Journal Articles

1. **Thompson PM**, Giedd JN, Woods RP, MacDonald D, Evans AC, Toga AW (2000). *Growth Patterns in the Developing Brain Detected By Using Continuum-Mechanical Tensor Maps*, **Nature**, **404**:(6774) 190-193, March 9, 2000.
2. Zeineh MM, Engel SA, **Thompson PM**, Bookheimer S (2003). *Dynamics of the Hippocampus During Encoding and Retrieval of Face-Name Pairs*, **Science**, 299(5606):577-580, January 24 2003.
3. **Thompson PM**, Vidal CN, Giedd JN, Gochman P, Blumenthal J, Nicolson R, Toga AW, Rapoport JL (2001). *Mapping Adolescent Brain Change Reveals Dynamic Wave of Accelerated Gray Matter Loss in Very Early-Onset Schizophrenia*, **Proceedings of the National Academy of Sciences of the USA**, **98**(20):11650-11655, September 25, 2001.
4. **Thompson PM**, Cannon TD, Narr KL, van Erp T, Khaledy M, Poutanen V-P, Huttunen M, Lönqvist J, Standertskjöld-Nordenstam C-G, Kaprio J, Dail R, Zoumalan CI, Toga AW (2001). *Genetic Influences on Brain Structure*, **Nature Neuroscience** **4**(12):1253-8, Dec. 2001.
5. **Thompson PM**, MacDonald D, Mega MS, Holmes CJ, Evans AC, Toga AW (1997a) *Detection and Mapping of Abnormal Brain Structure with a Probabilistic Atlas of Cortical Surfaces*, **Journal of Computer Assisted Tomography**, **21**(4):567-581, Jul.-Aug. 1997. [**Di Chiro Outstanding Scientific Paper Award, 1998**].
6. **Thompson PM**, Toga AW (1997b) *Detection, Visualization and Animation of Abnormal Anatomic Structure with a Deformable Probabilistic Brain Atlas based on Random Vector Field Transformations* (Invited Paper), **Medical Image Analysis** **1**(4): 271-294; paper, with video sequences on CD-ROM with Journal Issue, November 1997.
7. **Thompson PM**, Schwartz C, Lin RT, Khan AA, Toga AW (1996a) *3D Statistical Analysis of Sulcal Variability in the Human Brain*, **Journal of Neuroscience**, **16**(13):4261-4274, July 1996 [Cover Article].
8. **Thompson PM**, Schwartz C, Toga AW (1996b) *High-Resolution Random Mesh Algorithms for Creating a Probabilistic 3D Surface Atlas of the Human Brain*, **NeuroImage** **3**(1):19-34, March 1996 [Cover Article].

9. **Thompson PM**, Toga AW (1996c) *A Surface-Based Technique for Warping 3-Dimensional Images of the Brain*, **IEEE Transactions on Medical Imaging**, **15**(4):1-16, August 1996.
10. **Thompson PM**, Moussai J, Khan AA, Zohoori S, Goldkorn A, Mega MS, Small GW, Cummings JL, Toga AW (1998) *Cortical Variability and Asymmetry in Normal Aging and Alzheimer's Disease*, **Cerebral Cortex**, **8**(6):492-509, Sept.1998.
11. **Thompson PM**, Toga AW (1996d) *Visualization and Mapping of Anatomic Abnormalities using a Probabilistic Brain Atlas Based on Random Fluid Transformations*, **Proc. IEEE Visualization in Biomedical Computing**, Hamburg, Germany, September 1996, **4**:383-392. Also in: **Lecture Notes in Computer Science (LNCS) 1131**:383-392, K-H Höhne, R Kikinis [eds.], Springer-Verlag.
12. **Thompson PM**, Mega MS, Woods RP, Blanton RE, Moussai J, Zoumalan CI, Aron J, Cummings JL, Toga AW (2001). **Early Cortical Change in Alzheimer's Disease Detected with a Disease-Specific Population-Based Brain Atlas**, **Cerebral Cortex** **11**(1):1-16, Jan. 2001.
13. **Thompson PM**, Woods RP, Mega MS, Toga AW (2000). *Mathematical/Computational Challenges in Creating Population-Based Brain Atlases*, [Invited Paper], **Human Brain Mapping** **9**(2):81-92, Feb. 2000.
14. **Thompson PM**, Mega MS, Toga AW (2000). *Disease-Specific, Probabilistic Brain Atlases*, **Proceedings of the IEEE**, International Conference on Computer Vision and Pattern Recognition, June 2000.
15. **Thompson PM**, Mega MS, Vidal C, Rapoport JL, Toga AW (2001). **Detecting Disease-Specific Patterns of Brain Structure using Cortical Pattern Matching and a Population-Based Probabilistic Brain Atlas**, IEEE Conference on Information Processing in Medical Imaging (IPMI), UC Davis, 2001, in: *Lecture Notes in Computer Science (LNCS) 2082*:488-501, M Insana, R Leahy [eds.], Springer-Verlag.
16. **Thompson PM**, Toga AW (2002). *A Framework for Computational Anatomy* [Invited Paper], *Computing and Visualization in Science*, **5**:1-12.
17. **Thompson PM** (2002). *Brain Deficit Patterns May Signal Early-Onset Schizophrenia* [Invited Article], **Psychiatric Times**, **19**(8):30-32, August 2002.
18. **Thompson PM**, Hayashi KM, de Zubicaray G, Janke AL, Rose SE, Semple J, Doddrell DM, Cannon TD, Toga AW (2002). *Detecting Dynamic and Genetic Effects on Brain Structure using High-Dimensional Cortical Pattern Matching*, Proc. International Symposium on Biomedical Imaging (ISBI2002), Washington, DC, July 7-10, 2002.
19. **Thompson PM**, Cannon TD, Toga AW (2002). *Mapping Genetic Influences on Human Brain Structure* [Review Paper], **Annals of Medicine**, **2002**;34(7-8):523-36.
20. **Thompson PM**, Rapoport JL, Cannon TD, Toga AW (2002). *Imaging the Brain as Schizophrenia Develops: Dynamic and Genetic Brain Maps*, [Invited Paper], **Primary Psychiatry**, 2002.
21. **Thompson PM**, Toga AW (2003). *Cortical Diseases and Cortical Localization* [Review Article], **Nature Encyclopedia of the Life Sciences**, [in press].
22. **Thompson PM** (2003). *Schizophrenia*, **World Book Encyclopedia**, [peer-reviewed entry].

23. **Thompson PM**, Toga AW (2003). *Alzheimer's Disease: MRI Imaging of Progressive Brain Change* [Review Article], Adelman G, Smith BH, [eds.], **Encyclopedia of Neuroscience**, Nov. 2003.
24. **Thompson PM**, Hayashi KM, de Zubicaray G, Janke AL, Rose SE, Semple J, Herman D, Hong MS, Dittmer S, Doddrell DM, Toga AW (2003). *Dynamics of Gray Matter Loss in Alzheimer's Disease*, **Journal of Neuroscience**, 23(3):994-1005, Feb. 1 2003.
25. **Thompson PM**, Hayashi KM, de Zubicaray G, Janke AL, Sowell ER, Rose SE, Semple J, Herman D, Hong MS, Dittmer S, Doddrell DM, Toga AW (2003). *Dynamic Mapping of Alzheimer's Disease*, Proceedings of the 19<sup>th</sup> Colloque Medecine et Recherche, IPSEN Foundation, Paris, March 2003; Springer-Verlag.
26. **Thompson PM**, Hayashi KM, de Zubicaray G, Janke AL, Rose SE, Semple J, Hong MS, Herman D, Gravano D, Doddrell DM, Toga AW (2004). *Mapping Hippocampal and Ventricular Change in Alzheimer's Disease*, **NeuroImage**, 22(4):1754-66, Aug. 2004; published online, June 1, 2004.
27. **Thompson PM**, Hayashi KM, Simon S, Geaga J, Hong MS, Sui Y, Lee JY, Toga AW, Ling WL, London ED (2004). *Structural Abnormalities in the Brains of Human Subjects who use Methamphetamine*, **Journal of Neuroscience**, 24(26):6028-6036, June 30 2004.
28. **Thompson PM**, Hayashi KM, Sowell ER, Gogtay N, Giedd JN, Rapoport JL, de Zubicaray GI, Janke AL, Rose SE, Semple J, Doddrell DM, Wang YL, van Erp TGM, Cannon TD, Toga AW (2004). *Mapping Cortical Change in Alzheimer's Disease, Brain Development, and Schizophrenia*, Special Issue on *Mathematics in Brain Imaging* (Thompson PM, Miller MI, Ratnanather JT, Poldrack R, Nichols TE, eds.), **NeuroImage**, 23 Suppl 1:S2-18, September 2004.
29. **Thompson PM**, Lee AD, Dutton RA, Geaga JA, Hayashi KM, Eckert MA, Bellugi U, Galaburda AM, Korenberg JR, Mills DL, Toga AW, Reiss AL (2005). *Abnormal Cortical Complexity and Thickness Profiles Mapped in Williams Syndrome*, **Journal of Neuroscience**, **25(18): 4146-4158, April 20, 2005**.
30. **Thompson PM**, Dutton RA, Hayashi KM, Toga AW, Lopez OL, Aizenstein HJ, Becker JT (2005). *Thinning of the Cerebral Cortex in HIV/AIDS Reflects CD4+ T-Lymphocyte Decline*, **Proceedings of the National Academy of Sciences**, 102(43):15647-15652, October 25, 2005 [published online, Oct. 10, 2005].
31. **Thompson PM**, Sowell ER, Gogtay N, Giedd JN, Vidal CN, Hayashi KM, Leow A, Nicolson R, Rapoport JL, Toga AW (2005). Structural MRI and Brain Development, **International Review of Neurobiology** 2005; 67PB:285-323.
32. **Thompson PM**, Dutton RA, Hayashi KM, Lu A, Lee SE, Lee JY, Toga AW, Lopez OL, Aizenstein HJ, Becker JT (2006). *3D Mapping of Ventricular & Corpus Callosum Abnormalities in HIV/AIDS*, **Neuroimage**, 31(1):12-23, Jan 2006 [Epub ahead of print].
33. **Thompson PM**, Hayashi KM, Dutton RA, Chiang MC, Leow AD, Sowell ER, de Zubicaray GI, Becker JT, Lopez OL, Aizenstein HJ, Toga AW (2006). *Tracking Alzheimer's Disease*, **Proceedings of the New York Academy of Sciences**, Special Issue on *Imaging and the Aging Brain*, ed. De Leon MJ, Federoff H, Hirsch J, Martin GM, Morrison J, Snider A; **1097**: 183–214, February 2007.
34. Memoli F, Sapiro G, **Thompson PM** (2004). *Implicit Brain Imaging*, Special Issue on *Mathematics in Brain Imaging* (Thompson PM, Miller MI, Ratnanather JT, Poldrack R, Nichols TE, eds.), **NeuroImage**, September 2004.

35. Pitiot A, Delingette H, **Thompson PM**, Ayache N (2004). *Expert Knowledge Guided Segmentation System for Brain MRI*, Special Issue on *Mathematics in Brain Imaging* (Thompson PM, Miller MI, Ratnanather JT, Poldrack R, Nichols TE, eds.), **NeuroImage**, September 2004.
36. Gray JR, **Thompson PM** (2004). *Neurobiology of Intelligence: Science and Ethics*, **Nature Reviews Neuroscience**, 2004 Jun;5(6):471-82.
37. Gray JR, **Thompson PM** (2004). *Neurobiology of Intelligence: Health Implications?*, **Discovery Medicine**, 22:157-162.
38. Ashburner J, Csernansky J, Davatzikos C, Fox NC, Frisoni G, **Thompson PM** (2003). *Computer-Assisted Imaging to Assess Brain Structure in Healthy and Diseased Brains*, **Lancet Neurology** 2(2):79-88, February 2003.
39. Gogtay N, Giedd JN, Lusk L, Hayashi KM, Greenstein D, Vaituzis C, Nugent TF, Herman DH, Classen L, Toga AW, Rapoport JL, **Thompson PM** (2004). *Dynamic Mapping of Human Cortical Development During Childhood and Adolescence*, **Proceedings of the National Academy of Sciences**, 101(21):8174-8179, May 25 2004.
40. Cannon TD, **Thompson PM**, van Erp T, Toga AW, Poutanen V-P, Huttunen M, Lönqvist J, Standertskjöld-Nordenstam C-G, Narr KL, Khaledy M, Zoumalan CI, Dail R, Kaprio J (2002). *Cortex Mapping Reveals Heteromodal Gray Matter Deficits in Monozygotic Twins Discordant for Schizophrenia*, **Proceedings of the National Academy of Sciences of the USA**, 99(5):3228-3233.
41. Cannon TD, van Erp TGM, Bearden CE, Loewy R, **Thompson PM**, Toga AW, Huttunen MO, Keshavan M, Seidman LJ, Tsuang MT (2003). *Early and Late Neurodevelopmental Influences in the Prodrome to Schizophrenia: Contributions of Genes, Environment, and their Interactions*, **Schizophrenia Bulletin**, Special Issue, 2003; 29(4):653-69.
42. Cannon TD, Hennah W, van Erp TGM, **Thompson PM**, Lonnqvist J, Huttunen M, Gasperoni T, Tuulio-Henriksson, Pirkola T, Toga AW, Kaprio J, Mazziotta JC, Peltonen L (2005). *DISC1/TRAX Haplotypes Associate with Schizophrenia, Reduced Prefrontal Gray Matter, and Impaired Short- and Long-Term Memory*, **Archives of General Psychiatry**, 62(11):1205-13, Nov. 2005.
43. Toga AW, **Thompson PM**, Holmes CJ, Payne BA (1996) *Informatics and Computational Neuroanatomy*, Proc. of the American Medical Informatics Association, Section S75 - Brain Mapping and Image Databases, Washington, DC, USA, October 26-30, 1996, 299-303 [peer-reviewed article].
44. Toga AW, **Thompson PM** (1997) *Measuring, Mapping, and Modeling Brain Structure and Function* **First Prize (Best Paper)**, SPIE Medical Imaging Symposium, February 1997, Newport Beach, CA, USA; SPIE Lecture Notes Volume 3033:104-114.
45. Toga AW, **Thompson PM** (2001). *The Role of Image Registration in Brain Mapping* [Invited Paper], **Image and Vision Computing Journal**, 19(1-2):3-24.
46. Toga AW, **Thompson PM**, Mega MS, Narr KL, Blanton RE (2001). *Probabilistic Approaches for Atlasing Normal and Disease-Specific Brain Variability* [Invited Paper], **Anatomy and Embryology** (Berlin) 204(4):267-82, Oct. 2001.

47. Toga AW, **Thompson PM** (2001). *Maps of the Brain* [Invited Paper], **The New Anatomist (Anat Rec.)**, **265**(2):37-53, April 5 2001.
48. Toga AW, **Thompson PM** (2002). *New Approaches in Brain Morphometry* [Invited Paper], **Journal of Gerontology** 10(1):13-23, Jan./Feb. 2002.
49. Toga AW, **Thompson PM** (2003). *Mapping Brain Asymmetry* [Invited Paper], **Nature Reviews Neuroscience**, 4(1):37-48, January 2003.
50. Toga AW, **Thompson PM** (2003). *Temporal Dynamics of Brain Anatomy* [Invited Paper], **Annual Review of Biomedical Engineering**, 5:119-145, Aug. 2003.
51. Toga AW, **Thompson PM** (2005). *Genetics of Brain Structure and Intelligence*, **Annual Review of Neuroscience**, 2005;28:1-23.
52. Toga AW, **Thompson PM** (2005). *Brain Atlases of Normal and Diseased Populations*, **International Review of Neurobiology**, 2005;66:1-54. Review.
53. Toga AW, **Thompson PM**, Sowell ER (2006). *Mapping Brain Maturation*, **Trends in Neuroscience**, 2006 Feb 9; [Epub ahead of print]
54. Toga AW, **Thompson PM**, Mori S, Amunts K, Zilles K (2006). *Towards Multimodal Atlases of the Human Brain*, **Nature Reviews Neuroscience**, 2006 Dec;7(12):952-66.
55. Toga AW, Narr KL, **Thompson PM**, Luders E (2007). *Brain Asymmetry* [Review Article], **Encyclopedia of Neuroscience**, 2<sup>nd</sup> Edition, [invited paper, submitted, March 2006].
56. Mega MS, Chen S, **Thompson PM**, Woods RP, Karaca TJ, Tiwari A, Vinters H, Small GW, Toga AW (1997a) *Mapping Pathology to Metabolism: Coregistration of Stained Whole Brain Sections to PET in Alzheimer's Disease*, **NeuroImage** 5:147-153, February 1997.
57. Mega MS, **Thompson PM**, Cummings JL, Back CL, Xu LQ, Zohoori S, Goldkorn A, Moussai J, Fairbanks L, Small GW, Toga AW (1998) *Sulcal Variability in the Alzheimer's Brain: Correlations with Cognition*, **Neurology**, 50:145-151, January 1998.
58. Mega MS, Chu T, Mazziotta JC, Trivedi KH, **Thompson PM**, Shah A, Cole G, Frautschy SA, Toga AW (1999). *Mapping Biochemistry to Metabolism: FDG-PET and Beta-Amyloid Burden in Alzheimer's Disease*, **NeuroReport** 10(14):2911-2917, Sept. 29 1999.
59. Narr KL, **Thompson PM**, Sharma T, Moussai J, Cannestra AF, Toga AW (2000). *Mapping Corpus Callosum Morphology in Schizophrenia*, **Cerebral Cortex**, 10(1):40-49, January 2000.
60. Narr KL, **Thompson PM**, Sharma T, Moussai J, Blanton RE, Anvar B, Edris A, Krupp R, Rayman J, Khaledy M, Toga AW (2001). *3D Shape Characterization and Mapping of Temporo-Limbic Regions and the Lateral Ventricles in Schizophrenia*, **Biological Psychiatry** 50(2):84-97, July 15, 2001.
61. Narr KL, **Thompson PM**, Sharma T, Moussai J, Zoumalan CI, Rayman J, Toga AW (2001). *3D Mapping of Gyral Shape and Cortical Surface Asymmetries in Schizophrenia: Gender Effects*, **Am J Psychiatry** 2001 Feb

1;158(2):244-255.

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63. Narr KL, van Erp TG, Cannon TD, Woods RP, **Thompson PM**, Jang S, Blanton R, Poutanen VP, Huttunen M, Lonnqvist J, Standerksjold-Nordenstam CG, Kaprio J, Mazziotta JC, Toga AW. (2002). *A twin study of genetic contributions to hippocampal morphology in schizophrenia*, **Neurobiology of Disease**, 2002 Oct;11(1):83-95.
64. Narr KL, Sharma T, Woods RP, **Thompson PM**, Sowell ER, Rex D, Kim S, Asuncion D, Jang S, Mazziotta J, Toga AW (2003). *Increases in Regional Subarachnoid CSF without Apparent Cortical Gray Matter Deficits in Schizophrenia: Modulating Effects of Sex and Age*, **Am J Psychiatry**. 2003 Dec;160(12):2169-80.
65. Narr KL, **Thompson PM**, Szeszko P, Robinson D, Jang S, Woods RP, Kim S, Hayashi KM, Asuncion D, Toga AW, Bilder RM (2004). *Regional Specificity of Hippocampal Volume Reductions in First Episode Schizophrenia*, **NeuroImage** 2004 Apr;21(4):1563-75.
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67. Narr KL, Bilder RM, Toga AW, Woods RP, Rex DE, Szeszko PR, Robinson D, Sevy S, Gunduz-Bruce H, Wang YP, DeLuca H, **Thompson PM** (2005). *Mapping Cortical Thickness and Gray Matter Concentration in First Episode Schizophrenia*, **Cerebral Cortex**, 2005 Jun;15(6):708-19. 2004 Sep 15; [Epub ahead of print].
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72. Zhou Y, **Thompson PM**, Toga AW (1999). *Automatic Extraction and Parametric Representations of Cortical Sulci*, **Computer Graphics and Applications** 19(3):49-55, May 1999.
73. Pitiot A, Toga AW, **Thompson PM** (2002). *Adaptive elastic segmentation of brain MRI via shape-model-guided evolutionary programming*, **IEEE Transactions on Medical Imaging**, 21(8):910-23, Aug. 2002.
74. Pitiot A, Bardinet E, **Thompson PM**, Malandain G (2003). *Automated Piecewise Affine Registration of 2D*



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75. Pitiot A, Delingette H, **Thompson PM** (2003). *Learning Object Correspondences with the Observed Transport Shape Measure*, Proc. IPMI 2003, eds. Taylor C, Noble A, Ambleside, England, UK.
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  77. Pitiot A, Delingette H, Ayache N, **Thompson PM** (2003). *Expert Knowledge Guided Segmentation System for Brain MRI*, **Proceedings of MICCAI**, 2003, Volume 2879/2003, 644-652.
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  79. Pitiot A, Toga AW, Ayache N, **Thompson PM** (2002). *Texture-Based MRI Segmentation with a Two-Stage Hybrid Neural Classifier*, IEEE 2002 World Congress on Computational Intelligence and Neural Nets, Honolulu, HI, May 12-17, 2002 [peer-reviewed article].
  80. Pitiot A, Delingette H, **Thompson PM** (2007). *Learning Shape Correspondence for n-D Curves*, **International Journal of Computer Vision**, 71(1), pp. 71-88, January 2007.
  81. Sowell ER, **Thompson PM**, Holmes CJ, Batth R, Trauner DA, Jernigan TL, Toga AW (1999). *Localizing Age-Related Changes in Brain Structure between Childhood and Adolescence using Statistical Parametric Mapping*, **NeuroImage** 9(6 pt 1):587-597, June 1999.
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468. Dinov ID, Mega MS, **Thompson PM**, Lindshield CJ, Toga AW (2000). *Statistical Analysis of Functional Brain Data Using Sub-Volume Thresholding and an Elderly Population Probabilistic Brain Atlas: Effects of Education on Brain Perfusion in Alzheimer's Disease*, 6th International Conference on Functional Mapping of the Human Brain, San Antonio, Texas, June 2000.
469. Mega MS, Fennema-Notestine C, Dinov ID, **Thompson PM**, Archibald SL, Lindshield CJ, Felix J, Toga AW, Jernigan TL (2000). *Construction, Testing, and Validation of a Sub-Volume Probabilistic Human Brain Atlas for the Elderly and Demented Populations*, 6th International Conference on Functional Mapping of the Human Brain, San Antonio, Texas, June 2000.
470. Mega MS, Lindshield CJ, Leung M, Dinov ID, **Thompson PM**, Felix J, Fennema-Notestine C, Archibald SL, Jernigan TL, Toga AW (2000). *Application of a Sub-Volume Probabilistic Human Brain Atlas for the Elderly and Demented Populations: Automated Mapping of Regional Gray Matter Loss*, 6th International Conference on Functional Mapping of the Human Brain, San Antonio, Texas, June 2000.
471. Narr KL, **Thompson PM**, Sharma T, Moussai J, Krupp R, Jang S, Khaledy M, Toga AW (2000). *3D Maps of Cortical Gray Matter Concentration in Schizophrenic and Normal Populations*, 6th International Conference on Functional Mapping of the Human Brain, San Antonio, Texas, June 2000.
472. Narr KL, **Thompson PM**, Sharma T, Moussai J, Khaledy M, Eghbalieh S, Toga AW (2000). *3D Atlas of Sulcal Trajectories and Asymmetries in Schizophrenic and Normal Populations: Gender Effects*, 6th International Conference on Functional Mapping of the Human Brain, San Antonio, Texas, June 2000.
473. Blanton RE, Badrtalei S, Levitt JG, **Thompson PM**, McCracken JT, Narr KL, Sharma T, Toga AW (2000). *Volumetric and Morphometric Analysis of the Caudate Nucleus in the Normal Pediatric and Adult Human Brain*, 6th International Conference on Functional Mapping of the Human Brain, San Antonio, Texas, June 2000.
474. **Thompson PM**, Toga AW (2000). *Mathematical/Computational Challenges in Population-Based Brain Mapping*, Invited Talk Abstract for Joint Statistical Meetings 2000, Indianapolis, IN, August 13-17, 2000.
475. Mega MS, **Thompson PM**, Dinov ID, Toga AW, Cummings JL (2000). *The UCLA Alzheimer Brain Atlas Project: Structural and Functional Applications*, Proc. 2000 World Alzheimer's Congress, Washington DC, 2000.
476. Holmes CJ, Haney S, **Thompson PM**, Alger JR, Cloughesy TF, Elekes A, Toga AW (2000). *Remote Dynamic Volume Visualization of Tumor Growth*, Proc. Radiol. Soc. North America (RSNA), Chicago, IL, 2000.

**Society for Neuroscience 2000**

477. Haney S, **Thompson PM**, Cloughesy TF, Alger JR, Frew A, Toga AW (2000). *Prognostic Value of Growth Rates and Spectroscopic Data in Patients with Malignant Gliomas*, Proc. Society for Neuroscience, 2000.
478. **Thompson PM**, Mega MS, Cummings JL, Toga AW (2000). *Detecting Dynamic (4D) Profiles of Degenerative Rates in Alzheimer's Disease Patients, Using Tensor Mapping and a Population-Based Brain Atlas*, Proc. Society for Neuroscience, 2000.
479. Blanton RE, Levitt JG, **Thompson PM**, Uddin LQ, Capetillo-Cunliffe L, McCracken JT, Toga AW (2000). *3D Mapping of Cerebellar Anatomy in Normal Children: Age, Asymmetry, and Gender Effects*, Proc. Society for Neuroscience, 2000.
480. Sowell ER, Mattson SN, **Thompson PM**, Jernigan TL, Riley EP, Toga AW (2000). *Mapping Corpus Callosum Morphology and its Neurocognitive Correlates: The Effects of Prenatal Alcohol Exposure*, Proc. Society for Neuroscience, 2000.
481. Narr KL, **Thompson PM**, Sharma T, Khaledy M, Moussai J, Toga AW (2000). *3-Dimensional Mapping and Characterization of Differences in the Basal Ganglia in Schizophrenia*, Proc. Society for Neuroscience, 2000.
482. Rex DE, Pouratian N, **Thompson PM**, Cunanen CC, Sicotte NL, Collins RC, Toga AW (2000). *Cortical Surface Warping Applied to Group Analysis of fMRI of Tongue Movement in the Left Hemisphere*, Proc. Society for Neuroscience, 2000..
483. Mazziotta JC, Toga AW, Woods RP, **Thompson PM**, Evans AC, Paus T, Collins L, Pike B, Fox PT, Lancaster J, Parsons L, Simpson G, Zilles K (2000). *The International Consortium for Brain Mapping*, Proc. Annual Meeting of the Human Brain Project, June 1-2 2000, Bethesda, MD.

#### **Society for Neuro-Oncology 2000**

484. Haney S, **Thompson PM**, Cloughesy TF, Alger JR, Frew AJ, Toga AW (2000). *Growth Rates, MR Spectroscopy and Prognostic Markers for Glioblastoma Multiforme*, Proc. Society for Neuro-Oncology, Chicago, IL, Nov. 9-12, 2000.
485. Frew AJ, **Thompson PM**, Haney S, Cloughesy TF, Alger JR, Toga AW (2000). *Mapping Therapeutic Response In A Patient With Glioblastoma Multiforme Through Short Interval Scanning*, Proc. Society for Neuro-Oncology, Chicago, IL, Nov. 9-12, 2000.

#### **Brain Mapping Course 2000**

486. **Thompson PM**, Mega MS, Woods RP, MacDonald D, Narr KL, Zeineh MM, Rex D, Holmes CJ, Evans AC, Mazziotta JC, Toga AW (2000). *Surface-Based Analysis of the Structure and Function of the Human Cerebral Cortex*, Breakfast Symposium (with Dr. Bruce Fischl and Dr. David Van Essen): Brain Imaging Methods and Analysis Techniques, 6th Annual Meeting of the Organization for Human Brain Mapping, San Antonio, Texas, June 15, 2000.
487. **Thompson PM**, Toga AW (2000). *Mathematical/Computational Challenges in Population-Based Brain Mapping*, Invited Conference Paper, International Workshop on Statistics in Brain Mapping, and Joint Statistical Meetings (JSM), Indianapolis, IN, August 2000.

#### **American Academy of Neurology 2001**

488. **Thompson PM**, de Zubicaray G, Janke AL, Rose SE, Mega MS, Semple J, Hong MS, Cummings JL, Doddrell DM, Toga AW (2001). *Detecting Dynamic (4D) Profiles of Degenerative Rates in Alzheimer's Disease Patients, Using High-Resolution Tensor Mapping and a Brain Atlas Encoding Atrophic Rates in a Population*, American Academy of Neurology, June 2001.

### **Human Brain Mapping 2001**

489. **Thompson PM**, Cannon TD, Narr KL, van Erp T, Khaledy M, Poutanen V-P, Huttunen M, Lönqvist J, Standertskjöld-Nordenstam C-G, Kaprio J, Dail R, Zoumalan CI, Toga AW (2001). *Mapping of Linkages between Genetic Similarity and Brain Structure Reveals a Pattern of Differential Genetic Control for Subregions of the Human Cerebral Cortex*, 7th Annual Meeting of the Organization for Human Brain Mapping, Brighton, England, June 2001.
490. Cannon TD, **Thompson PM**, van Erp T, Toga AW, Poutanen V-P, Huttunen M, Lönqvist J, Standertskjöld-Nordenstam C-G, Narr KL, Khaledy M, Zoumalan CI, Dail R, Kaprio J (2001). *A Probabilistic Atlas of Cortical Gray Matter Changes in Monozygotic Twins Discordant for Schizophrenia*, 7th Annual Meeting of the Organization for Human Brain Mapping, Brighton, England, June 2001.
491. **Thompson PM**, de Zubicaray G, Janke AL, Rose SE, Dittmer S, Semple J, Gravano D, Han S, Herman D, Hong MS, Mega MS, Cummings JL, Doddrell DM, Toga AW (2001). *Detecting Dynamic (4D) Profiles of Degenerative Rates in Alzheimer's Disease Patients, Using High-Resolution Tensor Mapping and a Brain Atlas Encoding Atrophic Rates in a Population*, 7th Annual Meeting of the Organization for Human Brain Mapping, Brighton, England, June 2001.
492. **Thompson PM**, Vidal C, Giedd JN, Blumenthal J, Gochman P, Nicolson R, Toga AW, Rapoport JL (2001). *Mapping Adolescent Brain Change Reveals Dynamic Profile of Accelerated Gray Matter Loss in Childhood-Onset Schizophrenia*, 7th Annual Meeting of the Organization for Human Brain Mapping, Brighton, England, June 2001.
493. Vidal C, Rapoport JL, Giedd JN, Blumenthal J, Gochman P, Nicolson R, Toga AW, **Thompson PM** (2001). *Dynamic Patterns of Accelerated Gray Matter Loss are Linked with Clinical and Cognitive Change in Childhood-Onset Schizophrenia*, 7th Annual Meeting of the Organization for Human Brain Mapping, Brighton, England, June 2001.
494. Sowell ER, Tessner KD, **Thompson PM**, Narr KL, Cannon TD, Toga AW (2001). *Brain Growth and Atrophy: Relationships between Gray Matter Thinning and Cortical Surface Morphology During Normal Development and Aging*, 7th Annual Meeting of the Organization for Human Brain Mapping, Brighton, England, June 2001.
495. Sowell ER, **Thompson PM**, Tessner KD, Toga AW (2001). *Accelerated Brain Growth and Cortical Gray Matter Thinning are Inversely Related during Post-Adolescent Frontal Lobe Maturation*, 7th Annual Meeting of the Organization for Human Brain Mapping, Brighton, England, June 2001.
496. Narr KL, Bilder RM, **Thompson PM**, Dail R, Khaledy M, Toga AW (2001). *3D Cortical Surface Asymmetry and Variability Profiles in First-Episode Schizophrenia*, 7th Annual Meeting of the Organization for Human Brain Mapping, Brighton, England, June 2001.

### **International Schizophrenia Congress 2001:**

497. Cannon TD, **Thompson PM**, van Erp T, Toga AW, Huttunen M, Lönnqvist J, Standertskjöld-Nordenstam C-G (2001). *A Probabilistic Atlas of Cortical Gray Matter Changes in Monozygotic Twins Discordant for Schizophrenia*, International Congress on Schizophrenia Research, April 28-May 2, 2001.

**Society for Industrial and Applied Mathematics (SIAM) 2001:**

498. **Thompson PM** (2001). *Mathematical/Computational Challenges in Population-Based Brain Mapping*, Annual Conference of the Society for Industrial and Applied Mathematics (SIAM): 1st SIAM Conference on Life Sciences, Minisymposium: Mapping the Human Brain, Boston, MA, Sept. 22-26, 2001.
499. **Thompson PM** (2001). *Tensor Calculus for Surface Comparisons*, Annual Conference of the Society for Industrial and Applied Mathematics (SIAM): 1st SIAM Conference on Imaging Science, Minisymposium MS20: Comparative Mathematical Structures in 3D Medical Image Analysis; Chair: Fred L. Bookstein, Boston, MA, Sept. 22-26, 2001.

**SIGGRAPH 2001:**

500. Bacheller J, **Thompson PM**, Holmes CJ, Toga AW (2001). *Tensor Visualization of Brain Variability*, SIGGRAPH 2001 Computer Graphics Conference, Los Angeles, CA, 2001.
501. Bacheller J, **Thompson PM**, Holmes CJ, Toga AW (2001). *Animating High-Dimensional Tensor Datasets to Visualize Brain Variability*, Video with Abstract, SIGGRAPH 2001 Computer Graphics Conference, Los Angeles, CA, 2001.

**Institute for Pure and Applied Mathematics 2001:**

502. **Thompson PM** (2001). *Mathematical Challenges in Population-Based Brain Mapping*, Workshop on Mathematics and Modeling in Brain Mapping, Proceedings of the 1<sup>st</sup> IPAM Conference on Imaging in Medicine and Neurosciences, UCLA Institute for Pure and Applied Mathematics, May 21-25, 2001.

**Society for Neuroscience 2001:**

503. **Thompson PM**, Cannon TD, Narr KL, van Erp T, Khaledy M, Poutanen V-P, Huttunen M, Lönnqvist J, Standertskjöld-Nordenstam C-G, Kaprio J, Dail R, Zoumalan CI, Toga AW (2001). *Genetic Influences on Human Brain Structure Detected and Mapped with a Population-Based Brain Atlas Encoding Patterns of Heritability*, 31<sup>st</sup> International Meeting of the Society for Neuroscience, San Diego, CA, November 10-15, 2001.
504. Cannon TD, **Thompson PM**, van Erp T, Toga AW, Poutanen V-P, Huttunen M, Lönnqvist J, Standertskjöld-Nordenstam C-G, Narr KL, Beatty J, Khaledy M, Zoumalan CI, Dail R, Kaprio J (2001). *Heteromodal Gray Matter Deficits in Twins Discordant for Schizophrenia Isolated Using Cortical Pattern Matching*, 31<sup>st</sup> International Meeting of the Society for Neuroscience, San Diego, CA, November 10-15, 2001.
505. Narr KL, van Erp T, Cannon TD, Woods RP, **Thompson PM**, Jang S, Poutanen V-P, Huttunen M, Lönnqvist J, Standertskjöld-Nordenstam C-G, Mazziotta JC, Toga AW (2001). *A Twin Study of Genetic Contributions to Hippocampal Morphology in Schizophrenia*, 31<sup>st</sup> International Meeting of the Society for Neuroscience, San Diego, CA, November 10-15, 2001.
506. Vidal CN, Rapoport JL, Gochman P, Giedd JN, Blumenthal J, Nicolson R, Toga AW, **Thompson PM** (2001). *Dynamic Wave of Abnormal Adolescent Gray Matter Loss is Linked with Clinical and Cognitive Deficits in*

*Childhood-Onset Schizophrenia*, 31<sup>st</sup> International Meeting of the Society for Neuroscience, San Diego, CA, November 10-15, 2001.

507.Frew AJ, Alger JR, Cloughesy TF, Rubino G, Liao L, Jouben-Steele LM, Toga AW, **Thompson PM** (2001). *3D Mapping and Correlation of Growth Rates, MR Spectroscopy, and Pathology in Glioma Patients using Intraoperative MRI*, 31<sup>st</sup> International Meeting of the Society for Neuroscience, San Diego, CA, November 10-15, 2001.

508.Sowell ER, **Thompson PM**, Mattson SN, Tessner KD, Jernigan TL, Riley EP, Toga AW (2001). *Regional Brain Shape Abnormalities Persist into Adolescence After Heavy Prenatal Alcohol Exposure*, 31<sup>st</sup> International Meeting of the Society for Neuroscience, San Diego, CA, November 10-15, 2001.

509.Blanton RE, Levitt JG, McCracken JT, Fadale D, Sporty M, Lee M, Nobel D, Sadoun T, Lo C, Vahabnezhad E, Cook P, **Thompson PM**, Toga AW (2001). *The Measurement of Orbito-frontal Volumes During Normal Childhood and Adolescence*, Presentation 696.13, 31<sup>st</sup> International Meeting of the Society for Neuroscience, San Diego, CA, November 10-15, 2001.

**American College of Neuropsychopharmacology (ACNP) 2001:**

510.Rapoport JL, **Thompson PM**, Vidal CN, Gochman P, Giedd JN, Blumenthal J, Nicolson R, Toga AW (2001). *Mapping Adolescent Brain Change Reveals Dynamic Wave of Accelerated Gray Matter Loss in Childhood-Onset Schizophrenia*, Proc. Amer. Coll. Neuropsychopharmacology (ACNP), Waikoloa Village, HI, December 9, 2001.

511.Giedd JN, Molloy E, Vaituzis AC, Blumenthal J, Clasen L, Liu H, Castellanos FX, **Thompson PM** (2001). *Heritability of Cerebral Cortex Morphometry during Childhood and Adolescence*, Proc. Amer. Coll. Neuropsychopharmacology (ACNP), Waikoloa Village, HI, December 12, 2001.

**American Academy of Child and Adolescent Psychiatry (AACAP) 2001:**

512.Blanton RE, Levitt J, **Thompson PM**, Sadoun T, McCracken J, Toga AW (2001). *Significant Differences in Language-Related Regions in Autism*, American Academy of Child and Adolescent Psychiatry (AACAP), 2001.

**Institute for Pure and Applied Mathematics 2002:**

513.**Thompson PM** (2002). *Analysis of Brain Images*, Proceedings of the 1<sup>st</sup> IPAM Conference on Scientific Data Mining, Chandrika Kamath (ed.), UCLA Institute for Pure and Applied Mathematics, January 14-18, 2002.

514.Zeineh MM, Engel S, **Thompson PM**, Wilson C, Fried I, Bookheimer SY (2002). *Cortical Unfolding of the Medial Temporal Lobe in Normals and Epileptics*, Invited Presentation, Memory Symposium, Proceedings of the 2002 Cognitive Neuroscience Meeting, April 2002.

**International Society for Magnetic Resonance in Medicine (ISMRM) 2002:**

515.Frew AJ, **Thompson PM**, Cloughesy TF, Toga AW, Alger JR (2002). *Assessment of 3-Tesla Parametric T2 Reproducibility After Automated Image Registration in Longitudinal Studies of Brain Tumors*, Proc. International Society for Magnetic Resonance in Medicine (ISMRM) 2002, Honolulu, HI, May 2002.

### **Human Brain Mapping 2002:**

516. **Thompson PM**, Hayashi KM, de Zubicaray G, Janke AL, Rose SE, Dittmer S, Mega MS, Semple J, Herman D, Hong MS, Doodrell DM, Toga AW (2002). *Dynamically Spreading Wave of Gray Matter Loss Visualized in Alzheimer's Disease using Cortical Pattern Matching and a Brain Atlas Encoding Atrophic Rates*, 8th Annual Meeting of the Organization for Human Brain Mapping, Sendai, Japan, June 2002.
517. Vidal CN, Rapoport JL, Gochman P, Giedd JN, Blumenthal J, Nicolson R, Toga AW, **Thompson PM** (2002). *A New Method for Mapping the Linkage Between Abnormal Gray Matter Loss and the Clinical and Cognitive Deficits in Childhood-Onset Schizophrenia*, 8th Annual Meeting of the Organization for Human Brain Mapping, Sendai, Japan, June 2002.
518. Frew AJ, **Thompson PM**, Cloughesy TF, Toga AW, Alger JR (2002). *Automated Detection of Subtle Between-Study Alterations in Parametric Transverse Relaxation Time in Brain Tumor and Normal Brain Tissue*, 8th Annual Meeting of the Organization for Human Brain Mapping, Sendai, Japan, June 2002.
519. Zeineh MM, Engel SA, **Thompson PM**, Bookheimer SY (2002). *Dynamic Changes in the Human Hippocampus During Memory Consolidation of Face-Name Pairs*, 8th Annual Meeting of the Organization for Human Brain Mapping, Sendai, Japan, June 2002.

### **State of Missouri Education Summit 2002:**

520. **Thompson PM** (2002). *Imaging the Developing Brain in Children and Teenagers: What Are We Learning?*, State of Missouri Education Summit 2002, Lake of the Ozarks, Osage Beach, MO, April 26, 2002.

### **American Academy of Child and Adolescent Psychiatry (AACAP) 2002:**

521. **Thompson PM**, Vidal CN, Giedd JN, Cannon TD, Gogate N, Gochman P, Blumenthal J, Nicolson R, Toga AW, Rapoport JL (2002). *Brain Imaging in Normal and Abnormal Development: New Approaches*, Proc. American Academy of Child and Adolescent Psychiatry (AACAP), San Francisco, CA, October 2002.
522. Hamilton JD, Asarnow R, Gogate N, Rapoport JL, **Thompson PM** (2002). *The Neurobiology of Early-Onset Schizophrenia: An Update*, Proc. American Academy of Child and Adolescent Psychiatry (AACAP), San Francisco, CA, October 2002.

### **Australasian Society for Psychiatric Research (ASPR) 2002:**

523. Johnston P, Schall U, Ward P, Lagopoulos J, Rasser P, Thienel R, **Thompson PM** (2002). *An fMRI Investigation of Executive Function in Early Psychosis*, Proc. Australasian Society for Psychiatric Research (ASPR), Australia National University, Canberra, Australia, December 4-6 2002.

### **American Neuropsychiatric Association (ANPA) 2003:**

524. **Thompson PM** (2003). *Imaging of Brain Development and Schizophrenia: Recent Advances and Challenges*, Invited Symposium on Neuropsychiatry of Neurodevelopment, Organizer: Allan Reiss, M.D., Proc. 14<sup>th</sup> Ann. Conference of the American Neuropsychiatric Association (ANPA), Honolulu, HI, February 2-4, 2003.

### **International Schizophrenia Congress 2003:**

525. Rasser PE, Johnston P, Lagopoulos J, Ward PB, Schall U, Thienel R, Bender S, **Thompson PM** (2003). *Analysis of fMRI BOLD activation during the Tower of London Task using Cortical Pattern Matching*, International Congress for Schizophrenia Research (ICSR), Colorado Springs, Colorado, March 29-April 2, 2003.

#### **International Society for Magnetic Resonance in Medicine (ISMRM) 2003:**

526. Frew AJ, **Thompson PM**, Tseng PB, Cloughesy TF, Toga AW, Alger JR (2003). *T1, Proton Density T2 and Parametric T2 Reproducibility After Automated Image Registration in Longitudinal Studies of Brain Tumors*, Proc. International Society for Magnetic Resonance in Medicine (ISMRM) 2003, Toronto, Canada, May 10-16, 2003.
527. Vidal CN, DeVito TJ, Hayashi KM, Drost DJ, Williamson PC, Craven-Thuss B, Herman D, Sui Y, Toga AW, Nicolson R, **Thompson PM** (2003). *Detection and Visualization of Corpus Callosum Deficits in Autistic Children using Novel Anatomical Mapping Algorithms*, Proc. International Society for Magnetic Resonance in Medicine (ISMRM) 2003, Toronto, Canada, May 10-16, 2003.

#### **Dartmouth College fMRI Workshop 2003:**

528. **Thompson PM** (2003). *Mathematical Challenges and New Directions in Computational Neuroanatomy*, Tutorial Presentation, 3<sup>rd</sup> Annual fMRI Data Center (fMRIDC) Summer Workshop, Dartmouth College, Hanover, New Hampshire, July 7-9, 2003.

#### **Human Brain Mapping 2003:**

529. **Thompson PM**, Hayashi KM, de Zubicaray G, Janke AL, Rose SE, Semple J, Hong MS, Herman D, Gravano D, Dittmer S, Doddrell DM, Toga AW (2003). *Improved Detection and Mapping of Dynamic Hippocampal and Ventricular Change in Alzheimer's Disease Using 4D Parametric Mesh Skeletonization*, 9th Annual Meeting of the Organization for Human Brain Mapping, New York City, NY, USA, June 2003.
530. Vidal, C.N., Rapoport, J.L., Gochman, P., Giedd, J.N., Blumenthal, J., Gogtay, N., Nicolson, R., Toga, A.W., **Thompson, P.M.** (2003). *Mapping Limbic System Deficits in Adolescents with Schizophrenia Using Novel Computational Anatomy Techniques*, 9th Annual Meeting of the Organization for Human Brain Mapping, New York City, NY, USA, June 2003.
531. Vidal, C.N., DeVito, T.J., Hayashi, K.M., Drost, D.J., Williamson, P.C., Craven-Thuss, B., Herman, D., Sui, Y., Toga, A.W., Nicolson, R., **Thompson, P.M.** (2003). *Mapping Corpus Callosum Deficits in Autistic Children using Novel Computational Anatomy Algorithms*, 9th Annual Meeting of the Organization for Human Brain Mapping, New York City, NY, USA, June 2003.
532. Nicolson, R., DeVito, T.J., Vidal, C.N., Sui, Y., Hayashi, K.M., Drost, D.J., Williamson, P.C., Craven-Thuss, B., Pavlosky, W., Toga, A.W., **Thompson, P.M.** (2003). *Magnetic Resonance Imaging of the Hippocampus in Males with Autism*, 9th Annual Meeting of the Organization for Human Brain Mapping, New York City, NY, USA, June 2003.
533. Rasser, P., Ward, P., Johnston, P., Lagopoulos, J., Schall, U., Thienel, R., Bender, S., **Thompson, P.M.** (2003). *fMRI BOLD activation during the Tower of London task using Cortical Pattern Matching*, 9th Annual Meeting of the Organization for Human Brain Mapping, New York City, NY, USA, June 2003.



534. Sowell, E.R., **Thompson, P.M.**, Welcome, S.E., Henkenius, A.L., Toga, A.W., Peterson, B.S. (2003). *Cortical Abnormalities in Children and Adolescents with Attention Deficit Hyperactivity Disorder*, 9th Annual Meeting of the Organization for Human Brain Mapping, New York City, NY, USA, June 2003.
535. Zeineh, M.M., Mazziotta, J.C., **Thompson, P.M.**, Engel, S.A., Bookheimer, S.Y. (2003). *Hippocampal Flat Maps of Cortical Thickness and Power*, 9th Annual Meeting of the Organization for Human Brain Mapping, New York City, NY, USA, June 2003.
536. Narr, K.L., Bilder, R.M., Szeszko, P., **Thompson, P.M.**, Jang, S., Kim, S., Hayashi, K.M., Woods, R.P., Toga, A.W. (2003). *Mapping Regional Hippocampal Abnormalities in First Episode Schizophrenia*, 9th Annual Meeting of the Organization for Human Brain Mapping, New York City, NY, USA, June 2003.
537. Gu, X., Wang, Y.L., Chan, T.F., **Thompson, P.M.**, Yau, S.T. (2003). *Brain Surface Conformal Mapping*, 9th Annual Meeting of the Organization for Human Brain Mapping, New York City, NY, USA, June 2003.
538. Ballmaier, M., Kumar, A., Sowell, E.R., **Thompson, P.M.**, Blanton, R.E., Lavretsky, H., Welcome, S.E., Peterson, J., Pham, D., DeLuca, H., Toga, A.W. (2003). *Cortical Abnormalities in Elderly Depressed Patients*, 9th Annual Meeting of the Organization for Human Brain Mapping, New York City, NY, USA, June 2003.
539. Luders, E., Rex, D.E., Narr, K.L., Woods, R.P., Jancke, L., **Thompson, P.M.**, Mazziotta, J.C., Toga, A.W. (2003). *Relationships between Sulcal Asymmetries and Corpus Callosum Morphometry: Gender and Handedness Effects*, 9th Annual Meeting of the Organization for Human Brain Mapping, New York City, NY, USA, June 2003.
540. Blanton, R.E., Levitt, J., Peterson, J., Sadoun, T., To, D., Lee, M., **Thompson, P.M.**, McCracken, J., Toga, A.W. (2003). *IQ Correlations with Regional Gray Matter Decreases in Normal Children*, 9th Annual Meeting of the Organization for Human Brain Mapping, New York City, NY, USA, June 2003.

#### **Spring Brain Conference 2003:**

541. Woolsey, T., Mintun, M., Gollub, R., **Thompson, P.M.** (2003). *Brain Images of Mental Illness*, Invited Workshop, Proc. 14th Annual Spring Brain Conference, Sedona, Arizona, March 12-15, 2003.
542. **Thompson, P.M.** (2003). *Brain Structure Changes in Populations, Families, and Individuals with Schizophrenia*, Proc. 14th Annual Spring Brain Conference, Sedona, Arizona, March 12-15, 2003.

#### **IPSEN Foundation Conference 2003:**

543. **Thompson PM**, Hayashi KM, de Zubizaray G, Janke AL, Rose SE, Semple J, Hong MS, Herman D, Dittmer S, Doddrell DM, Toga AW (2003). *Dynamics of Gray Matter Loss in Alzheimer's Disease, Mapped with a Population Based Brain Atlas*, Proc. 2003 IPSEN Foundation Conference, "The Living Brain and Alzheimer's Disease," [Hyman, B., Demonet, J.F., Christen, Y., eds.], Paris, France, March 17, 2003.

#### **Society for Neuroscience 2003:**

544. **Thompson PM**, Hayashi KM, Hong MS, Herman DH, Simon S, Toga AW, London ED (2003). *Methamphetamine-Induced Deficits in the Human Hippocampus Detected Using Novel Computational Anatomical Mapping Algorithms and MRI*, 33rd International Meeting of the Society for Neuroscience, New Orleans, LA, November 8-12, 2003.
545. Vidal CN, Rapoport JL, Hayashi KM, Sui Y, Nguyen T, Giedd JN, Gochman P, Blumenthal J, Gogtay N, Nicolson R, Toga AW, **Thompson PM** (2003). *Mapping Hippocampal and Ventricular Changes in Adolescents*

*with Schizophrenia using Novel Computational Anatomy Techniques*, 33rd International Meeting of the Society for Neuroscience, New Orleans, LA, November 8-12, 2003.

546. Gogtay N, Lusk L, Hayashi KM, Giedd JN, Classen L, Vaituzis C, Nugent TF, Blumenthal J, Vidal CN, Toga AW, Rapoport JL, **Thompson PM** (2003). *Dynamics of Human Cortical Development Tracked Using Cortical Surface Mapping and Long-Interval Serial MRI*, 33rd International Meeting of the Society for Neuroscience, New Orleans, LA, November 8-12, 2003.

547. Nicolson R, Vidal CN, DeVito TJ, Hayashi KM, Drost DJ, Williamson PC, Craven-Thuss B, Herman DH, Sui Y, Toga AW, **Thompson PM** (2003). *Corpus Callosum Deficits in Autism Detected and Visualized using Statistical Anatomic Maps*, 33rd International Meeting of the Society for Neuroscience, New Orleans, LA, November 8-12, 2003.

548. Sowell ER, Leonard CM, **Thompson PM**, Lombardino LJ, Welcome SE, Toga AW (2003). *Longitudinal Mapping of Brain Maturation During Childhood*, 33rd International Meeting of the Society for Neuroscience, New Orleans, LA, November 8-12, 2003.

#### **American Academy of Child and Adolescent Psychiatry (AACAP) 2003:**

549. Nicolson, R., Vidal, C.N., DeVito, T.J., Sui, Y., Hayashi, K.M., Drost, D.J., Williamson, P.C., Craven-Thuss, B., Toga, A.W., **Thompson, P.M.** (2003). *Hippocampal Mapping in Autism*, Annual Meeting of the American Academy of Child and Adolescent Psychiatry (AACAP), Miami Beach, FL.

#### **American Association for Geriatric Psychiatry (AAGP) 2004:**

550. Siddarth, P., Ercoli, L.M., **Thompson, P.M.**, Hayashi, K.M., Small, G.W. (2004). *Apolipoprotein Epsilon-4 Genetic Risk for Alzheimer's Disease is Associated with Accelerated Loss in the Ratio of Gray to White Matter Volume*, Annual Meeting of the American Association for Geriatric Psychiatry (AAGP), Baltimore, MD, Feb. 21-24 2004.

551. Ercoli, L.M., Siddarth, P., **Thompson, P.M.**, Hayashi, K.M., Small, G.W. (2004). *Reduced Cerebral Gray Matter Volumes May Have Prognostic Significance for Memory Decline in Healthy Older Adults*, Annual Meeting of the American Association for Geriatric Psychiatry (AAGP), Baltimore, MD, Feb. 21-24 2004.

#### **American College of Neuropsychopharmacology (ACNP) 2004:**

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#### **International Society for Intelligence Research (ISIR) 2003:**

554. **Thompson PM** (2003). *Genetics, Brain Structure, and IQ*, Proc. International Society for Intelligence Research, Newport Beach, CA, Dec. 4-6 2003.

555. Haier, R.J., **Thompson, P.M.**, Prabakaran, V., Gray, J., Neubauer, A., Stough, C., Jung, R.E. (2003). *Brain Imaging Studies of Intelligence: Do We Finally Know Where Intelligence Is in the Brain?*, Haier Symposium, Proc. International Society for Intelligence Research, Newport Beach, CA, Dec. 4-6 2003.

#### **Australasian Society for Psychiatric Research (ASPR) 2003:**

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#### **American Mathematical Society 2004:**

557. **Thompson PM** (2004). *Mathematical/Computational Challenges in Brain Mapping*, Proc. American Mathematical Society, Phoenix, AZ, January 2004.

#### **SPIE Medical Imaging 2004:**

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#### **Biological Psychiatry 2004:**

559. Narr KL, **Thompson PM**, Bilder RM, Woods RP, Rex DE, Szeszko P, Robinson D, Wang YP, DeLuca H, Toga AW (2004). *Regional Cortical Gray Matter Reductions in First Episode Schizophrenia*, International Conference of the Society of Biological Psychiatry, New York, NY, 2004.

#### **Human Brain Mapping 2004:**

560. **Thompson PM**, Hayashi KM, Simon SL, Geaga JA, Hong MS, Sui Y, Lee JY, Toga AW, Ling W, London ED (2004). *Detection and Mapping of Abnormal Brain Structure in Methamphetamine Users*, International Conference of the Organization for Human Brain Mapping, Budapest, Hungary, June 13-17 2004.
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- 567.Frew AJ, **Thompson PM**, Cloughesy TF, Bier D, Toga AW, Alger JR (2004). *Parametric Transverse Relaxation Time Measures Are More Consistent Across Subjects than T2-Weighted Image Intensity Measures*, International Conference of the Organization for Human Brain Mapping, Budapest, Hungary, June 13-17 2004.
- 568.Sowell ER, Peterson BS, **Thompson PM**, Yoshii J, Kan E, Toga AW (2004). *Gender Differences in Cortical Thickness Mapped in 176 Healthy Individuals Between 7 and 87 Years*, International Conference of the Organization for Human Brain Mapping, Budapest, Hungary, June 13-17 2004.
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- 570.Wang YL, Gu X, Chan TF, **Thompson PM**, Yau ST (2004). *Volumetric Harmonic Brain Mapping using a Variational Method*, International Conference of the Organization for Human Brain Mapping, Budapest, Hungary, June 13-17 2004.
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- 573.Nugent TF, **Thompson PM**, Herman D, Hayashi KM, Giedd JN, Greenstein D, Classen L, Rapoport JL, Gogtay N (2004). *Dynamic Mapping of Human Hippocampal Development during Childhood and Adolescence*, International Conference of the Organization for Human Brain Mapping, Budapest, Hungary, June 13-17 2004.

#### **Society for Nuclear Medicine 2004:**

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#### **CCCT Conference 2004:**

- 575.Wang YL, Gu X, **Thompson PM**, Yau ST (2004). *Hippocampal Morphometry Studied Using Brain Conformal Mapping*, International Conference on Computing, Communications and Control Technologies, Austin, Texas, August 14-17 2004.

#### **Conference of the International Society for Neuropsychopharmacology (CINP) 2004:**

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#### **Notre Dame Conference 2004:**

577. **Thompson PM** (2004). *Mapping the Brain in Large Human Populations*, Proc. Notre Dame Conference on Quantitative Methodologies, Univ. of Notre Dame, Indiana, May 27-29, 2004.

**Human Brain II 2004:**

578. **Thompson PM** (2004). *Mapping Human Brain Development: Longitudinal Neuroimaging and Genetic Studies*, Human Brain II - Modelling and Remodelling, St. Lucia, Rome, Italy, October 6-9, 2004.

**Society for Neuroscience 2004:**

579. **Thompson PM**, Lee AD, Dutton RA, Geaga JA, Hayashi KM, Bacheller JD, Eckert MA, Toga AW, Reiss AL (2004). *Fractal Complexity and Thickness of the Human Cortex are Increased in Williams Syndrome*, Proc. 34th Annual Conference of the Society for Neuroscience, San Diego, CA, Oct. 23-27 2004.

580. Lin JJ, Salamon N, Lee AD, Dutton RA, Geaga JA, Hayashi KM, London ED, Toga AW, Engel J, **Thompson PM** (2004). *Mapping of Neocortical Gray Matter Loss in Patients with Mesial Temporal Lobe Epilepsy with Hippocampal Sclerosis*, Proc. 34th Annual Conference of the Society for Neuroscience, San Diego, CA, Oct. 23-27 2004.

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585. Sowell ER, **Thompson PM**, Yoshii J, Kan E, Toga AW, Peterson BS (2004). *Gray Matter Thickness Abnormalities Mapped in Children with Tourette Syndrome*, Proc. 34th Annual Conference of the Society for Neuroscience, San Diego, CA, Oct. 23-27 2004.

586. Davis SW, Hayashi KM, Meltzer CC, **Thompson PM**, Toga AW, Lopez OL, Becker JT (2004). *Mapping Hippocampal Volume Changes in Alzheimer's Disease and Mild Cognitive Impairment*, Proc. 34th Annual Conference of the Society for Neuroscience, San Diego, CA, Oct. 23-27 2004.

587. O'Hare ED, Kan E, Yoshii J, Mattson SN, Riley EP, **Thompson PM**, Toga AW, Sowell ER (2004). *Cognitive Correlates of Anterior Vermal Dysmorphology in Severe Prenatal Alcohol Exposure*, Proc. 34th Annual Conference of the Society for Neuroscience, San Diego, CA, Oct. 23-27 2004.

588. Luders E, Narr KL, Zaidel E, **Thompson PM**, Jancke L, Gaser C, Toga AW (2004). *Asymmetries in the Corpus Callosum and the Influence of Gender*, Proc. 34th Annual Conference of the Society for Neuroscience, San Diego, CA, Oct. 23-27 2004.

**American College of Neuropsychopharmacology (ACNP) 2004:**

589.London ED, Berman SM, Voytek BT, Simon SL, Monterosso J, Geaga JA, Hong MS, Hayashi KM, **Thompson PM**, Mandelkern MA, Brody AL, Rawson RA, Ling W (2004). *Cerebral Metabolic Dysfunction and Impaired Vigilance in Recently Abstinent Methamphetamine Abusers*, 43<sup>rd</sup> Annual Meeting of the **American College of Neuropsychopharmacology (ACNP)**, San Juan, Puerto Rico, Dec. 12-16 2004.

**American Association for Geriatric Psychiatry (AAGP) 2004:**

590.Butters MA, Hayashi KM, Aizenstein HJ, Seaman J, Figurski J, Zmuda MD, Meltzer CC, Reynolds CF, **Thompson PM**, Becker JT (2004). *Three dimensional volume measurement reveals decreased volume of the caudate nucleus in late-life depression*, **American Association for Geriatric Psychiatry**, 2004.

**8<sup>th</sup> Biennial Australasian Schizophrenia Conference 2004:**

591.Rasser PE, Peck G, Johnston PJ, **Thompson PM**, Ward PB, Schall U (2004). *fMRI BOLD Cerebellar Activation of First-Episode Schizophrenia Patients during the Tower of London Task*, **8<sup>th</sup> Biennial Australasian Schizophrenia Conference**, Sept. 22-24 2004.

**Human Brain Mapping Conference 2005:**

592.**Thompson PM** (2005). *Mapping Genetic Influences on Brain Structure and Intelligence*, Breakfast Symposium, Toronto, Canada, 2005.

**International Congress on Schizophrenia Research 2005:**

593.Szeszko PR, Robinson D, Narr KL, Kane JM, **Thompson PM**, Woods RP, Rex DE, Wang YP, DeLuca H, Toga AW, Bilder RM (2005). *Decreased Frontal Cortical Thickness in Patients with First-Episode Schizophrenia who are Nonresponsive to Atypical Antipsychotics*, International Congress on Schizophrenia Research, Savannah, GA, April 2-6, 2005.

594.Narr KL, Toga AW, Szeszko PR, **Thompson PM**, Woods RP, Robinson D, Sevy S, Wang YP, Schrock K, Bilder RM (2005). *Cortical thinning in cingulate and occipital cortices in first episode schizophrenia*, International Congress on Schizophrenia Research, Savannah, GA, April 2-6, 2005.

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**American Academy of Neurology 2005:**

596.**Thompson PM**, Dutton RA, Lu A, Lee SE, Lee JY, Hayashi KM, Toga AW, Lopez OL, Aizenstein HJ, Becker JT (2005). *Mapping 3-Dimensional Changes in Corpus Callosum and Ventricular Structure in HIV/AIDS Patients*, 57th Annual Meeting of the American Academy of Neurology (AAN), Miami Beach, FL, April 9-16, 2005.

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598.Apostolova L, **Thompson PM**, Hayashi KM, Dinov ID, Toga AW, Cummings JL (2005). *Cortical Atrophy Pattern Predicts Conversion from Mild Cognitive Impairment to Alzheimer Dementia*, 57th Annual Meeting of the American Academy of Neurology (AAN), Miami Beach, FL, April 9-16, 2005.

599. Apostolova L, **Thompson PM**, Dutton RA, Dinov ID, Toga AW, Cummings JL (2005). *Hippocampal Size Can Predict the Outcome of Mild Cognitive Impairment*, 57th Annual Meeting of the American Academy of Neurology (AAN), Miami Beach, FL, April 9-16, 2005.

#### **American Geriatric Society 2005:**

600. Roybal DJ, Dutton RA, Hayashi, KM, de Zubicaray GI, O'Dowd BS, Chalk JB, Janke AL, McMahon KL, Cowin GJ, Strudwick M, Bryant MK, Doddrell DM, **Thompson PM** (2005). *Mapping ApoE4 and Gender Effects on Hippocampal Atrophic Rates: A Longitudinal MRI Study of Normal Aging*, 2005 Annual Scientific Meeting of the American Geriatric Society (AGS), Orlando, FL, May 11-15, 2005.

#### **Human Brain Mapping Conference 2005:**

601. **Thompson PM**, Dutton RA, Hayashi KM, Lu A, Lee SE, Lee JY, Toga AW, Lopez OL, Aizenstein HJ, Becker JT (2005). 3D Cortical Thickness Reductions Mapped in HIV/AIDS Correlate with Cognitive Impairment and Immune System Deterioration, 11th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Toronto, Canada, June 12-16, 2005.

602. Leow AD, Lee AD, Chiang MC, Dutton RA, Hayashi KM, Huang SC, Becker JT, Davis SW, Toga AW, **Thompson PM** (2005). Analysis of Regional Brain Atrophy in a Single Case of Semantic Dementia Using Serial MRI with Inverse-Consistent Non-Rigid Registration, 11th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Toronto, Canada, June 12-16, 2005.

603. Chiang MC, Reiss AL, Eckert MA, Dutton RA, Lee AD, Alagband Y, Bellugi U, Galaburda A, Korenberg J, Mills DL, Toga AW, **Thompson PM** (2005). Tensor-Based Morphometry of the Corpus Callosum in Williams Syndrome, 11th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Toronto, Canada, June 12-16, 2005.

604. Lin JJ, Salamon N, Lee AD, Dutton RA, Geaga JA, Hayashi KM, Luders E, Toga AW, Engel J, **Thompson PM** (2005). Mapping Reduced Cortical Thickness and Complexity in Mesial Temporal Lobe Epilepsy with Hippocampal Sclerosis, 11th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Toronto, Canada, June 12-16, 2005.

605. Vidal CN, Frenoux E, Nicolson R, Boire JY, DeVito TJ, Geaga JA, Hayashi KM, Drost DJ, Williamson PC, Henry JD, Toga AW, **Thompson PM** (2005). 3D Mapping of the Lateral Ventricles in Autism, 11th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Toronto, Canada, June 12-16, 2005.

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607. Carmichael OT, **Thompson PM**, Dutton RA, Lu A, Lee SE, Lee JY, Hayashi KM, Toga AW, Lopez OL, Aizenstein HJ, Becker JT (2005). *Mapping 3D Ventricular Changes in HIV/AIDS with Manual and Fully-Automated Tracings*, 11th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Toronto, Canada, June 12-16, 2005.

608. Carmichael OT, **Thompson PM**, Dutton RA, Lu A, Lee SE, Lee JY, Hayashi KM, Toga AW, Lopez OL, Aizenstein HJ, Becker JT (2005). *Dementia-Associated Ventricular Volume Changes in a Community Cohort*, 11th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Toronto, Canada, June 12-16, 2005.

609. Nugent TF, **Thompson PM**, Herman DH, Giedd JN, Greenstein D, Classen L, Rapoport JL, Gogtay N (2005). *Dynamic Mapping of Hippocampal Development in Childhood Onset Schizophrenia*, 11th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Toronto, Canada, June 12-16, 2005.
610. Sabattoli F, Boccardi M, Lee AD, Dutton RA, **Thompson PM**, Frisoni GB (2005). Hippocampal Changes in Alzheimer, Fronto-Temporal and Lewy Body Dementia Patients: A Radial Atrophy Mapping Study, 11th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Toronto, Canada, June 12-16, 2005.
611. Narr KL, Bilder RM, Woods RP, **Thompson PM**, Szeszko P, Robinson D, Ballmeier M, Slater M, Messenger B, Wang YP, Toga AW (2005). Mapping CSF Changes in First Episode Schizophrenia, 11th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Toronto, Canada, June 12-16, 2005.
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613. Wang Y, Gu X, Hayashi KM, Chan TF, **Thompson PM**, Yau ST (2005). Brain Surface Parametrization with Holomorphic Differential Forms, 11th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Toronto, Canada, June 12-16, 2005.
614. Wang Y, Gu X, Chan TF, **Thompson PM**, Yau ST (2005). Direct Painting Software for Tracing on 3D Brain Surfaces with Global Conformal Parametrization, 11th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Toronto, Canada, June 12-16, 2005.
615. Apostolova LG, **Thompson PM**, Hayashi KM, Dinov ID, Toga AW, Cummings JL (2005). 3D Surface-Based Gray Matter Density Analysis Can Predict Conversion from Mild Cognitive Impairment to Alzheimer's Dementia, 11th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Toronto, Canada, June 12-16, 2005.
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618. Luders E, Narr KL, **Thompson PM**, Rex DE, Woods RP, DeLuca H, Jancke L, Toga AW (2005). Gender Effects on Cortical Thickness, 11th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Toronto, Canada, June 12-16, 2005.
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620. Gogtay N, Herman DH, Ordonez A, Greenstein D, Hayashi KM, Nugent TF, Vaituzis C, Giedd JN, Classen L, Lelbenluft E, **Thompson PM**, Rapoport JL (2005). Cortical Brain Development in Early Onset Bipolar Illness Before and After the Illness Onset, 52nd Annual Meeting of the Society for Nuclear Medicine (SNM), Toronto, Canada, June 18-22, 2005.



621. Protas H, **Thompson PM**, Hayashi KM, Huang SC (2005). Cortical Brain Surface Mapping for Studying Partial Volume Effects in Brain FDG-PET Images, 52nd Annual Meeting of the Society for Nuclear Medicine (SNM), Toronto, Canada, June 18-22, 2005.
622. Ogren JA, Staba RJ, Lin JJ, Salamon N, Dutton RA, Luders E, Toga AW, Engel J, **Thompson PM**, Wilson C (2005). *Fast Ripple Oscillations Correlate with Increases in Hippocampal Atrophy in Unilateral Mesial Temporal Lobe Epilepsy*, American Epilepsy Society and American Clinical Neurophysiology Society Joint Annual Meeting, 2005, *EPILEPSIA* 46: 8-9 Suppl. 8 2005.
623. Carmichael O, Aizenstein HJ, Davis SW, Becker JT, **Thompson PM**, Meltzer CC, Liu Y (2005). *Atlas-Based Hippocampus Segmentation In Alzheimer's Disease and Mild Cognitive Impairment*. 13<sup>th</sup> Annual Meeting of the International Society for Magnetic Resonance in Medicine (ISMRM), South Beach, Miami, FL, May 7-13, 2005.

#### **Society for Neuroscience (SFN) 2005**

624. **Thompson PM**, Dutton RA, Hayashi KM, Toga AW, Lopez OL, Aizenstein HJ, Becker JT (2005). *Thinning of the Cerebral Cortex Visualized in HIV/AIDS Reflects CD4+ T-Lymphocyte Decline*, 35<sup>th</sup> Annual Meeting of the Society for Neuroscience, Washington DC, Nov. 12-16, 2005.
625. Bearden CE, Dutton RA, van Erp TGM, Tran H, Zimmermann L, Geaga JA, Simon TJ, Ding L, Emanuel BS, **Thompson PM** (2005). *Cortical Thickness Maps in Children with 22q11.2 Deletion Syndrome*, 35<sup>th</sup> Annual Meeting of the Society for Neuroscience, Washington DC, Nov. 12-16, 2005.
626. Soares JC, Bearden CE, Dalwani M, Hayashi KM, Lee AD, Nicoletti M, Trakhenbroit M, Glahn DC, Brambilla P, Sassi RB, Mallinger AG, Frank E, Kupfer D, **Thompson PM** (2005). Cortical Mapping of Gray Matter Density Bipolar Disorder Patients, 35<sup>th</sup> Annual Meeting of the Society for Neuroscience, Washington DC, Nov. 12-16, 2005.
627. Leow AD, **Thompson PM**, Hayashi KM, Bearden C, Nicoletti MA, Monkul SE, Brambilla P, Sassi RB, Mallinger AG, Soares JC (2005). *Lithium Effects on Human Brain Structure Mapped Using Longitudinal MRI*, 35<sup>th</sup> Annual Meeting of the Society for Neuroscience, Washington DC, Nov. 12-16, 2005.
628. Sowell ER, **Thompson PM**, Kan E, Toga AW, Luna B (2005). Mapping Relationships Between Frontal Cortical Activation and Cortical Thickness in Normal Adolescents, 35<sup>th</sup> Annual Meeting of the Society for Neuroscience, Washington DC, Nov. 12-16, 2005.
629. van Erp TGM, **Thompson PM**, Kieseppä TT, Zimmermann LL, Tran HL, Correll C, Wobbekind A, Haukka J, Partonen T, Kaprio J, Lönngqvist J, Poutanen VP, Toga AW, Cannon TD (2005). *Cortical Gray Matter Density in Twins Discordant for Bipolar I Disorder*, 35<sup>th</sup> Annual Meeting of the Society for Neuroscience, Washington DC, Nov. 12-16, 2005.
630. Lu LH, Leonard CM, **Thompson PM**, Kan E, Jolley J, Toga AW, Sowell ER (2005). *Double Dissociation of Anatomical Behavioral Specialization Using MRI*, 35<sup>th</sup> Annual Meeting of the Society for Neuroscience, Washington DC, Nov. 12-16, 2005.
631. Hua X, Leow AD, Levitt JG, **Thompson PM**, Toga AW (2005). *Detecting Brain Growth Patterns in Normal Children using Tensor-Based Morphometry*, 35<sup>th</sup> Annual Meeting of the Society for Neuroscience, Washington DC, Nov. 12-16, 2005.
632. Lu LH, Leonard CM, Dinov ID, **Thompson PM**, Kan E, Jolley J, Toga AW, Sowell ER (2005). *Differentiating Between Phonological Processing and Rapid Naming Using Structural MRI*, 34th Annual International Neuropsychological Society (INS) Meeting, Boston, MA, February 1-4, 2006.

633. Bernstein MA, Lin C, Borowski BJ, Dale AM, Krueger G, Ward HA, Metzger GJ, Debbins JP, Scott KT, Fox NC, Hill DLG, Schuff N, Harvey DJ, Killiany R, Whitwell JL, Ward CP, Britson PJ, **Thompson PM**, Alexander GE, Glover GH, Mugler JP III, Weiner MW, Jack CR (2005). *Alzheimer's Disease Neuroimaging Initiative (ADNI): The MR Imaging Protocol*. Presented at State-of-the-Art Cardiovascular and Neuro MRI, a Joint Workshop of the ISMRM and CSR, Beijing, China, September 2005.

#### **American Academy of Neurology (AAN) 2006**

634. Chiang MC, Dutton RA, Hayashi KM, Toga AW, Lopez OL, Aizenstein HJ, Becker JT, **Thompson PM** (2006). 3D Pattern of Brain Atrophy in HIV/AIDS Mapped using Tensor-Based Morphometry, Annual Meeting of the American Academy of Neurology, 2006.

635. Cummings JL, Apostolova LG, Akopyan GG, Steiner CA, Partiali N, Toga AW, **Thompson PM** (2006). Structural Correlates of Apathy in Alzheimer's Disease, Annual Meeting of the American Academy of Neurology, 2006.

636. Apostolova LG, Dinov ID, Toga AW, Cummings JL, **Thompson PM** (2006). 3D Comparison of Hippocampal Atrophy in Mild Cognitive Impairment and Alzheimer's Disease, Annual Meeting of the American Academy of Neurology, 2006.

637. Apostolova LG, Steiner CA, Akopyan GG, Toga AW, Cummings JL, **Thompson PM** (2006). Structural Correlates of Apathy in Alzheimer's Disease, Annual Meeting of the American Academy of Neurology, 2006.

638. Carmichael OT, Kuller LH, Lopez OL, **Thompson PM**, Dutton RA, Lu A, Lee SH, Lee JY, Aizenstein HA, Meltzer CC, Liu Y, Toga AW, Becker JT (2006). *Longitudinal study of ventricular atrophy rates in the Cardiovascular Health Study*, Annual Meeting of the American Academy of Neurology, 2006.

639. Carmichael OT, Kuller LH, Lopez OL, **Thompson PM**, Dutton RA, Lu A, Lee SH, Lee JY, Aizenstein HA, Meltzer CC, Liu Y, Toga AW, Becker JT (2006). *Cardiovascular Risk Factors Accelerate Ventricular Expansion in the Cardiovascular Health Study*, Annual Meeting of the American Academy of Neurology, 2006.

640. Small GW, Kepe V, Ercoli L, Siddarth P, Miller K, Bookheimer SY, Lavretsky H, Cole G, Vinters HV, **Thompson PM**, Huang SC, Satyamurthy NE, Phelps ME, Barrio JR (2006). *FDDNP-PET Scanning of Cerebral Amyloid and Tau Deposits in Mild Cognitive Impairment*, Annual Meeting of the American Academy of Neurology, 2006 [Late Breaking Science Abstract]; *Neurology*. 2006 Jul 11;67(1):186.

641. Small GW, Kepe V, Ercoli L, Siddarth P, Vinters HV, Bookheimer SY, Cole GM, **Thompson PM**, Huang SC, Barrio JR (2006). *Cerebral FDDNP-PET Binding Increases in MCI and Aging as Neurodegeneration Progresses*, Annual Meeting of the Alzheimer's Imaging Consortium (AIC), 2006.

#### **Society of Biological Psychiatry (SOBP) 2006**

642. Leow AD, Lu A, Lee AD, Gogtay N, Rapoport JL, Toga AW, **Thompson PM** (2006). *Tensor-Based Morphometry Reveals Growth Pattern Abnormalities in Childhood-onset Schizophrenia*, 61<sup>st</sup> Annual Scientific Convention of the Society of Biological Psychiatry (SOBP), Toronto, Ontario, Canada, May 18-20 2006.

#### **Human Brain Mapping Conference 2006**

643. Chiang MC, Dutton RA, Hayashi KM, Toga AW, Lopez OL, Aizenstein HJ, Becker JT, **Thompson PM** (2006). 3D Pattern of Brain Atrophy in HIV/AIDS Visualized using Tensor-Based Morphometry, 12th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Florence, Italy, June 11-15, 2006.

644. Chiang MC, Reiss AL, Dutton RA, Lee AD, Hayashi KM, Eckert MA, Bellugi U, Galaburda AM, Korenberg JR, Mills DL, Toga AW, **Thompson PM** (2006). 3D Pattern of Brain Volume Reduction in Williams Syndrome Visualized using Tensor-Based Morphometry, 12th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Florence, Italy, June 11-15, 2006.
645. Apostolova LG, Lu P, Rogers S, Dutton RA, Toga AW, Cummings JL, **Thompson PM** (2006). 3D mapping of language impairments in clinical and pre-clinical Alzheimer's disease, 12th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Florence, Italy, June 11-15, 2006.
646. Apostolova LG, Lu P, Rogers S, Dutton RA, Toga AW, Cummings JL, **Thompson PM** (2006). 3D mapping of Mini-Mental State Examination performance in clinical and pre-clinical Alzheimer's disease, 12th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Florence, Italy, June 11-15, 2006.
647. Lee AD, Leow AD, Lu A, Reiss AL, Hall S, Toga AW, **Thompson PM** (2006). Brain Deficits Visualized in Fragile X Syndrome using Elastic Matching and Riemannian Tensor-Based Morphometry, 12th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Florence, Italy, June 11-15, 2006.
648. Lu A, Leow AD, Lee AD, Gogtay N, Rapoport JL, Toga AW, **Thompson PM** (2006). Growth Pattern Abnormalities in Childhood-onset Schizophrenia Visualized using Tensor-Based Morphometry, 12th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Florence, Italy, June 11-15, 2006.
649. Foland LC, Altshuler LL, Leow AD, Lee AD, Lu A, Asuncion D, Toga AW, **Thompson PM** (2006). A Tensor-Based Morphometric Study of Bipolar Disorder, 12th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Florence, Italy, June 11-15, 2006.
650. Lepore N, Chou YY, Brun CA, Mani M, de Zubicaray GI, McMahon K, Wright M, Martin N, Toga AW, **Thompson PM** (2006). Genetic Influences on Brain Structure and Fiber Architecture Mapped using Diffusion Tensor Imaging and Tensor-Based Morphometry in Twins, 12th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Florence, Italy, June 11-15, 2006.
651. Bearden CE, Dutton RA, van Erp TGM, Zimmermann L, Tran H, Geaga JA, Simon TJ, Cannon TD, Emanuel BS, **Thompson PM** (2006). Abnormal Cortical Thickness and Cortical Asymmetry Mapped in Children with 22q11.2 Microdeletions, 12th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Florence, Italy, June 11-15, 2006.
652. Pievani M, Testa C, Sabbatoli F, Galluzzi S, Ettori M, Hayashi KM, Lee AD, Dutton RA, **Thompson PM**, Frisoni GB (2006). Structural correlates of age at onset in Alzheimer's disease: a cortical pattern matching study, 12th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Florence, Italy, June 11-15, 2006.
653. Rasser PR, Peck G, Johnston P, Schall U, **Thompson PM** (2006). Atlas of Cerebellar Cortical Gray Matter Thickness, 12th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Florence, Italy, June 11-15, 2006.
654. Tosun D, Reiss AL, Prince JL, Bellugi U, Galaburda AM, Korenberg JR, Mills DL, Toga AW, **Thompson PM** (2006). Measuring Increased Sulcal Complexity in Williams Syndrome using 3-D Cortical Morphometry, 12th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Florence, Italy, June 11-15, 2006.
655. Wang YL, Chiang MC, **Thompson PM** (2006). Surface Mutual Information for Brain Mapping, 12th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Florence, Italy, June 11-15, 2006.

656. Lui LM, Wang YL, Chan TF, **Thompson PM** (2006). Automatic Landmark Tracking and the Optimization of Brain Conformal Mapping, 12th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Florence, Italy, June 11-15, 2006.
657. Gutman B, Wang YL, Lui LM, Chan TF, **Thompson PM** (2006). Hippocampal Surface Analysis Using Spherical Harmonic Functions Applied to Surface Conformal Mapping, 12th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Florence, Italy, June 11-15, 2006.
658. Wang YL, Gu XF, Chan TF, Toga AW, **Thompson PM**, Yau ST (2006). Brain Surface Conformal Parameterization with Algebraic Functions, 12th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Florence, Italy, June 11-15, 2006.
659. Kochunov PK, **Thompson PM**, Lancaster JL (2006). Age-related trends in gray matter thickness, sulcal and white matter atrophy during normal aging, 12th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Florence, Italy, June 11-15, 2006.
660. Narr KL, Woods RP, **Thompson PM**, Robinson D, Szeszko P, Dimtcheva T, Gurbani M, Toga AW, Bilder RM (2006). Relationships between IQ and regional cortical gray matter thickness in healthy adults, 12th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Florence, Italy, June 11-15, 2006.
661. Narr KL, Bilder RM, Wang YP, Luders E, **Thompson PM**, Woods RP, Robinson D, Szeszko P, Toga AW (2006). Asymmetries of Cortical Thickness and Shape: Effects of Handedness, Gender and Schizophrenia, 12th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Florence, Italy, June 11-15, 2006.
662. Ogren JA, Staba RJ, Lin JJ, Salamon N, Dutton RA, Fields T, Luders E, Toga AW, Engel J, **Thompson PM**, Wilson CL (2006). *Mapping Hippocampal Radial Atrophy and High Frequency Oscillations in Mesial Temporal Lobe Epilepsy*, 12th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Florence, Italy, June 11-15, 2006.
663. O'Hare ED, Lu LH, Bookheimer SY, Kan E, McCourt ST, Poldrack RA, **Thompson PM**, Toga AW, Sowell ER (2006). Mapping Relationships Between Cortical Thickness and Cortical Activation During Verbal Working Memory in Normally Developing Children and Adolescents, 12th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Florence, Italy, June 11-15, 2006.
664. Lu LH, O'Hare ED, Bookheimer SY, Kan E, McCourt ST, **Thompson PM**, Toga AW, Sowell ER (2006). Mapping Activation During Verbal Learning and Recall in Normally Developing Children, 12th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Florence, Italy, June 11-15, 2006.

**International Conference on Alzheimer's Disease (ICAD2006) and American Neurological Association (ANA) 2006**

665. Apostolova LG, Clark DG, Zoumalan C, Steiner CA, McMurtray A, Dutton RA, Hayashi KM, Toga AW, Cummings JL, Mendez MF, **Thompson PM** (2006). *3D Mapping of Gray Matter Atrophy in Semantic Dementia and Frontal Variant Frontotemporal Dementia*, International Conference on Alzheimer's Disease (ICAD2006), Madrid, Spain, 2006.
666. Apostolova LG, Dinov ID, Zoumalan C, Steiner CA, Siu E, Toga AW, Cummings JL, Small GW, **Thompson PM**, Phelps ME, Silverman DH (2006). *MR-Guided 3D PET Mapping of Longitudinal Changes in Regional Cerebral Metabolism of Normal Subjects*, International Conference on Alzheimer's Disease (ICAD2006), Madrid, Spain, 2006.

667. Apostolova LG, Lu P, Rogers S, Dutton RA, Hayashi KM, Toga AW, Cummings JL, **Thompson PM** (2006). *3D mapping of verbal memory performance in clinical and pre-clinical Alzheimer's disease*, 131<sup>st</sup> Annual Meeting of the American Neurological Association, Chicago, IL, October 8-11, 2006.

#### **Society for Neuroscience (SFN) 2006**

668. Apostolova LG, **Thompson PM**, Steiner CA, Akopyan GG, Dutton RA, Toga AW, Cummings JL (2006). *Comparison of 3D Cortical Gray Matter Atrophy in Amnesic Mild Cognitive Impairment and Alzheimer's Disease*, 36<sup>th</sup> Annual Meeting of the Society for Neuroscience, Atlanta, Georgia, Oct. 14-18 2006.
669. Foland LC, Altshuler LL, Eisenberger NI, Townsend J, Bookheimer SY, **Thompson PM** (2006). *Deficient modulation of amygdala activity by the prefrontal cortex in bipolar mania*, 36<sup>th</sup> Annual Meeting of the Society for Neuroscience, Atlanta, Georgia, Oct. 14-18 2006.
670. Bearden CE, **Thompson PM**, Dutton RA, Frey B, Peluso M, Nicoletti M, Diershke N, Hayashi KM, Klunder AD, Brambilla P, Sassi RB, Mallinger AG, Soares JC (2006). *Three-dimensional patterns of hippocampal volume reduction in unmedicated patients with bipolar disorder*, 36<sup>th</sup> Annual Meeting of the Society for Neuroscience, Atlanta, Georgia, Oct. 14-18 2006.
671. Hayashi KM, Gothelf D, Furfaro JA, Eckert MA, Hall SS, O'Hara R, Erba HW, Patnaik S, Golianu B, Kraemer HC, Piven J, **Thompson PM**, Reiss AL (2006). *Specific Abnormalities of Brain Development in Fragile X Syndrome are Associated with Autistic Behaviors*, 36<sup>th</sup> Annual Meeting of the Society for Neuroscience, Atlanta, Georgia, Oct. 14-18 2006.
672. O'Hare ED, Lu LH, Bookheimer SY, Kan E, McCourt ST, Poldrack RA, **Thompson PM**, Toga AW, Sowell ER (2006). *Mapping Relationships Between Cortical Thickness and Functional Activation During Verbal Working Memory in Normal Children*, 36<sup>th</sup> Annual Meeting of the Society for Neuroscience, Atlanta, Georgia, Oct. 14-18 2006.
673. Boccardi M, Ganzola R, Sabbatoli F, **Thompson PM**, Beltramello A, Geroldi C, Umiltà CA, Frisoni GB (2006). *Localization of hippocampal atrophy in frontotemporal dementia: a radial atrophy mapping study*, 5th International Conference on Frontotemporal Dementia, San Francisco, California, Sept. 6-8 2006.
674. Ogren JA, Bragin A, Hoftman G, Staba RJ, Lin JJ, Salamon N, Dutton RA, Fields T, Toga AW, Engel J, **Thompson PM**, Wilson CL (2006). *Mapping Hippocampal Atrophy in Patients with Low-Voltage Fast and Hypersynchronous Seizure Onset Patterns*, Annual Conference of the American Epilepsy Society, 2006.
675. Bearden CE, **Thompson PM**, Dutton RA, Frey B, Peluso M, Nicoletti M, Diershke N, Hayashi KM, Klunder AD, Brambilla P, Sassi RB, Mallinger AG, Soares JC (2006). *3D mapping of hippocampal anatomy in unmedicated and lithium-treated bipolar patients*, Annual Meeting of the European College of Neuropsychopharmacology (ECNP), Paris, France, 16-20 September 2006.

#### **American College of Neuropsychopharmacology (ACNP) 2006:**

676. Bearden CE, **Thompson PM**, Dutton RA, Frey B, Peluso M, Nicoletti M, Diershke N, Hayashi KM, Klunder AD, Glahn D, Brambilla P, Sassi RB, Mallinger AG, Soares JC (2006). *Three-dimensional mapping of hippocampal anatomy in unmedicated and lithium-treated patients with bipolar disorder*, Annual Meeting of the American College of Neuropsychopharmacology (ACNP) 2006, Hollywood, Florida, December 2006.
677. Becker JT, Juengst S, Lobaugh NJ, **Thompson PM**, Lopez OL, Aizenstein HJ (2006). *Brain Structural Abnormalities in HIV/AIDS Analyzed by the Method of Partial Least Squares*, Annual Meeting of the American College of Neuropsychopharmacology (ACNP) 2006, Hollywood, Florida, December 2006.

678. Bookheimer S, Braskie M, Burggren A, Miller K, Ercoli L, **Thompson PM**, Small GW (2006). *Functional MRI and Structure-Function Mapping in the Early Diagnosis of Alzheimer's Disease*, Annual Meeting of the American College of Neuropsychopharmacology (ACNP) 2006, Hollywood, Florida, December 2006.
679. Small GW, Kepe V, Ercoli LM, Siddarth P, Bookheimer SY, Miller KJ, Lavretsky H, Cole GM, Vinters HV, **Thompson PM**, Huang SC, Satyamurthy N, Phelps ME, Barrio JR (2006). *PET Imaging of Brain Amyloid and Tau Deposits*. Annual Meeting of the American College of Neuropsychopharmacology (ACNP) 2006, Hollywood, Florida, December 2006.
680. Sun D, Phillips L, Velakoulis D, Yung A, McGorry PD, Wood SJ, van Erp TGM, **Thompson PM**, Toga AW, Cannon TD, Pantelis C (2007). *Progressive Brain Structural Changes Mapped as Psychosis Develops in 'At Risk' Individuals*, International Congress on Schizophrenia Research, Colorado Springs, CO, March 28-April 1, 2007, SCHIZOPHRENIA BULLETIN 33 (2): 356-357 MAR 2007.
681. **Thompson PM** (2006). *Time-lapse Mapping of Brain Changes in Schizophrenia & over the Human Lifespan*, **International Journal of Neuropsychopharmacology** 9:S34, Suppl. 1 July 2006.
682. Ringman JM, Dutton RA, Lai J, Medina L, Apostolova LG, Cummings JL, **Thompson PM** (2007). *Cortical Thinning Detected and Visualized in the Pre-Clinical Phase of Familial Alzheimer's Disease*, submitted to the American Academy of Neurology, 2007.
683. Apostolova LG, Silverman DH, Green A, Rogers SA, **Thompson PM**, Dinov ID, Siu E, Toga AW, Cummings JL, Phelps ME, Small GW (2007). *ApoE4 Allele Influences longitudinal 3D hippocampal FDG-PET changes in nondemented elderly*, 2007 meeting of the American Academy of Neurology; NEUROLOGY 68 (12): A328-A328 Suppl. 1 MAR 20 2007.
684. Carmichael O, **Thompson PM**, Dutton RA, Lu A, Lee S, Lee J, Kuller L, Lopez O, Aizenstein H, Meltzer C, Liu Y, Toga AW, Becker JT (2007). *Spatial mapping of ventricular changes related to dementia and mild cognitive impairment in a large community-based cohort*. 2007 meeting of the American Academy of Neurology; NEUROLOGY 68 (12): A328-A328 Suppl. 1 MAR 20 2007.
685. Lu LH, Dapretto M, O'Hare ED, Kan E, McCourt ST, Jolley J, **Thompson PM**, Toga AW, Sowell ER (2007). *Right hemisphere involvement in language development observed with magnetic resonance imaging and neuropsychological measures*, 35th Annual International Neuropsychological Society (INS) Meeting, Portland, Oregon, February 7-10, 2007.

#### **Society of Biological Psychiatry (SOBP) 2007**

686. London ED, Monterosso JR, Berman S, **Thompson PM**, Baicy K, Payer D (2007). *Deficits in Brain Structure and Function Associated with Methamphetamine Abuse: Impaired Cognitive Control and Therapeutic Approaches*, 62nd Annual Scientific Convention of the Society of Biological Psychiatry (SOBP), Westin Horton Plaza, San Diego, CA, May 17th-19th, 2007.
687. Bearden CE, Soares JC, Klunder AD, Nicoletti M, Diershke N, Hayashi KM, Brambilla P, Sassi RB, Axelson D, Ryan N, Birmaher B, **Thompson PM** (2007). *Three-dimensional mapping of hippocampal anatomy in adolescents with early-onset bipolar disorder*, 62nd Annual Scientific Convention of the Society of Biological Psychiatry (SOBP), Westin Horton Plaza, San Diego, CA, May 17th-19th, 2007.

#### **Human Brain Mapping Conference (OHBM) 2007**

688. Chiang MC, Reiss AL, Lee AD, Bellugi U, Galaburda AM, Korenberg JR, Mills DL, Toga AW, **Thompson PM** (2007). *3D Pattern of Brain Abnormalities in Williams Syndrome Visualized using Tensor-Based*

- Morphometry*, 13th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Chicago, IL, June 10-14, 2007.
689. Lepore N, Shi Y, Lepore F, Voss P, Fortin M, Lassonde M, Dinov ID, Toga AW, **Thompson PM** (2007). *Hippocampal Shape Differences Detected in Blind versus Sighted Subjects*, 13th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Chicago, IL, June 10-14, 2007.
690. Chou YY, Leporé N, de Zubicaray GI, Rose SE, Carmichael OT, Becker JT, Toga AW, **Thompson PM** (2007). *Automated Ventricular Mapping via Multiple Surface-based Atlases*, 13th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Chicago, IL, June 10-14, 2007.
691. Chou YY, Leporé N, de Zubicaray GI, Rose SE, Carmichael OT, Becker JT, Toga AW, **Thompson PM** (2007). *Ventricular Shape Differences Mapped Automatically in Those at Genetic Risk for Alzheimer's Disease*, 13th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Chicago, IL, June 10-14, 2007.
692. Foland LC, Altshuler LL, Eisenberger NI, Townsend J, Bookheimer SY, **Thompson PM** (2007). *Functional connectivity of fronto-limbic networks in bipolar mania during an affective faces task*, 13th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Chicago, IL, June 10-14, 2007.
693. Ganzola R, Boccardi M, Sabattoli F, **Thompson PM**, Hayashi KM, Klunder AD, Beltramello A, Bonetti M, Geroldi C, Umiltà C, Frisoni GB (2007). *Localization of hippocampal atrophy in frontotemporal dementia: a radial atrophy mapping study*, 13th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Chicago, IL, June 10-14, 2007.
694. Boccardi M, Frisoni GB, Ganzola R, Rossi R, Sabattoli F, **Thompson PM**, Klunder AD, Hayashi KM, Tiihonen J (2007). *Hippocampal morphology in psychopathic individuals*, 13th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Chicago, IL, June 10-14, 2007.
695. Pievani M, Testa C, Sabattoli F, Bonetti M, Hayashi KM, Lee AD, Dutton RA, **Thompson PM**, Frisoni GB (2007). *Effects of the ApoE genotype and age at onset in Alzheimer's Disease: a cortical pattern matching study*, 13th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Chicago, IL, June 10-14, 2007.
696. Luders E, Narr KL, Bilder RM, **Thompson PM**, Szeszko PR, Hamilton L, Gurbani MN, Toga AW (2007). *Positive Correlations between Corpus Callosum Thickness and Intelligence*, 13th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Chicago, IL, June 10-14, 2007.
697. Sun D, Velakoulis D, Yung A, McGorry PD, Wood SJ, Phillips L, van Erp TGM, **Thompson PM**, Toga AW, Stuart GW, Cannon TD, Pantelis C (2007). *Brain surface contraction mapped in first-episode schizophrenia – a longitudinal magnetic resonance imaging study*, 13th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Chicago, IL, June 10-14, 2007.
698. Protas HD, Huang SC, Kepe V, Hayashi KM, Klunder AD, Braskie MN, Ercoli LM, Bookheimer SY, **Thompson PM**, Barrio JR, Small GW (2007). *Hemispheric Cortical Surface Map for Assessing the Rate of Changes of Regional Cortical FDDNP Distribution versus MMSE Score*, 54<sup>th</sup> Annual Meeting of the Society for Nuclear Medicine, June 2-6, 2007, Washington, DC.
- Alzheimer's Association International Conference 2007**
699. Small GW, Protas HD, Huang SC, Kepe V, Siddarth P, Hayashi KM, Klunder AD, Braskie MN, Ercoli LM, Bookheimer SY, **Thompson PM**, Barrio JR (2007). *FDDNP Binding Values from Cortical Hemispheric Surface*

*Maps Correlate with MMSE Scores*, Alzheimer's Association International Conference on the Prevention of Dementia, June 9-12, 2007, Marriott Wardman Park Hotel, Washington, DC.

700. Alexander GE, Chen K, Reiman EM, Aschenbrenner M, Merkle TL, Hanson KD, Dale AM, Bernstein MA, Kornak J, Schuff N, Fox NC, **Thompson PM**, Weiner MW, Jack CR Jr (2007). *Regional Gray Matter Reductions in Alzheimer's Dementia and Amnesic Mild Cognitive Impairment: Preliminary Findings From the Alzheimer's Disease Neuroimaging Initiative Using Voxel-based Morphometry*, Alzheimer's Association International Conference on the Prevention of Dementia, June 9-12, 2007, Marriott Wardman Park Hotel, Washington, DC.

701. Becker JT, Lopez OL, Aizenstein HJ, Lobaugh NJ, **Thompson PM**, Juengst S (2007). *Brain Functional Alterations in HIV/AIDS Analysed by the Method of Partial Least Squares*, 34th Annual Meeting of the International Neuropsychological Society, 2007.

#### **International Schizophrenia Congress 2007:**

702. Schall U, Mitchie PT, Ward PB, Fulham WR, Hughes M, Richards A, Todd J, Case V, Meyer L, Stone E, Johnston P, Rasser PE, **Thompson PM** (2007). *Multimodal Imaging of the Mismatch Negativity Deficit in Schizophrenia*, International Congress for Schizophrenia Research (ICSR), Colorado Springs, Colorado, April 2007.

#### **American Neurological Association 2007**

703. Apostolova LG, **Thompson PM**, Green AH, Jack CR, Harvey D, Petersen RM, Thal L, Cummings JL, DeCarli C for the ADCS Group (2007). *3D comparison of low-to-intermediate vs. advanced hippocampal atrophy in MCI*, 132<sup>nd</sup> Annual meeting of the American Neurological Association, Washington DC, 2007.

704. Apostolova LG, **Thompson PM**, Green AH, Jack CR, Harvey D, Petersen RM, Thal L, Cummings JL, DeCarli C for the ADCS Group (2007). *3D analysis of hippocampal atrophy progression in MCI subjects*, 132<sup>nd</sup> Annual meeting of the American Neurological Association, Washington DC, 2007.

#### **American College of Neuropsychopharmacology (ACNP) 2007:**

705. Pantelis C, Sun D, Phillips L, Velakoulis D, Yung A, Wood SJ, **Thompson PM**, van Erp TGM, Toga AW, Proffitt TM, Henry LP, Harris MG, Cannon TD, McGorry PD (2007). *Are Cortical Gray Matter Changes in Schizophrenia Intermediate Phenotypes?*, Annual Meeting of the American College of Neuropsychopharmacology (ACNP) 2007, Boca Raton, Florida, December 9-13 2007.

706. Bearden CE, van Erp TGM, Lee AD, Dutton RA, Simon TJ, Glahn DG, Cannon TD, Emanuel BS, Toga AW, **Thompson PM** (2007). *Alterations in Midline Cortical Thickness and Complexity Mapped in Children with 22q11.2 Deletions*, Annual Meeting of the American College of Neuropsychopharmacology (ACNP) 2007, Boca Raton, Florida, December 9-13 2007.

707. Soares JC, Bearden CE, **Thompson PM**, Hayashi KM, Klunder AD, Nicoletti M, Diershke N, Brambilla P (2007). *Three-dimensional mapping of hippocampal anatomy in unmedicated patients with unipolar depression*, Annual Meeting of the American College of Neuropsychopharmacology (ACNP) 2007, Boca Raton, Florida, December 9-13 2007.

#### **Society for Neuroscience (SFN) 2007:**



708. Foland LC, Altshuler LL, Leow AD, Sugar CA, Toga AW, **Thompson PM** (2007). *Lithium and Mood State Effects on Brain Structure in Subjects with Bipolar Disorder*, Soc. Neuroscience, San Diego, CA, USA.
709. Ward PB, Schall U, Michie PT, **Thompson PM**, Rasser P, Fulham R (2007). *Mismatch Negativity Amplitudes in First-Episode and Chronic Schizophrenia: ERP, fMRI, and Cortical Grey Matter Evidence of Deficits in Deviance-Related Auditory Processing*, Soc. Neuroscience, San Diego, CA, USA.
710. Apostolova LG, Mosconi L, Green A, **Thompson PM**, DeLeon M (2007). *Preclinical progression of hippocampal atrophy in cognitively normal subjects who convert to MCI and AD*, Annual Meeting of the American Neurological Association, Marriott Wardman Park, Washington, DC, October 2007.

#### **Society of Biological Psychiatry (SOBP) 2008**

711. **Thompson PM** (2008). *Mapping Brain Changes in an Antipsychotic Trial*, Society of Biological Psychiatry 2008, Invited Presentation, Washington, DC, May 1-3 2008.
712. van Erp TGM, Kieseppä T, Bearden CE, Sun D, Zimmermann LL, Tran HL, Correll C, Wobbekind A, Haukka J, Partonen T, Kaprio J, Lönnqvist J, Poutanen V, Toga AW, **Thompson PM**, Cannon TD (2008). *Cortical Gray Matter Density in Twins Discordant for Bipolar I Disorder*, Society of Biological Psychiatry 2008, Washington, DC, May 1-3 2008.
713. Sun D, van Erp TGM, Daley M, Bearden CE, Mkrtchyan A, Toga AW, **Thompson PM**, Cannon TD (2008). *Cortical gray matter mapping during the psychosis prodrome*, Society of Biological Psychiatry 2008, Washington, DC, May 1-3 2008.
714. Foland LC, Townsend J, Bookheimer SY, Thompson PM, Altshuler LL (2008). *A functional magnetic resonance imaging study of bipolar disorder: Elucidating state- and trait-related changes in prefrontal cortex*, Society of Biological Psychiatry 2008, Washington, DC, May 1-3 2008.
715. Bearden CE, **Thompson PM**, Hayashi KM, Klunder AD, Nicoletti MA, Dierschke N, Kopecek M, Brambilla P, Soares JC (2008). *Three-dimensional mapping of hippocampal anatomy in unmedicated patients with unipolar depression*, **Society of Biological Psychiatry** 2008, Washington, DC, May 1-3 2008.

#### **American Academy of Neurology (AAN) 2008**

716. Harris R, Alcantara D, Amenta N, Lopez OL, Eiríksdóttir G, Sigurdsson S, Gudnason V, **Thompson PM**, Launer L, Carmichael OT (2008). *Localized Measures of Callosal Atrophy Are Associated with Late-Life Hypertension in a Population-Based Study: AGES-Reykjavik Study*, Proc. American Acad. Neurology, 2008.
717. Apostolova LG, Beyer MK, Green AE, Avedissian C, Hwang K, Aarsand D, Janvin CC, Larsen JP, Cummings JL, **Thompson PM** (2008). *Hippocampal Atrophy in Parkinson's Disease Patients with Mild Cognitive Patients*, Proc. American Acad. Neurology, 2008.

#### **American Psychiatric Association (APA) 2008**

718. Foland LC, Altshuler LL, Narr KL, Bartzokis G, Alagband Y, Townsend J, Toga AW, **Thompson PM** (2008). *Can brain structure change with mood? An exploratory analysis of mood-state related changes in amygdala volume in subjects with bipolar disorder*. Annual Meeting of the American Psychiatric Association, 2008.

#### **Human Brain Mapping 2008:**

719. Chiang MC, Barysheva M, Lee AD, Madsen SK, Klunder AD, Toga AW, McMahon KL, de Zubicaray GI, Meredith M, Wright MJ, Srivastava A, Balov N, **Thompson PM** (2008). *Mapping Genetic Influences on Brain*

- Fiber Architecture with High Angular Resolution Diffusion Imaging (HARDI)*, 13th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Melbourne, Australia, June 15-19, 2008
- 720.Zhan L, Chiang MC, Barysheva M, Toga AW, McMahon KL, de Zubicaray GI, Meredith M, Wright MJ, **Thompson PM** (2008). *How Many Gradients are Sufficient in High-Angular Resolution Diffusion Imaging (HARDI)?* 13th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Melbourne, Australia, June 15-19, 2008.
- 721.Haro G, Lenglet C, Sapiro G, **Thompson PM** (2008). *Stratification and Complexity of Brain Connectivity*, 13th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Melbourne, Australia, June 15-19, 2008.
- 722.Chou YY, Lepore N, Barysheva M, Chiang MC, McMahon KL, de Zubicaray GI, Meredith M, Wright MJ, Toga AW, **Thompson PM** (2008). *Mapping Genetic Influences on the Lateral Ventricles using Multi-Atlas Fluid Image Alignment in Twins*, 13th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Melbourne, Australia, June 15-19, 2008.
- 723.Chou YY, Leporé N, Hua X, Toga AW, **Thompson PM** (2008). *Mapping Neurodegeneration using Multi-Atlas Fluid Image Alignment*, 13th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Melbourne, Australia, June 15-19, 2008.
- 724.Brun C, Lepore N, Pennec X, Chou YY, Lee AD, Barysheva M, McMahon K, de Zubicaray GI, Wright M, Toga AW, **Thompson PM** (2008). *Volumetric Differences in Brain Structure in Identical and Fraternal Twins Computed using Riemannian Tensor-Based Morphometry*, 13th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Melbourne, Australia, June 15-19, 2008.
- 725.Apostolova LG, Beyer MK, Green AE, Morra JH, Hwang K, Aarsland D, Janvin CC, Larsen JP, Cummings JL, **Thompson PM** (2008). *Automated 3D mapping of caudate atrophy in Parkinson's disease with and without dementia*, 13th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Melbourne, Australia, June 15-19, 2008.
- 726.Morra J, Tu Z, Apostolova LG, Green AE, Avedissian C, Madsen SK, Parikshak N, Hua X, Toga AW, Jack CR, Schuff N, Weiner MW, **Thompson PM** (2008). *Mapping Hippocampal Degeneration in 400 Subjects with a Novel Automated Segmentation Approach*, 13th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Melbourne, Australia, June 15-19, 2008.
- 727.Hua X, Leow AD, Lee S, Parikshak N, Klunder AD, Toga AW, Lepore N, Chou YY, Brun C, Chiang MC, Barysheva M, Jack CR, Weiner MW, **Thompson PM** (2008). *3D Mapping of Brain Atrophy in Alzheimer's Disease and Mild Cognitive Impairment with Tensor-Based Morphometry*, 13th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Melbourne, Australia, June 15-19, 2008.
- 728.Lepore N, Vachon P, Lepore F, Chou YY, Voss P, Brun C, Lee AD, Tog AW, **Thompson PM** (2008). *3D Pattern of Brain Changes in Deaf Subjects Mapped using Tensor-Based Morphometry*, 13th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Melbourne, Australia, June 15-19, 2008.
- 729.Lueders E, Narr KL, Hamilton LS, Phillips OR, **Thompson PM**, Valle JS, DelHomme M, Strickland T, McCracken JT, Toga AW, Levitt JG (2008). *Decreased Corpus Callosum Thickness in Attention Deficit / Hyperactivity Disorder (ADHD)*, 13th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Melbourne, Australia, , Italy, June 15-19, 2008.

730. Narayan VM, Phillips OR, Narr KL, **Thompson PM**, Toga AW, Szeszko PR (2008). *Patterns of cortical thickness in obsessive compulsive disorder (OCD)*, 13th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Melbourne, Australia, June 15-19, 2008.
731. Narr KL, Szeszko P, Lencz T, Woods RP, Hamilton LS, Phillips O, **Thompson PM**, Toga AW, Malhotra AK, Bilder RM (2008). *Evidence for DTNBP1/imaging phenotype associations in schizophrenia*, 13th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Melbourne, Australia, June 15-19, 2008.
732. Pievani M, Sabattoli F, Testa C, Bonetti M, Dutton RA, Lee AD, **Thompson PM**, Frisoni GB (2008). *The APOE e4 allele is associated with greater hippocampal atrophy in the subicular and CA1 areas in Alzheimer's disease: an in vivo MR study*, 13th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Melbourne, Australia, June 15-19, 2008.
733. Rasser PE, Todd J, **Thompson PM**, Michie PT, Ward PB, Johnston P, Helmbold K, Case V, Tooney PA, Schall U (2008). *Linking Cerebral Gray Matter and Mismatch Negativity (MMN) in Schizophrenia*, 13th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Melbourne, Australia, June 15-19, 2008.
734. van Erp TGM, Chiang MC, Sun D, Hardt ME, Bockholt JH, Turner JA, Calhoun VD, Johnson HJ, Greve DN, Williams S, O'Leary D, Lauriello J, Wible CG, Lim KO, Mueller BA, Brown GG, Voyvodic J, McCarthy G, Mathalon D, Ford JM, Potkin SG, Cannon TD, **Thompson PM**, Toga AW and the FBIRN (Functional Brain Imaging Research Network). *3D Pattern of Brain Abnormalities in Chronic Schizophrenia Visualized Using Tensor-Based Morphometry: a Multi-Site Structural Imaging Study*, 13th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Melbourne, Australia, June 15-19, 2008.
735. Franc D, Lenglet C, Haro G, **Thompson PM**, Mueller B, Sapiro G, Lim KO (2008). *Uncertainty of apparent white matter fiber tract size in DTI fiber tracking and region of interest analyses: A multi-resolution study*, 13th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Melbourne, Australia, June 15-19, 2008.
736. Wang YL, Gu X, Chan TF, **Thompson PM** (2008). *Brain Surface Conformal Slit Mapping*, 13th Annual Meeting of the Organization for Human Brain Mapping (OHBM), Melbourne, Australia, June 15-19, 2008.
737. Schall U, Rasser PE, Todd J, Michie PT, Ward PB, Johnston P, Helmbold K, Case V, Tooney PA, **Thompson PM** (2008). *A simple auditory event-related potential is linked to cerebral grey matter pathology in schizophrenia*, Inaugural Conference of the International Schizophrenia Research Society- -June 21-25 2008, Venice, Italy, 2008.

#### **International Conference on Alzheimer's Disease (ICAD2008)**

738. Apostolova LG, **Thompson PM**, Green AE, Jack CR, Harvey D, Petersen RC, Thal LJ, Aisen P, Cummings JL, DeCarli C for the ADCS Group (2008). *3D comparison of low, intermediate and advanced hippocampal atrophy in MCI*, International Conference on Alzheimer's Disease, Chicago, July 26-31 2008.
739. Apostolova LG, Beyer M, Green AE, Chou YY, Morra JH, Hwang K, Aarsland D, Janvin C, Larsen J, Cummings JL, **Thompson PM** (2008). **Automated 3D mapping of caudate atrophy and ventricular enlargement in Parkinson's disease with and without dementia**, International Conference on Alzheimer's Disease, Chicago, July 26-31 2008.
740. Apostolova LG, Morra JH, Green AE, Hwang K, Avedissian C, Parikshak N, Cummings JL, Toga AW, Jack CR, Weiner MW, **Thompson PM** (2008). *Automated Longitudinal 3D Mapping of Hippocampal ADAS-Cog Delayed Recall Effects in 293 Normal Elderly, MCI and AD Subjects*, International Conference on Alzheimer's Disease, Chicago, July 26-31 2008.

741. Barnes J, Bartlett JW, van de Pol L, Loy CT, Scahill RI, Frost C, **Thompson PM**, Fox NC (2008). *A meta-analysis of hippocampal atrophy rates in Alzheimer's disease*, International Conference on Alzheimer's Disease, Chicago, July 26-31 2008.
742. Zhang H., Wu T, Bae M, Reiman EM, Alexander GE, Jack Jr CR, **Thompson PM**, Chen, K (2008). *Use Of The Support Vector Machine And Sensitivity Of an AD-related Region-of-interest Gray Matter Classifier In Identifying Amnesic MCI Subjects Who Convert To AD: Preliminary Findings From The AD Neuroimaging Initiative*, International Conference on Alzheimer's Disease, Chicago, July 26-31 2008.
743. Lu PH, **Thompson PM**, Alex Leow, Grace Lee, Agatha Lee, Daniel Geschwind, Stephanie Stewart, George Bartzokis, Apolipoprotein genotype predicts rate of brain atrophy in healthy elderly adults: A tensor-based morphometry study, International Conference on Alzheimer's Disease, Chicago, July 26-31 2008.
744. Bartzokis G, Po-Haong Lu<sup>1</sup>, Kathleen Tingus<sup>1</sup>, Mario Mendez<sup>1</sup>, Aurora Richards<sup>1</sup>, Douglas Peters<sup>1</sup>, Pablo Villablanca<sup>1</sup>, Paul Finn<sup>1</sup>, **Thompson PM**, Jim Mintz<sup>2</sup> Lifespan trajectories of speed and myelin integrity: Implications for cognition, International Conference on Alzheimer's Disease, Chicago, July 26-31 2008.
745. Prestia A, **Thompson PM**, Francesca Sabbatoli<sup>1</sup>, Michela Pievani<sup>1</sup>, Giovanni B. Frisoni<sup>1</sup>, Elisa Canu *In vivo* mapping of incremental cortical atrophy from health to overt Alzheimer's disease, International Conference on Alzheimer's Disease, Chicago, July 26-31 2008.
746. Ganzola R, Marina Boccardi<sup>1</sup>, **Thompson PM**, Alberto Beltramello<sup>3</sup>, Elisa Canu<sup>1</sup>, Giovanni B. Frisoni Mapping local structural hippocampal changes in Alzheimer's disease and normal aging on MR imaging at 3T, International Conference on Alzheimer's Disease, Chicago, July 26-31 2008.
747. Alexander GE, Krista D. Hanson<sup>1,2</sup>, Kewei Chen<sup>3,2</sup>, Eric M. Reiman<sup>3,2</sup>, Matthew A. Bernstein<sup>4</sup>, John Kornak<sup>5</sup>, Norbert W. Schuff<sup>5</sup>, Nick C. Fox<sup>6</sup>, **Thompson PM**, Michael W. Weiner<sup>5</sup>, Clifford R. Jack<sup>4</sup>, Six month MRI gray matter declines in Alzheimer's dementia evaluated by voxel-based morphometry with multivariate network analysis: Preliminary findings from the ADNI study, International Conference on Alzheimer's Disease, Chicago, July 26-31 2008.
748. Pievani M, Cristina Testa<sup>1,3</sup>, Francesca Sabbatoli<sup>1</sup>, Matteo Bonetti<sup>4</sup>, Kiralee M. Hayashi<sup>5</sup>, **Thompson PM**, Giovanni B. Frisoni The APOE E4 allele is associated with greater atrophy of the temporal cortex in Alzheimer's disease: An *in vivo* MRI study, International Conference on Alzheimer's Disease, Chicago, July 26-31 2008.

#### **American College of Neuropsychopharmacology (ACNP2008)**

749. Daley ML, van Erp TGM, Bearden CE, Loesch I, Alaverdyan M, **Thompson PM**, O'Neill J, Toga AW, Cannon TD (2008). *Hippocampal Volumes in the Psychosis Prodrome*, AACAP Conference, 2008.
750. Bartzokis G, Lu PH, Tingus K, Richard A, Peters DG, Oluwadara B, Barall K, Finn JP, Villablanca P, **Thompson PM**, Mintz J (2008). *Assessing Human Myelination Trajectories: Implications for Treatment and Prevention of Neuropsychiatric Disorders*, Annual Meeting of the **American College of Neuropsychopharmacology (ACNP)** 2008, Phoenix, Arizona, December 2008.
751. **Thompson PM** (2008). *Dynamics, Genetics and Clinical Correlates of White Matter Changes in Alzheimer's Disease*, Annual Meeting of the **American College of Neuropsychopharmacology (ACNP)** 2008, Phoenix, Arizona, December 2008.

752. van Erp TGM, **Thompson PM**, Kieseppä T, Bearden CE, Marino A, Hoftman GD, JHaukka J, Partonen T, Huttunen M, Kaprio J, Lönqvist J, Poutanen VP, Toga AW, Cannon TD (2008). *Hippocampal Morphology in Twins Discordant for Bipolar I Disorder*, **Society for Neuroscience (SFN), 2008**.
753. Eckstein I, Shattuck DW, Stein JL, McMahon K, de Zubicaray GI, Wright MJ, **Thompson PM**, Toga AW (2008). *Active Fibers: Matching Deformable Tract Templates to Diffusion Tensor Images*, International Brain Mapping and Intraoperative Surgical Planning Conference (IBMISPS), 5th Annual World Congress, Los Angeles, CA, Aug. 26-29 2008.
754. Schall U, Rasser PE, Atkinson R, Fulham R, Helmbold K, Todd J, Halpin S, Johnston P, Michie PT, Ward PB, **Thompson PM**, Carr, V (2008). *Mismatch negativity in prodrome, first episode and established schizophrenia: Relationship with stimulus type, generator sources, grey matter loss, and functional outcome*, Proc. International Conference on Schizophrenia Research (ICOSR), San Diego, 2008.
755. Wright M, Blokland G, Chiang MC, MacMahon K, Martin N, Toga AW, de Zubicaray G, **Thompson PM** (2008). An imaging study of Australian twins: Quantifying genetic and environmental influences on fMRI and HARDI phenotypes, **Psychophysiology, 45: S17, Suppl. 1**.

## II. INVITED LECTURES 1996-2008

### Hamburg, Germany

*Visualization and Mapping of Anatomic Abnormalities using a Probabilistic Brain Atlas Based on Random Fluid Transformations*, Invited Speaker, International Conference on Visualization in Biomedical Computing: Hamburg, Germany, **September 23, 1996**. Paper can be found in: Lecture Notes in Computer Science **1131**, K.-H. Höhne, R. Kikinis, [eds.], Springer-Verlag.

### Montreal Neurological Institute, McGill University, Canada

*Advances in the Mapping of Structural Abnormalities in the Human Brain*, Invited Speaker, Symposium on Statistics in Brain Mapping, Host: Dr Luc Vinet, Centre de Recherche en les Mathématiques, Montreal, **June 13, 1998**.

### University of Southern California, Department of Electrical Engineering

*Mathematical/Computational Strategies for Human Brain Mapping*, Invited Speaker, USC Human Brain Project Seminar Series, Host: Prof. Richard Leahy, Editor, IEEE Transactions on Medical Imaging, **December 4, 1997**.

### University of California Los Angeles, Department of Mathematics

*Mathematical/Computational Strategies for Mapping the Human Brain*, Invited Speaker, UCLA Mathematics Seminar Series, Host: Prof. Tony Chan, Chair, UCLA Dept. Mathematics, **November 20, 1997**.

### University of California Los Angeles, Department of Statistics

*Encoding Structural and Functional Information in Human Brain Image Databases*, Invited Speaker, UCLA Seminars in Statistics, Host: Prof. Ker-Chau Li, UCLA Dept. of Statistics, **February 27, 1997**.

### University of California Los Angeles, Dept. of Biomathematics

*Detection and Quantification of Anatomic Abnormalities using a Probabilistic Atlas of the Human Brain*, Invited Speaker, UCLA Seminars in Biomathematics, Host: Carol Newton, M.D., Ph.D., UCLA Dept. of Biomathematics, **April 4, 1996**.

### University of California Los Angeles, Division of Brain Mapping, Dept. of Neurology

*Pathology Detection using a Probabilistic Reference System for the Human Brain*, Invited Speaker, UCLA Human Brain Mapping Seminars, Host: John Mazziotta, M.D., Ph.D., UCLA Dept. of Neurology, **March 11, 1998.**

**University of California Los Angeles, Neuroscience Grand Rounds, Dept. of Neurology**

*Detection and Mapping of Abnormal Brain Structure in Development and Disease using Neuroimaging*, Invited Speaker, UCLA Neurology Grand Rounds, Host: Robert C. Collins, M.D., Chair, Dept. of Neurology, **April 22, 1998.**

**University of California Los Angeles, Brain Research Institute, 1998 Eiduson Lecture**

*Mathematical/Computational Strategies for Human Brain Mapping and Pathology Detection*, Invited Lecture, Hosts: Allan J. Tobin, Ph.D., Director of the UCLA Brain Research Institute, and Arthur P. Arnold, Ph.D., Chair, Neuroscience Inter-Departmental Ph.D. Program, **June 2, 1998.**

**Montreal Neurological Institute, McGill University, Canada**

*Growth Patterns in the Developing Human Brain Detected Using Continuum-Mechanical Tensor Maps and Serial MRI*, Invited Speaker, International Conference on Functional Mapping of the Human Brain, **June 10, 1998.**

**Laboratory for Research on the Neuroscience of Autism, University of California at San Diego, La Jolla, CA**

*Mathematical/Computational Strategies for Human Brain Mapping and Pathology Detection*, Invited Lecture, Host: Eric Courchesne, M.D., Director of Autism Research, **July 3, 1998.**

**Pittsburgh Supercomputing Center, Pittsburgh, PA**

*Supercomputing Strategies in Human Brain Mapping*, Invited Speaker, Workshop on Biomedical Image Analysis and Visualization, July 24-July 26 1998, Host: Nigel Goddard, Ph.D., **July 24, 1998.**

**University of California Los Angeles, 1998 Neuro-Oncology Symposium, School of Medicine**

*Modeling of Human Brain Tumors: Imaging in the 4<sup>th</sup> Dimension*, Invited Speaker, UCLA Neuro-Oncology Symposium, Host: Tim Cloughesy, M.D., UCLA Dept. of Neurology, and Director, Neuro-Oncology Program, **October 14, 1998.**

**University of Texas, San Antonio, TX**

*Mathematical/Computational Challenges in Creating Deformable and Probabilistic Atlases of the Human Brain*, Invited Speaker, BrainMap 1998, Host: Jack Lancaster, Ph.D., **December 7-8 1998.**

**University of California Los Angeles, Division of Brain Mapping, Dept. of Neurology**

*Challenges in Population-Based Brain Mapping: Dynamic, Disease-Specific and Probabilistic Brain Atlases*, Invited Speaker, UCLA Human Brain Mapping Seminars, Ahmanson-Lovelace Brain Mapping Center, Host: John Mazziotta, M.D., Ph.D., UCLA Dept. of Neurology, **March 10, 1999.**

**University of California Los Angeles, Department of Neurology Faculty Retreat, Lake Arrowhead, CA**

*Population-Based Brain Mapping*, Invited Speaker, Seminar Topic: *Innovation in the 21<sup>st</sup> Century: Implications for Neuroscience*, Host: Marie-Francoise Chesselet, M.D., Ph.D., UCLA Dept. of Neurology, **June 5, 1999.**

**Veteran's Administration (VA) Hospital, West Los Angeles, CA**

*Challenges in Population-Based Brain Mapping*, Invited Speaker, Hosts: Eric Cheng, M.D., Chief Resident, and Claude Wasterlain, M.D., UCLA Dept. of Neurology and VA Medical Center, **October 1, 1999.**

**University of Minnesota, Minneapolis, MN**

*Mathematical/Computational Challenges in Population-Based Brain Mapping*, Invited Speaker, Dept. of Electrical and Computer Engineering, Host: Prof. Guillermo Sapiro, Ph.D. and Prof. Peter Olver, Ph.D., Director of the Institute for Mathematics and Its Applications, **November 15, 1999.**

**University of California Los Angeles, Department of Statistics**

*Mathematical and Statistical Challenges in Population-Based Brain Imaging*, Invited Speaker, UCLA Seminars in Statistics, Host: Prof. Rick Schoenberg, UCLA Dept. of Statistics, **February 1, 2000.**

**University of California Los Angeles, Department of Biostatistics**

*Mathematical and Statistical Challenges in Brain Mapping*, Invited Speaker, UCLA Seminars in Biostatistics, Hosts: Prof. Dorota Dabrowska, UCLA Dept. of Biostatistics, **February 9, 2000.**

**Brown University, Providence, RI**

*Mathematical/Computational Challenges in Population-Based Brain Mapping*, Invited Speaker, Seminars in Computer Vision and Biomedical Engineering, Brown Applied Mathematics Pattern Theory and Vision Seminar, Dept. of Applied Mathematics, Host: Prof. Ulf Grenander, Professor Emeritus in Applied Mathematics, Brown University, **April 25-27, 2000.**

**University of Indiana, Indianapolis, IN**

*Mathematical/Computational Challenges in Population-Based Brain Mapping*, Invited Speaker, International Workshop on Statistics in Brain Mapping, and Joint Statistical Meetings (JSM) 2000, Host: Prof. Keith Worsley, Ph.D., **August 13, 2000.**

**Dept. of Neurosurgery, Montreal Neurological Institute, McGill University, Canada**

*Advances in Mapping the Human Brain*, Invited Speaker, Killam Lecture Committee, McGill Dept. of Neurology and Neurosurgery, Host: Louis Collins, Ph.D. Date: TBA, Summer 2000.

**Neuro-Oncology Program 2000 Retreat, Lake Arrowhead Resort, CA**

*Modeling Human Brain Tumors: Growth Mapping, Intraoperative MRI, and Genetic Profiling*  
Invited Speaker, Neuro-Oncology Retreat, Host: Tim Cloughesy MD, **October 7, 2000.**

**Santa Monica Hospital, Los Angeles**

*Brain Mapping in Diseased Populations: Recent Advances and Future Promise*, Invited Speaker, CME Accredited Course to Primary Care Physicians, family practitioners and internists, Host: Poonam Bhatla, **October 26, 2000.**

**Florida State University, Dept. of Statistics, Tallahassee, FL**

*Mathematical/Computational Challenges in Population-Based Brain Mapping*, Invited Speaker, Seminars in Statistics and Biomedical Engineering, Host: Anuj Srivastava, Ph.D. Date: **November 7, 2000.**

**Johns Hopkins University School of Medicine and**

**Center for Imaging Science, Whiting School of Engineering, Baltimore, MD**

*Mathematical/Computational Challenges in Population-Based Brain Mapping*, Invited Speaker, Seminars in Biomedical Engineering, Host: Michael I. Miller, Ph.D.. Director of the Center for Imaging Science, Johns Hopkins University. Date: **November 20, 2000.**

**University of California Los Angeles, Crump Institute for Molecular Imaging (CIMI), Department of Medical and Molecular Pharmacology**

*An Introduction to Current Challenges in Brain Mapping*, Invited Speaker, Seminars in Imaging and Instrumentation, Host: Prof. Simon Cherry, Associate Director, Crump Institute for Molecular Imaging, 3:00PM, **November 29, 2000.**

**Centre de Recherche en les Mathematiques, McGill University, Montreal, Canada**

*Advances in Digital Brain Atlases Based on Large Human Populations*, Guest Speaker, Symposium on Mathematical Methods in Brain Mapping, Host: Prof. Luc Vinet and Prof. Keith Worsley, Centre de Recherche en les Mathematiques, Montreal, **December 10-11, 2000.**

**National Institutes of Health, NIMH Child Psychiatry Branch, Bethesda, MD**

*Advances in Mapping Human Brain Development*, Guest Speaker, Integrative Neuroscience Seminar, Hosts: Jay Giedd MD, and Judy Rapoport MD, Child Psychiatry Branch, NIMH, **January 25, 2001**

**Missouri Education Summit, Symposium on Brain Research, Osage Beach, Lake of the Ozarks, MO**

*Mapping Brain Growth in Children and Teens: Recent Advances and Future Promise*, Keynote Speaker, Hosts: Governor Bob Holden and First Lady Lori Hauser Holden of Missouri, and Nancy Davis, PhD, Director, Practical Parenting Partnerships, **March 23, 2001.**

*Policy Implications of Current Research on Brain Development*, Panel Speaker (with John Constantino MD, Washington University), Host: Dr. Orlo Shroyer, State Commissioner for Education, Missouri, **March 23, 2001.**

*Brain Development and Neuro-Imaging: What Are We Learning?* Platform Talk, Missouri Education and Parenting Conference, Host: Nancy Davis, PhD, Director, Practical Parenting Partnerships, **March 23, 2001.**

**Arizona State University, Alzheimer's Disease Center, Phoenix, AZ**

*Imaging Brain Development and Disease in Large Human Populations*, Invited Speaker, Seminars in Neurology, Hosts: Gene Alexander, M.D., and Eric Reiman, M.D., Arizona State University Alzheimer's Disease Center, **April 26, 2001.**

**National Academy of Sciences, Washington, DC**

*Mapping Brain Growth in Children and Teens: Recent Advances and Future Promise*, Invited Speaker, National Academy of Sciences, Hosts: Michele Kipke, Ph.D. and Sonja Wolfe, Ph.D., National Academy of Sciences and Institute of Medicine, **May 2, 2001.**

**University of California Los Angeles, Institute for Pure and Applied Mathematics**

*Mathematical Challenges in Population-Based Brain Mapping*, Invited Speaker and Session Chair, Workshop on Mathematics and Modeling in Brain Mapping, Conference on Imaging in Medicine and Neurosciences, May 21-25 2001, UCLA Institute for Pure and Applied Mathematics, Hosts: Eitan Tadmor PhD, Stan Osher PhD, and Tony Chan PhD, **May 24, 2001.**

**Society for Industrial and Applied Mathematics (SIAM), Boston, MA**

*A Tensor Calculus for Surface Comparisons*, Guest Speaker, Host: Fred Bookstein, PhD, Minisymposium MS20: Comparative Mathematical Structures in 3D Medical Image Analysis, 3-5 PM, Clarendon Room, **March 4-6, 2002.**

**Society for Industrial and Applied Mathematics (SIAM), Boston, MA**

*Mathematical/Computational Challenges in Population-Based Brain Mapping*, Guest Speaker, Host: Monica Hurdal, PhD, Minisymposium MS9: Mapping the Human Brain, 2:15 PM - 4:15 PM, St. James Room, **March 6-8, 2002.**

**University of California San Francisco (UCSF), San Francisco, CA**



*Challenges in Population-Based Brain Imaging: Mapping Brain Development and Disease*, Guest Speaker, UCSF Grand Rounds in Psychiatry and Pediatrics, Hosts: Bryna Siegel PhD and Melanie Farley PhD, UCSF Langley Porter Institute, 4:00 PM – 5:30 PM, **October 31, 2001.**

**University of California Los Angeles, Institute for Pure and Applied Mathematics**

*Brain Image Analysis: Recent Advances and Current Mathematical/Computational Challenges*, Invited Speaker, Workshop on Scientific Data Mining (SDM2002), January 14-18 2002, UCLA Institute for Pure and Applied Mathematics, Hosts: Chandrika Kamath PhD, Lawrence Livermore Labs., and Padhraic Smyth PhD, UC Irvine, **January 15, 2002.**

**University of Minnesota, Minneapolis, MN**

*Brain Imaging in Healthy and Diseased Populations: Recent Advances and Current Challenges*, Guest Speaker, Host: Gordon Legge PhD and Guillermo Sapiro PhD, Cognitive Neuroscience Colloquium, **February 1, 2002.**

**Los Angeles Psychiatric Institute (LAPSI), Sawtelle Blvd., Los Angeles, CA**

*The Child and Adolescent Brain: What Neuroimaging Reveals About Development*, Guest Speaker, Host: Regina Pally, PhD, UCLA Neuropsychiatric Institute, 8:00 PM – 9:00 PM, CME Accredited Course, **February 25, 2002.**

**Missouri Education Summit, Symposium on Brain Research, Osage Beach, Lake of the Ozarks, MO**

*Brain Growth in Children and Teens*, Keynote Speaker, Organizer: Darlene Robinett, Practical Parenting Partnerships, **April 26-27, 2002.**

**Conference on Discrete Geometry in Medicine, Wakulla Springs, FL**

*Building Large-Scale Brain Atlases for Disease and Genetic Applications: Covariant PDEs and Probability Distributions on Manifolds*, Invited Speaker, Host: Monica Hurdal, PhD, Conference on Discrete Geometry with Applications to Science and Medicine, Workshop held by Florida State University Dept. of Mathematics, Focused Research Group (FRG) on Conformal Mapping, Wakulla Springs, FL, **May 16-19, 2002.**

**American Academy of Child and Adolescent Psychiatry, San Francisco, CA**

*Brain Imaging In Normal and Abnormal Development: Recent Advances*, Guest Speaker, Host: John Hamilton MD, Workshop on Childhood Onset Schizophrenia, with Judith Rapoport MD, Bob Asarnow PhD, and Nitin Gogtay MD, Hilton San Francisco, 8:00 AM – 11:00 AM, CME Accredited Course, **October 25, 2002.**

**Rockefeller University, New York, NY**

*Brain Imaging In Schizophrenia, Development, and Dementia: Recent Advances and Challenges*, Guest Speaker, Host: Maria Karayiorgou MD, Clinical Neuroscience Seminar, 12 noon, **October 30, 2002.**

**University of Pennsylvania, Philadelphia, PA**

*Mapping the Brain in Healthy and Diseased Populations*, Guest Speaker, Host: Jim Gee PhD, GRASP Laboratory Seminar, Room 318C, 11:00AM, **November 1, 2002.**

**UCLA Life Course Development Seminar, Los Angeles, CA**

*Brain Mapping in Development, Dementia, and Schizophrenia*, Guest Speaker, joint with Tyrone Cannon PhD, Professor and Chair, UCLA Psychology. Hosts: Neal Halfon PhD, Dept. Pediatrics, Patricia Greenfield PhD, UCLA Psychology, and Lenny Rome PhD, Dean of Research, UCLA School of Medicine; UCLA Faculty Center, 12 noon to 2PM, **November 21, 2002.**

**UCLA Psychosis Seminar, Dept. Psychology, Los Angeles, CA**

*New Brain Imaging Strategies for Studying Schizophrenia: Mapping Dynamic, Genetic, and Drug Effects*, Guest Speaker. Host: Keith Nuechterlein PhD, Neuropsychiatric Institute, UCLA School of Medicine; 10 to 11AM, **December 6, 2002.**

**American Neuropsychiatric Association CME Workshop, Honolulu, HI**

*Imaging of Brain Development and Schizophrenia: Recent Advances and Challenges*, Host: Allan Reiss, M.D., Sheraton Waikiki Hotel, Honolulu, HI, **February 4, 2003.**

**UCLA Brain Matters Seminar, Dept. Neurology, Los Angeles, CA**

*Brain Imaging in Alzheimer's Disease, Schizophrenia, and Development: New Advances and Challenges*, Guest Speaker. Host: Catarina de Carvalho, Dept. Neurology, UCLA School of Medicine; Oldendorf Room, 4 to 5PM, **February 10, 2003.**

**Sedona Spring Brain Conference, Sedona, AZ**

*Brain Images of Mental Illness*, Host: Tom Woolsey MD, 14th Annual Spring Brain Conference, Sedona, Arizona, **March 15, 2003.**

**IPSEN Beaufour Foundation, Paris, France**

*Dynamics of Gray Matter Loss in Alzheimer's Disease, Mapped with a Population Based Brain Atlas*, Hosts: Bradley Hyman, Jean Francois Demonet, Yves Christen, Jacqueline Merveille, Paris, France, **March 17, 2003.**

**International Prodromal Research Network, Santa Monica, CA**

*Mapping Disease Progression in Schizophrenia*, Guest Speaker. Host: Ty Cannon, PhD, Director, Center for the Assessment and Prevention of Prodromal States (CAPPS), Casa del Mar Hotel, Santa Monica, CA. **May 2, 2003.**

**Human Brain Mapping Morning Workshop, New York, NY**

*Mapping Brain Degeneration*, Host: Ed Bullmore PhD, Empire Complex, Marriott Marquis Hotel, Times Square, New York, NY. **June 19, 2003.**

**Dartmouth College, Hanover, NH**

*Mathematical Challenges and New Directions in Computational Neuroanatomy*, Guest Speaker, Host: Mike Gazzaniga MD and Jack van Horn PhD, fMRI Data Center (fMRIDC), Dartmouth College, Hanover, New Hampshire, **July 7, 2003.**

**University of Pennsylvania, Philadelphia, PA**

*Imaging Brain Disease*, Neurology Grand Rounds, University of Pennsylvania School of Medicine, Host: John Detre MD. **September 4, 2003.**

**University of Minnesota, Minneapolis, MN**

*Imaging Schizophrenia*, Host: Martin Wessendorf PhD, and Linda King. **September 5, 2003.**

**Louisiana State University, New Orleans, LA**

*Imaging Cortical Changes Across the Human Lifespan: Mapping Development, Aging, and Dementia*, Workshop on Cortical and Thalamic Plasticity, Organizer: Reha Erzurumlu, Ph.D. and William Guido, Ph.D., Louisiana State University. **November 5, 2003.**

**Society for Neuroscience Satellite Symposium, New Orleans, LA**

*Bioinformatics and Brain Imaging*, Workshop on Bioinformatics, Organizer: Robert Williams, Ph.D., University of Tennessee at Memphis, **November 6, 2003.**

**INRIA Sophia Antipolis, France**

*Analyse Mathématique d'Image du Cerveau Humain chez les Sujets Sains et Pathologiques*, Hosts: Nicholas Ayache, Director, INRIA Epidaure, and Xavier Pennec, INRIA Epidaure, **November 25, 2003.**

**University of California at Irvine (UCI), Irvine, CA**

*Genes, Brain Structure, and Intelligence*. Host: Richard Haier PhD, UC Irvine, **December 4, 2003.**

**American Mathematical Society (AMS), Phoenix, AZ**

*Mathematics of Human Brain Mapping*, Host: Ivo Dinov PhD, **January 7, 2004.**

**UCLA Medical Center, Los Angeles, CA**

*Advances in Brain Imaging in Alzheimer's Disease*, Invited Speaker in a Workshop for Drew/King Medical Center Medical Students, Host: Jeff Cummings MD, **January 22, 2004.**

**Keystone Symposium on Drug Discovery, Keystone, CO**

*4D Mapping of Brain Change in Alzheimer's Disease and Schizophrenia: New Strategies for Drug Assessment*, Invited Speaker in a Symposium on Imaging Technologies in Drug Discovery, Host: Josh Boger PhD, **March 23, 2004.**

**University of California Los Angeles, NPI Grand Rounds, Neuropsychiatric Institute**

*Mapping Brain Changes in Alzheimer's Disease, Schizophrenia and Development*, Invited Speaker, UCLA NPI Grand Rounds, Host: Anand Kumar, Ph.D., NPI, **April 6, 2004.**

**International Symposium on Biomedical Imaging, Washington, DC**

*Nonlinear Brain Image Registration*, Invited Speaker and Symposium Organizer, ISBI 2004, **April 15, 2004.**

**CASE Media Workshop, University of California Los Angeles, Neuropsychiatric Institute**

*Mapping the Developing Brain*, Invited Speaker, UCLA CASE Media Day, Presentations to National Journalists winning CASE Media Scholarships, Host: Dan Page and Roxanne Moster, UCLA Media Relations, NPI, **April 19, 2004.**

**University of Southern California (USC), Los Angeles, CA**

*Brain Imaging in Human Populations: Mathematical/Computational Challenges*. Guest Speaker at the Joint Symposium on Neural Computation, Host: Laurent Itti PhD, Univ. of Southern California, **May 15, 2004.**

**University of Notre Dame, South Bend, IN**

*Mapping the Brain in Large Human Populations*, Guest Speaker, *Annual Symposium on Quantitative Methods in Psychology*, Host: Prof. Michael Wenger, University of Notre Dame, **May 29, 2004.**

**Centre de Recherche en les Mathématiques, University of Montreal, Montreal, Canada**

*Shape Analysis of 3D Brain Structures*, Guest Speaker, Symposium on Mathematical Methods in Brain Mapping, Statistical Society of Canada, Host: Prof. Keith Worsley, Centre de Recherche en les Mathématiques, Montreal, **June 2, 2004.**

**Budapest Conference Center, Budapest, Hungary**

*Mapping Genetic Influences on Brain Structure*, Guest Speaker, HBM Breakfast Symposium, Organizer: Kate Watkins PhD, **June 13, 2004.**

**UCLA Institute of Pure and Applied Mathematics (IPAM), Los Angeles, CA**

*Medical & Neuroscience Applications of Computational Anatomy*, Guest Speaker and Chair, IPAM Summer School on Mathematics in Brain Imaging (MBI2004), **July 12, 2004.**

**New York Academy of Sciences (NYAS), Manhattan, New York, NY**

*Time-Lapse Mapping of Gray/White Matter Changes over the Human Lifespan using MRI Databases*, Invited Speaker and Session Moderator, NYAS Conference on Diffusion Tensor Imaging, Host: John Ulmer PhD and Larry Parsons PhD, **August 19, 2004.**

**MICCAI Invited Symposium, St. Malo, France**

*Mapping Brain Changes in Aging & Alzheimer's Disease*, Invited Speaker, Tutorial Workshop at the MICCAI 2004 Conference, Host: Nicholas Ayache PhD, **September 26, 2004.**

**IPAM External Advisory Board, 5-Year Review, IPAM, Los Angeles, CA**

*IPAM Brain Imaging Summer School*, Speaker, Presentation, with Michael Miller PhD (Johns Hopkins University), to the UCLA IPAM External Advisory Board, Host: Mark Green PhD, **October 20, 2004.**

**ADRC External Advisory Board, UCLA Covel Commons, Los Angeles, CA**

*Mapping Brain Changes in Alzheimer's Disease & Those At Risk*, Speaker, Presentation to the UCLA ADRC External Advisory Board, Host: Jeffrey Cummings MD, **October 23, 2004.**

**Eli Lilly Corporate Headquarters, Indianapolis, IN**

*Mapping Cortical Change in Schizophrenia using Cortical Pattern Matching*, Guest Speaker, Prioritized Future Studies Advisory Summit, Host: Gary Tollefson MD PhD (CNS Division Head) and Jeffrey Lieberman MD, **November 1, 2004.**

**National Institute of Aging (NIA) Site Visit, Bethesda, MD**

*Brain MRI and Amyloid PET Scanning in Aging and Dementia*, Site Visit Speaker, Host: John Morris MD, **November 3, 2004.**

**Mayo Clinic, Rochester, MN**

*Brain Imaging in Healthy and Diseased Populations*, Mayo Clinic Biomedical Engineering Program: Invited Speaker, Host: Clifford Jack MD, Armando Manduca PhD, **November 19, 2004.**

**National Institutes of Health (NIH) Kick-Off Meeting for the National Centers for Computational Biology**

*The UCLA Center for Computational Biology*, Plenary Speaker, Hosts: Greg Farber PhD (NCRR), John Haller PhD (NIBIB), **December 8, 2004.**

**UCLA Center for Neurotherapeutics**

*Neuroimaging in Alzheimer's Disease*, Guest Speaker, Day of tutorial lectures Hosted by CNT for a group from Forest Pharmaceuticals, Host: Kavita Shankar PhD, UCLA Center for Neurotherapeutics, **March 23, 2005.**

**Stanford University, Stanford, CA**

*Analyzing Brain Changes in Alzheimer's Disease, Schizophrenia, and Development*, Guest Speaker, Seminar on Frontiers in Interdisciplinary Biosciences, Bio-X Program, James H. Clark Center Auditorium, Host: Brian Wandell PhD, Dept. Psychology, Stanford University, **April 7, 2005**.

**University of Minnesota, Minneapolis, MN**

*Neuroimaging of Normal and Abnormal Brain Development*, Guest Speaker, Conference: "Pathways of Development: Perspectives from Developmental, Cognitive and Affective Neuroscience", Hosts: Chuck Nelson PhD, Erika Hoyt PhD, Center for Neurobehavioral Development, University of Minnesota, **April 22, 2005**.

**Killam Lecture: Montreal Neurological Institute, McGill University, Montreal, Canada**

*Analyzing Brain Changes in Alzheimer's Disease, Schizophrenia, and Development*, Guest Speaker, Hosts: Louis Collins PhD, Alan Evans PhD, Bruce Pike PhD, McConnell Brain Imaging Center, McGill University, Canada, **May 24, 2005**.

**UCLA Center for Neurotherapeutics**

*Imaging Disease Progression with Applications to Drug Trials*, Guest Speaker, Day of tutorial lectures Hosted by CNT for a group from Forest Pharmaceuticals, extension of earlier talk for a second group of visitors; Host: Kavita Shankar PhD, UCLA Center for Neurotherapeutics, **August 30, 2005**.

**Johns Hopkins University School of Engineering and Center for Imaging Science, Whiting School of Engineering, Baltimore, MD**

*Analyzing Brain Images from Large Human Populations*, Invited Speaker, Seminars in Biomedical Engineering, Co-Guest Speaker, James Gee. Ph.D., University of Pennsylvania School of Medicine. Host: Michael I. Miller, Ph.D., Director of the Center for Imaging Science, Johns Hopkins University. **September 28, 2005**.

**Hyatt Regency Hotel, Baltimore, MD – Biomedical Engineering Society (BMES2005)**

*Analyzing Brain Images from Large Human Populations*, Hosts: Michael I. Miller, Ph.D. and Alexander Popel Ph.D., Johns Hopkins University. **September 29, 2005**.

**Century Plaza Hotel, Century City, CA – Child Neurology Society (CNS)**

*Mapping Brain Development with MRI*, Guest Speaker, Symposium on Structural Neuroimaging, Host: Jeff Neil, M.D., Washington University at St. Louis, Co-Guest Speaker, Peter van Zijl. Ph.D., Johns Hopkins University Kennedy Krieger Institute, **September 30, 2005**.

**Skirball Center, Los Angeles, CA – 10<sup>th</sup> Annual Review of Psychiatry, Semel Institute**

*Imaging the Developing Brain– Can We See Signs of Risk for Illness?*, Luncheon Plenary Speaker (~260 attendees), 10<sup>th</sup> Annual Review of Psychiatry, Semel Institute, UCLA; Host: Andrew Leuchter, MD; **October 28, 2005**.

**Society for Neuroscience One-Day Short Course, Washington, DC**

*Mapping Disease & Genetic Effects on the Brain by Imaging Human Populations*, Plenary Speaker (~100 attendees, with afternoon break-out groups), Host: Tyrone Cannon, PhD; **November 11, 2005**.

**University of Pittsburgh Medical Center, Pittsburgh, PA**

**Alzheimer's Disease Research Center, Dept. Neurology**

*Mapping Brain Changes in Alzheimer's Disease, Development and Schizophrenia*, Host: Jim Becker, Ph.D., Alzheimer's Disease Research Center, UPMC. **December 19, 2005**.

**American Society of Functional Neuroradiology One-Day Course, San Diego Convention Center, CA**

*Time-lapsed Grey and White Matter Changes in Normal Aging and Cognitive Disorders*, in Short Course on *Structural Grey Matter and White Matter Mapping and the Clinical Neurosciences*, American Society of Neuroradiology; Hosts: John Ulmer MD and Aaron Field MD PhD, **May 4, 2006**.

**New York Academy of Sciences, NYU Kimmel Center, New York, NY**

*Population-Based Mapping of Brain Changes in Aging and Dementia*, In: Workshop on *Imaging and the Aging Brain*, Hosts and Organizers: Mony de Leon EdD PhD, Rashid Shaikh MD, Kara-Leigh Dockery MD, **May 18, 2006**.

**Collegium Internationale Neuropsychopharmacologicum (CINP) Workshop, Chicago, IL**

*Time-Lapse Mapping of Brain Changes in Schizophrenia*, Invited Symposium Speaker with Chris Pantelis and Eve Johnstone; Host: Jeffrey Lieberman MD, Columbia University, **July 11, 2006**.

**Eli Lilly Corporate Headquarters, Indianapolis, IN**

*Time-Lapse Mapping Reveals Different Disease Trajectories in Schizophrenia Depending on Antipsychotic Treatment*, Guest Speaker, Neuroprotection Advisory Board, Host: John Hayes MD (Vice President, Lilly Research Labs) and Jeffrey Lieberman MD, **November 28, 2006**.

**American College of Neuropsychopharmacology (ACNP) Invited Symposium, Hollywood, FL**

*Visualizing Brain Changes in Aging and Dementia*, Guest Speaker with Jay Giedd, Nitin Gogtay, Guido Gerig; Host: Nitin Gogtay MD, NIMH Child Psychiatry Branch, **December 7, 2006**.

**Santa Monica, CA – American Society for Adolescent Psychiatry (ASAP)**

*Imaging Normal and Abnormal Brain Development with MRI*, Guest Speaker, Host: Mohan Nair, M.D., Sheraton Delfina Hotel, Santa Monica, CA, **March 9, 2007**.

**Royal Academy of Sciences (KNAW), Amsterdam, The Netherlands**

*Development of the Brain*, Guest Speaker, Hosts: Eco de Geus • Danielle Posthuma • Dorret Boomsma • Terry Goldberg, Dutch Royal Academy of Sciences, Workshop on Integrating Imaging and Genetics in Cognitive Research, Amsterdam, The Netherlands, **May 9, 2007**.

**UCLA Institute of Pure and Applied Mathematics (IPAM), Los Angeles, CA**

*Brain mapping using deformation morphometry, information theory and diffusion tensor imaging*, Guest Speaker and Co-Organizer, IPAM Workshop on Image Processing for Random Shapes: Applications to Brain Mapping, Geophysics, and Astrophysics (RSWS4), **May 25, 2007**.

**Alzheimer's Association, Washington, DC**

*3D and 4D MR imaging of aging and dementia: principles and pitfalls*, Alzheimer's Association Prevention Meeting, One Day Course on *Advanced Acquisition and Analysis Methods*, Host: Clifford Jack MD, at the Marriott Wardman Park Hotel, Washington, DC, Saturday, **June 9, 2007**.

**Research Triangle Park, North Carolina**

*Brain mapping using deformation morphometry, information theory and diffusion tensor imaging*, Workshop on Computational Anatomy, Host: Laurent Younes, Ph.D., Johns Hopkins University Center for Imaging Science, **July 10, 2007**.

**University of Cambridge, United Kingdom**

*Mapping Brain Development*, Host: Ed Bullmore MD PhD, GE Sponsored Symposium on Advances in Brain Imaging, **November 12, 2007**.

**Massachusetts Institute of Technology (MIT), McGovern Institute for Brain Research, Boston, MA**

*Heritability of brain morphology and its applications to psychiatric disease*, Host: Charles Jennings, McGovern Symposium, **April 29, 2008**. [cancelled]

**Society of Biological Psychiatry (SOBP) Invited Symposium, Washington, DC**

*Mapping Progressive Brain Changes in an Antipsychotic Trial*, Host: Bob McCarley, Harvard CIDAR Center Director, **May 3, 2008**. [cancelled]

**National Institutes of Health, Bethesda, MD**

*HIV Effects on the Brain*, Talk at All-Hands Meeting for the National Computational Biology Centers (NCBCs), **August 12 2008**.

**American College of Neuropsychopharmacology (ACNP) Invited Symposium, Scottsdale, AZ**

*White Matter Changes in Health and Disease*, Guest Speaker with Jay Giedd, George Bartzokis, Nitin Gogtay, Guido Gerig; Host: Nitin Gogtay MD, NIMH Child Psychiatry Branch, **December 7, 2008**.

**II.B. ADDITIONAL MEETINGS ATTENDED & PLATFORM TALKS:**

- International Conference on Visualization in Biomedical Computing, Hamburg, Germany (**Invited Speaker**) 1996
- Medical Robotics and Computer-Assisted Surgery, Johns Hopkins University, Baltimore 1996
- Society for Neuroscience, 1993-2005
- International Conference on Functional Mapping of the Human Brain, Boston 1996, Copenhagen 1997 (**Invited Speaker**), Montreal 1998, San Antonio 2000 (**Invited Speaker**), New York 2004 (**Invited Speaker**), Toronto 2005 (**Invited Speaker**)
- Pittsburgh Supercomputing Center: Biomedical Image Analysis and Visualization Workshop (**Invited Speaker**) 1998
- 1998 International *BrainMap* Conference, San Antonio, Texas (**Invited Speaker**) 1998

**III. MEDIA COVERAGE**

**III.A. INTERNATIONAL (U.S./Canada)**

- Mackenzie D (2000). *The Shape of Madness*, **Discover Magazine**, Jan. 2000 Issue. CIRCULATION: 2.2 Million readers. 8-page Feature Article. Reviewed our research findings in schizophrenia and Alzheimer's Disease, and our computational work in creating population-based digital brain atlases.

**III.B. NATIONAL**

- Rausch C (2000). *Mapping the Collective Consciousness: Images of the Century*, **Wired Magazine**, Jan. 2000 Issue. Full-page Graphic and Feature. Illustrated our research on encoding patterns of neuroanatomical variability in large human populations.
- Mahoney D (2000). *Insight Section: Advances in Graphical Visualization*, **Computer Graphics World**. Jan. 2000 Issue. Full-page Graphic and Feature. Illustrated our research in visualization of brain imaging data and mapping abnormalities of organization at the human cortex.
- Mahoney D (2001). *Insight Section: Mapping Brain Disease*, **Computer Graphics World**. Feb. 2001 Issue. Full-page Graphic and Feature. Illustrated our research mapping the dynamic profile of tissue loss in schizophrenia.

### III.C. REGIONAL

- Gannis M (1999). *Bioinformatics Infrastructure for Large-Scale Analyses*, **Envision**, Fall 1999 Issue, San Diego Supercomputing Center Quarterly Science Magazine. 2-page Feature Article. Reviewed our research developing high-performance algorithms for analysis of brain imaging data in diseased populations.
- Maisel M (1999). *Making Headway in Computational Neuroscience* [Cover Article], **Envision**, Summer 1999 Issue, San Diego Supercomputing Center Quarterly Science Magazine. 2-page Feature Article. Reviewed our research using mathematical algorithms and large image databases to synthesize probabilistic atlases of the human brain.

### III.D. PROFESSIONAL

- Lauerman J (2000). *Brain Atlases Reveal Individual Terrain*, Dana Foundation National Newsletter, vol. 10, no. 1, Jan./Feb. 2000. Special Issue on news from the 29<sup>th</sup> annual Society for Neuroscience meeting in Miami, Florida, Oct. 1999. Highlighted our research on algorithms for early detection of gray matter loss in Alzheimer's Disease.
- Lipton L (2000). *Morphometrics Opens Door to More Precise Brain Studies*, **Psychiatric News** (Newspaper of the American Psychiatric Association). Highlighted our research on structural imaging in schizophrenia, dementia and brain development. May 19, 2000.
- Crutcher K (2000). *A Glimpse into the Future?*, **Alzheimer's Forum** Highlighted our research on mapping brain change in Alzheimer's Disease, presented at the Society for Neuroscience in New Orleans, LA, Nov. 2000.

### III.E. NEWSWIRES/NATIONAL NEWSPAPERS/TV NETWORKS

i. The following newswires, TV networks and daily newspapers covered our *Nature* report on **mapping growth in the brains of children**:

- New York Times. *Study: Brains Grow Furiously* (March 9, 2000)
- Washington Post. *Key Brain Growth Goes On Into Teens*, Front Page Article by Curt Suplee (March 9, 2000).
- USA Today. *Kids' Brains Still Growing Into Puberty* (March 9, 2000).
- Los Angeles Times. *Scientists Map Patterns of Growth in Young Brains*, by Science Editor Robert Lee Hotz (March 9, 2000)
- Globe and Mail (Canada). *Scientists Map Growth of Children's Brains* (March 9, 2000); *Brains Develop into Puberty, Study Says* (March 10, 2000), Health Feature Article by Christa Foss.
- Chicago Tribune. *Brain Develops through Age 15, Study Suggests* (March 10, 2000).
- Arizona Republic. *Child Brain Studies Offer New Insights* (March 9, 2000).
- Philadelphia Inquirer. *Brain Not Finished Developing by Age 6, Scientists Now Say* (March 9, 2000).
- San Gabriel Valley Tribune. *Child Brain Study Finds Growth Spurts* (March 10, 2000).
- San Jose Mercury News. *Stunning Brain Changes Traced as Children Mature* (March 9, 2000)
- Press Telegram. *Brain Changes Mapped* (March 9, 2000)
- Watertown Daily Times. *Study: Brain Growth Goes on Into Teens* (March 9, 2000).
- Cincinnati Post. *Brains Continue to Grow: Study: Intellect in Teens Doubles* (March 9, 2000).
- San Francisco Chronicle, San Diego Union Tribune, Las Vegas Sun, Contra Costa Times, Miami Herald, Popular Science Magazine, and other AP syndicates
- Beloit Daily News. *Brains Grow Well Into Puberty* (March 10, 2000).

#### International:

- The Times of India (New Delhi). *Scientists Map Children's Brain Development* (March 13, 2000); also *Study: Brains Grow Furiously* (March 11, 2000); reprinted in Heart Care Foundation of India (March 2000 Issue): *Children's brains grow furiously: Study*



- Indian Express (Bombay) *Scientists Map Children's Brain Development* (March 10, 2000).
- News International (Pakistan). World News Section. *Children's Brains* (March 9, 2000).
- Irish Examiner (Ireland). *Brain Grows at Dramatic Rate into Puberty* (March 10, 2000).
- Swedish News (Sweden). [in Swedish:] *Tonåren avgörande för att utveckla hjärnkapaciteten* (March 24, 2000).
- Polish Newswire (Poland). [in Polish:] *Rzeczpospolita*, Nr. 61 (March 13, 2000). *Neurobiologia: Dopiero po 20. roku życia ostatecznie kształtują się emocje, samokontrola i zdolność empatii: Życie wewnętrzne mózgu*, by Zbigniew Wojtasinski (March 13, 2000).
- Spiegel Online (Germany). [in German:] *Neurologie: Gehirnentwicklung erfolgt noch bis zur Pubertät* (March 10, 2000).
- Periódico Público (Mexico). [in Spanish:] *Año III, número 907: El cerebro cambia en la adolescencia: Si se desarrollan destrezas en esta época, quedarán incorporadas de por vida* (March 10, 2000).
- Associated Press Newswire. *Study: Brains Grow Furiously* (March 9, 2000).
- Reuters Newswire. *Scientists Map Children's Brain Development* (March 8, 2000).
- ReutersHealth Newswire. *Brain Development Revealed in 4-D* (March 8, 2000).
- United Press International (UPI) Newswire. *Scientists Map Brain Growth Patterns* (March 8, 2000).
- UC Newswire. *Scientists Map Brain Development in Four Dimensions, Revealing Stage-Specific Growth Patterns in Children*, Article by Alan Eyerly (March 10, 2000).
- UCLA Today. *Guide to Optimal Learning: Scientists Track Growth of Human Brain*, Article by Alan Eyerly (April 4, 2000).
- UCLA Magazine. *Lifelong Learning*, (Summer 2000 Issue; June 30, 2000).
- ABC News. *Scientists Map Brains of Kids*.
- MSNBC News. *Scientists Map Brain Development: Technique Could be used in Alzheimer's Treatment* (March 8, 2000)
- Fox News. *Scientists Map Brain's Development* (March 8, 2000).
- WebMD.com. *New Tool Shows How a Child's Brain Grows: May Some Day Help Doctors Assess Children's Development*, Front Page Article by Daniel J. DeNoon, WebMD Medical News (March 14, 2000).
- CNEWS Canadian News Network. *Fine-Tuning the Mind: Children's Brains Grow Furiously Into Puberty* (March 9, 2000)
- NewsNow Health Network, Johns Hopkins IntelliHealth Network, About.com News Network
- HealthScout News Network. *Brain Growth Goes Into the Teen Years: New Study Shows Development Up to Age 15* (March 13, 2000)
- DrKoop.com and Medical PressCorps News Service. *Scientists Map the Growing Brain*, by Paul Candon (March 9, 2000)
- Education Week. *Study Suggests that Brain Growth Continues into Adolescence*, by Linda Jacobson (March 22, 2000)
- Education Week. 2<sup>nd</sup> Article. *Special Feature on Teenage Brain Development*, by Linda Jacobson (October 4, 2000)
- Education Week. 3<sup>rd</sup> Article. *Letters to Editor*, by Gladys Lipton (October 22, 2000). Highlighted our research and its relevance to current policy in teaching foreign languages.
- Youth Today. *Message from Teen Brains: It's Not Too Late!* by Diana Zuckerman (April 2000 Issue); reprinted by the National Center for Policy Research for Women and Families, *News You Can Use on Children's Health*, April 2000.
- News Primedia: News in the Workplace. *Study Shows Brains Growing Drastically During Childhood* (March 2000).

- The Complexity Digest. *How Do Brains of Children Grow?* by Dean LeBaron and Gottfried J. Mayer (March 18, 2000).
- Pittsburgh Post-Gazette. *What teens do may affect how their brains are built: Scientists say brains are 'pruned' until age 19 or 20, but it's not clear what determines what's lopped off*, By Rachel Smolkin, Post-Gazette National Bureau. Sunday, May 7, 2000.
- Brainconnection.com. *Brain Study May Provide Some Help for Educators*, Gargi Talukder, Stanford University, June 16, 2000.
- Focus Magazine (International; Milan, Italy). *Special Feature on Brain Development and Childhood Onset Schizophrenia*, by Amelia Beltramini, Science Editor (to appear, Fall 2000)
- Offspring Magazine (National & International). Front Page/8-page feature. *How to Help Your Kid Excel*, by Shannon Brownlee and Lisa Kalis. Highlighted our research charting brain growth in children; interview on brain development in children. Dec. 2000/Jan. 2001 Issue.
- Seattle Chamber Magazine. *Feature Article: Brain Research Reveals Kids' Key Periods for Learning*, Interview. Jan. 2001 Issue.

## ii. Coverage of National Academy of Sciences Workshop, May 2001

- Reuters Health Newswire. *Brain Scan Technology Poised to Play Policy Role*, by Todd Zwillich, Washington, May 2, 2001.  
Reprinted in: MEDLINE Plus (News), June 2001; Hoosier Times, June 5, 2001; Autism Digest Magazine, May 4, 2001.
- Washington Post. Front Page Article. *Are Teens Just Wired That Way? Researchers Theorize Brain Changes Are Linked to Behavior*, by Shankar Vedantam, Washington Post Staff Writer. Sunday, June 3, 2001; Page A01.  
Reprinted in:
  - San Francisco Chronicle. *Theory says teens wired to take risks; Researchers think rebelliousness may be linked to brain changes*, <http://www.sfgate.com/cgi-bin/article.cgi?f=/chronicle/archive/2001/06/05/MN14265.DTL>. June 5, 2001.
  - MSNBC News. *Are Teens Just Wired That Way?* June 6, 2001.
  - Detroit News. *Brain Changes May Affect Teen Behavior*. June 7, 2001.
  - Orlando Sentinel. July 1, 2001.
  - Boston Globe.
  - Quad-City Times, Iowa. *Maybe Teens are Just Wired That Way: Changes In Brain Could Account For Erratic Behavior*. Section: Health, Page A5. Sat. June 9, 2001.  
Also reprinted in *Today* (Magazine of the International Child and Youth Network; June 5, 2001)
- Aquilone News (Italy). *Lo studio di due ricercatori Usa: cambiamenti radicali tra adolescenza e maturita'*, by Alessandra Farkas. June 2001.
- Galileo News (Italy). *ADOLESCENZA: La rabbia dei teen-ager? E' il cervello che muta*. June 4, 2001.
- Il Giornali di Vicenza (Italy). *Adolescenti scapestrati? Macché ormoni è tutta colpa del cervello*. June 4, 2001.
- Medicina Y Familia (Peru). *La adolescencia sería un periodo crítico para el cerebro*. June 2001.
- Chicago Tribune. *The Teen Brain Theory*. By Meghan Mutchler Deerin, Chicago Tribune Health Section. August 28, 2001.

### iii. Coverage of Schizophrenia Paper, Proceedings of the National Academy of Sciences, Sept. 2001

- Reuters Health (New York). *Study charts path of brain damage in schizophrenia*. By Amy Norton. Sept. 24, 2001.
- ABC Newswire. *Mystery of the Mind, New Study Provides Clues as to What Causes Schizophrenia*. By Jenette Restivo. Sept. 24, 2001.
- UPI Newswire. *Doctors Map Schizophrenia Progression*. By Norra MacReady. Sept. 24, 2001.
- Reuters Health Professional Newswire (Westport, CT). *Spreading waves of gray matter loss occur in early-onset schizophrenia*.
- Yahoo Newswire. *MRI Sheds New Light on Schizophrenia. Destruction of "gray matter" in the brain may lead to debilitating mental illness*. Sept. 24, 2001.
- BBC News, England. *Schizophrenics suffer brain 'forest fire'*. Sept. 25, 2001.
- Aerzte Zeitung. *Gehirnverlust breitet sich wie eine Welle aus. Neue MRT-Diagnostik bei Schizophrenie-Kranken / Verlauf des Substanzverlusts über fünf Jahre nachgezeichnet*. Sept. 24, 2001. [in German]
- Wissenschaft Online. **Die Nebel lichten sich: Hirnveränderungen bei Schizophrenie**. Sept. 25, 2001. [in German]
- Science Daily. *UCLA Researchers Map How Schizophrenia Engulfs Teen Brains*. Sept. 25, 2001.
- Health Media/Yahoo Headlines. *Schizophrenic brain images "offer hope for new treatments"*. Sept. 26, 2001.
- Toronto Star. *A Disturbing Report on A Cruel Disease*. By Jay Ingram, Science Correspondent. Sept. 30, 2001.
- Dr. Koop.com. *Scientists Map Schizophrenia's Destruction*. By Lee Hickling, drkoop.com Health Correspondent. Oct. 1, 2001.
- Mental Health Weekly. *MRI Reveals Brain Changes Associated with Schizophrenia*, vol. 11, no. 37. Oct. 1, 2001.
- Nature Reviews Neuroscience. *Psychiatric Disorders: Mapping grey matter*. By Rachel Jones. Nature Reviews Neuroscience vol. 2, no. 11. November 2001 Issue.
- Clinical Psychiatry News. **NOVEL MRI TECHNIQUE: Childhood Schizophrenia Starts as Wave of Tissue Loss**. By Norra MacReady, International Medical News Group, Los Angeles Bureau. To appear.
- Neuropsychiatry Reviews. By Liz Lipton and Peter Doskoch. To appear.

### iv. Coverage of Genetics, Brain Structure and Intelligence Paper, Nature Neuroscience, Nov. 2001

The following newswires, TV networks and daily newspapers in 20 countries covered our *Nature Neuroscience* report on genes, brain structure and IQ:

Discovery Channel (video interview, Nov. 16, 2001; 3 minutes)

*Additional Press Coverage:*

**New York Times** (November 5, 2001)

**Scientific American** (November 7, 2001)

**Science** (November 16, 2001)

Nature Neuroscience Cover (November 25, 2001)

BBC World Service Radio Broadcast (November 6, 2001)

National Geographic (November 8, 2001)

Reuters Health Professional Newswire (November 5, 2001)

Reuters Health Consumer News (November 5, 2001)

Genome News Network (with images; November 9, 2001)

UPI Newswire (November 5, 2001)

BBC News (London; November 5, 2001)

Dallas Morning News (January 14, 2002)

Frankfurter Allgemeine Zeitung (Germany; November 5, 2001)

Frankfurter Allgemeine Zeitung [2nd Article] (Germany; November 13, 2001)

Ha'aretz (International Newspaper of Israel; in Hebrew; November 11, 2001)  
 Stern (Germany; November 15, 2001)  
 Hospodársky Denník (Slovakian News Service; in Slovak; November 21, 2001)  
 Tiscali News (in Czech; November 11, 2001)  
 Pantax News (in Czech; November 25, 2001)  
 Klik News Magazine (Croatia; in Serbo-Croat; November 8, 2001)  
 Ekologija News (Croatia; in Serbo-Croat; November 9, 2001)  
 Vecernji Editorial (Croatia; in Serbo-Croat; November 18, 2001)  
 Radio Liberty (in Russian; November 6, 2001)  
 La Nacion (Argentina; in Spanish; November 6, 2001)  
 Cadime News (Argentina; in Spanish; November 6, 2001)  
 Hersenletsel News (The Netherlands; in Dutch; November 10, 2001)  
 Medisch Contact (The Netherlands; in Dutch; November 9, 2001)  
 Mozon News (Norway; in Norwegian; November 6, 2001)  
 Union Radio (Venezuela; in Spanish; November 7, 2001)  
 Venezuela Innovadora (Caracas, Venezuela; in Spanish; November 8, 2001)  
 Inforcyt News (Ecuador; in Spanish; November 9, 2001)  
 Medicentrum Hungary (Budapest; in Hungarian; November 8, 2001)  
 Origo News (Hungary; in Hungarian; November 7, 2001)  
 Gondola News (Hungary; in Hungarian; December 26, 2001)  
 Elender News (Hungary; in Hungarian; November 8, 2001)  
 Hirek News (Hungary; in Hungarian; November 8, 2001)  
 Imperial Network News (Skopje, Macedonia; in Serbo-Croat, Macedonian variant; November 8, 2001)  
 Shanghai News (China; in Chinese; November 9, 2001)  
 Biosino Health News (China; in Chinese; November 5, 2001)  
 Kordic News (Korea; in Korean; November 5, 2001)  
 Vietnam Express (Vietnam; in Vietnamese; November 6, 2001)  
 Vietmedia News (Vietnam; in Vietnamese; November 16, 2001)  
 Prometheus News (Brazil; in Portuguese; November 11, 2001)  
 Oficina Informa News (Brazil; in Portuguese; November 10, 2001)  
 Free ML News (Japan; in Japanese; November 12, 2001)  
 Blaxos News (Greece; in Greek; November 7, 2001)  
 Estonian Genome Foundation (Estonia; in Estonian; November 5, 2001)  
 La Tercera (Chile; in Spanish; January 10, 2002)  
 El Norte de Castilla News (Spain; in Spanish; January 10, 2002)  
 Rheinische Post (Germany; November 5, 2001)  
 Heise Editorial, with images (in German; November 6, 2001)  
 Der Tagesspiegel (in German; November 8, 2001)  
 Aerzte Zeitung (Germany; November 6, 2001)  
 Expedition Zone News (in German, with images; November 6, 2001)  
 RAI News (Italy; November 10, 2001)  
 KW Newswire (Italy; November 15, 2001)  
 La Nazione (Rome, Italy; November 4, 2001)  
 La Stampa (Italy; November 5, 2001)

Clarin News Service (Italy; November 6, 2001)  
 EC Planet News Service (Italy; November 6, 2001)  
 Yahoo France (in French; November 7, 2001)  
 Hindustan Times (India; November 6, 2001)  
 New Scientist (November 6, 2001)

New Scientist (2nd article; November 10, 2001)  
Schweizerische Depeschagentur AG (SDA) (Switzerland; November 4, 2001)  
El Mundo Salud (Spanish; November 5, 2001)  
BBC Mundo (BBC World Service Spanish version; November 6, 2001)  
Presstext Austria (Austria; in German; November 15, 2001)  
Oman Observer (Oman; November 6, 2001)

The Independent (England; November 5, 2001)  
The Scotsman (Scotland; November 5, 2001)  
Daily Mail (London; November 6, 2001)  
The Mirror (London; November 5, 2001)  
Daily Californian (November 5, 2001)  
Western Mail and Echo (November 5, 2001)  
Western Daily Press (Bristol, England; November 5, 2001)  
Ananova Newswire (November 5, 2001)  
Courier Mail (Australia; November 5, 2001)  
Lexington Herald (Kentucky; November 5, 2001)  
Belfast News (Ireland; November 5, 2001)  
Herald Sun (November 8, 2001)  
The Age (Australia; November 5, 2001)  
Cosmiverse News (November 5, 2001)  
Jewish World Review (November 9, 2001)  
New York Times (2nd article; November 11, 2001)  
CBS News (November 19, 2001)  
Manila Bulletin (Philippines; November 15, 2001)  
Singles Connection News (November 2001)  
Dyslexia Teacher (November 2001)  
Science and Spirit Magazine (Jan./Feb. 2002)  
Biological Psychology Newsletter (December 19, 2001)

#### **v. Coverage of Alzheimer's Disease Paper, Journal of Neuroscience, Feb. 2003**

The following newswires, and daily newspapers covered our *Journal of Neuroscience* report on video mapping of the progression of brain changes in Alzheimer's disease:

**New York Times.** *New Method Aids Evaluation of Alzheimer's Drugs.* By Erica Goode. February 6, 2003.  
**Wall Street Journal.** *Alzheimer's Patients Show Rapid Brain-Cell Erosion.* By Bob McGough. February 6, 2003.  
**Boston Globe.** *Inside the damaged brain. New dynamic imaging techniques provide a deeper look at Alzheimer's and schizophrenia.* By Robert Adler. May 6, 2003.  
**USA Today.** *Made in her Mother's Image?* By Kathleen Fackelmann, March 12, 2003.  
Reuters Newswire. *Scans Show Dramatic Brain Cell Loss in Alzheimer's.* By Maggie Fox. February 6, 2003.  
Reuters Italy. *Salute:risonanza scopre come procede Alzheimer, risultati online.* February 6, 2003.  
ESS Finnish News (Finland). *Alzheimer etenee luultua nopeammin.* February 6, 2003.  
Dr. Koop. *New Video Technique Allows Tracking of Alzheimer's.* February 6, 2003.  
Houston Chronicle. *Vast loss of brain cells shown in Alzheimer's.* February 6, 2003.  
Charlotte Observer. February 6, 2003.  
South African Broadcasting Corporation News. *Scans Show Dramatic Brain Cell Loss in Alzheimer's.* February 6, 2003.  
International Herald Tribune (France). *Videos Can Now Track Alzheimer's.* February 6, 2003.

Sydney Morning Herald (Australia). *Scans Show Dramatic Brain Cell Loss in Alzheimer's Patients*. February 6, 2003.

New York Times. *Computer images show the progressive damage of Alzheimer's disease in the human brain*. (2nd report, Feb. 11, 2003)

Los Angeles Daily News. *MRIs help chart the path of Alzheimer's disease*. (Feb. 10, 2003)

Dallas Morning News (Feb. 14, 2003; Color Feature)

El Mundo Salud, Spain. *VIDEOS TRIDIMENSIONALES: Capturan en imágenes el 'viaje' del Alzheimer a través del cerebro*. (Feb. 6, 2003)

Hurriyet News, Istanbul, Turkey. *Alzheimer işte böyle yayılıyor*. (Feb. 9, 2003)

Ultimo Segundo News, Sao Paulo, Brazil. *Nova técnica mostra expansão do mal de Alzheimer no cérebro de pacientes*. (Feb. 10, 2003)

La Tercera, Sanitago de Chile, Chile. *Con videos de cerebro: Observan avance del Alzheimer*. (Feb. 9, 2003)

24 Ur News, Slovenia. *Alzheimerjeva bolezen uničuje celice*. (in Slovene; Feb. 21, 2003)

Aftenposten News, Norway. *Skremmende bilder av Alzheimers herjinger*. (Feb. 6, 2003)

Moss Dagblad, ANB News, Oslo, Norway. *Ødelegger hjernen i rekordfart*. (in Norwegian; Feb. 7, 2003)

Geoscience News. *Alzheimer in lebenden Gehirnen gefilmt: Hilfe für Pharmaunternehmen bei Medikamenten-Evaluierung* (in German; Feb. 10, 2003)

ESS Finnish News (in Finnish; Feb. 6, 2003).

Rzeczpospolita News. *Jak postępuje choroba Alzheimera*. (in Polish; Feb. 10, 2003).

The Times of India. *Scans show brain cell loss in Alzheimer's*. (Feb. 6, 2003)

Corner Mix News, Croatia. *Alzheimer brzo i postojano uništava moždane stanice*. (in Serbo Croat; Feb. 12, 2003)

Pressetext Austria, Austria. *Videos zeigen Alzheimer-Zerstörung in lebenden Gehirnen: Hilfe für Pharmaunternehmen bei Medikamenten-Evaluierung*. (in German; Feb. 6, 2003)

Nzoom News Service, New Zealand. *Alzheimer's brain cell loss revealed*. (Feb. 8, 2003)

Business Weekly, England. *Cambridge role in key finding on Alzheimer's*. (Feb. 10, 2003)

Ottawa Citizen, Canada. *Scans chart ravages of Alzheimer's: Tests could help doctors evaluate treatments*. (Feb. 7, 2003)

La Nacion, Argentina. *Novedoso método para evaluar el Alzheimer: Permite ver el avance de la enfermedad* (Feb. 11, 2003)

NAPS News Service, Berlin. *Hilfe für Pharmaunternehmen bei Medikamenten-Evaluierung* (in German; Feb. 10, 2003)

La Opinion. *Nueva tecnología para diagnosticar Alzheimer: Un grupo de científicos logra examinar el cerebro vivo y comprobar la destrucción que este mal produce en su tejido celular*. (in Spanish; Feb. 10, 2003)

Reuters Photo (Feb. 6, 2003)

Medscape News. *3D-Video MRI Shows Progression in Alzheimer's Disease* (Feb. 20, 2003)

Il Nuovo, Italy. *Fotografata l'avanzata dell'Alzheimer: La ricerca pubblicata su Journal of Neuroscience spiega come il morbo aggredisce e disintegra il cervello*. (Feb. 10, 2003)

Corriere Canadese, Canada. *Inarrestabile Alzheimer: La malattia, secondo gli studiosi, avanza come una colata lavica*. (in Italian; Feb. 11, 2003)

Yahoo Italia Notizie/ANSA News Service. *Salute: Risonanza Scopre Come Procede Alzheimer, Risultati Online* (Italy; Feb. 7, 2003)

Farmacia Italia. *Medicina: Alzheimer, Malattia avanza come colata lavica*. (Italy; Feb. 7, 2003)

Italia Salute. (Italy; Feb. 7, 2003)

Nethaber News. *Alzheimer işte böyle yayılıyor*. (in Turkish; Feb. 10, 2003)

Todoancianos News. *Capturan en imágenes el viaje del Alzheimer a través del cerebro*. (in Spanish; Feb. 9, 2003)

Die Virtuelle Apotheke. *Neue Möglichkeit klinischer Versuche bei Alzheimer*. (in German; Feb. 7, 2003)

Informationsdienst Wissenschaft. *Fortschreiten der Alzheimerkrankheit erfolgreich abgebildet.* (in German; Feb. 7, 2003)

Medica Portal. *Fortschreiten der Alzheimerkrankheit erfolgreich abgebildet.* (in German; Feb. 11, 2003)

Medica Portal. *Alzheimer-Defizite auf Bild gebannt.* (2nd story; in German; Feb. 22, 2003)

Aerztliche Praxis. *Fortschreiten der Krankheit wird sichtbar gemacht: Neues Verfahren gibt Auskunft über Alzheimer-Status* (in German; Feb. 14, 2003)

The Mercury, Hobart, Australia. *Alzheimer's rapid brain cell loss.* (Feb. 6, 2003)

Alzheimer's Forum. *Alzheimer's Destruction Live.* (Feb. 10, 2003)

Alzheimer Online. *Una novedosa técnica de imágenes tridimensionales en movimiento ha permitido por primera vez captar en vivo la evolución del Alzheimer en el cerebro.* (in Spanish; Feb. 9, 2003)

Senior Journal. *Dramatic 3-D Images Show How Alzheimer's Engulfs Brain.* (Feb. 7, 2003)

Alzheimer's Daily News. *Brain Cell Loss in AD Patients.* (Feb. 7, 2003)

Advance News. *3-D Video from MRI Tracks Alzheimer's.* (Feb. 20, 2003)

Health on the Net Foundation. *New Video Technique Allows Tracking of Alzheimer's* (Feb. 6, 2003)

Health and Age. *Tracking Alzheimer's in the living brain.* (Feb. 14, 2003)

Intelihealth News. *MRI Study Shows Progress Of Alzheimer's.* (Feb. 12, 2003)

Financial Times Newswire. *Wall Street Journal: In Alzheimer's erosion sweeps over the brain.* (Feb. 6, 2003)

CNS News. *New Magnetic Resonance Imaging Technique Map Alzheimer's Progression.* (March 2003).

PR Newswire (Apr. 24, 2003)

1st Vitality (Feb. 7, 2003)

American Health Assistance Foundation (Feb. 2003).

#### **vi. Coverage of Methamphetamine Paper, Journal of Neuroscience, June 30 2004**

The following newswires, and daily newspapers covered our *Journal of Neuroscience* report mapping brain deficits caused by methamphetamine abuse:

**Discover Magazine. Year in Science. Selected as one of the Top 100 Scientific Discoveries of the Year 2004.**

**New York Times.** *This is Your Brain on Meth: A "Forest Fire" of Damage.* By Sandra Blakeslee. July 20, 2004.

**USA Today** (July 21, 2004).

Taipei Times (July 20, 2004).

Spartanburg Herald, South Carolina (July 20, 2004).

Toronto Star, Canada (July 24, 2004).

Washington Blade, DC (July 23, 2004).

Sun Herald, Mississippi (July 22, 2004).

Arizona Central, AZ (July 22, 2004).

Omaha World Herald (July 25, 2004).

TV News Report (Dec. 10, 2004). Aired Dec. 10-14 on KGO-ABC (San Francisco), KGUN-ABC (Tucson, AZ), WHAS-ABC (Louisville, KY) and KAIT-ABC (Jonesboro, AR). [ScienCentral, a New York-based science news production company, produced and distributed stories on the study to ABC and NBC affiliates nationwide].

#### **vi. Coverage of HIV/AIDS Paper, Proceedings of the National Academy of Sciences, Oct. 11 2005**

Press from around the world reported Oct. 11-17 on our *PNAS* report mapping brain deficits caused by **HIV/AIDS**. This study found that AIDS selectively ravages the brain, causing 15 percent tissue loss even in seemingly healthy patients on powerful drug regimens. The imaging research is the first to pinpoint the damage inflicted by AIDS on brain regions that control movement, language and judgment. Print media covering the research included:

Ärzte Zeitung (Germany),

El Mundo (Spain),  
Khoa Hoc Press (Vietnam),  
Le Monde (France),  
New Oriental Press (China),  
Pittsburgh Tribune Review,  
The Telegraph (London) and  
VN Express (Vietnam).

Newswire coverage included AFP (Associated Foreign Press; French, Spanish, Italian, and Portuguese), BBC News, Associated Press, City News Service, DeHavilland Information Service (U.K.), Health Day News and Ivanhoe Newswire. Radio coverage included KPCC 89.3FM, and KPBS 89.5FM (San Diego). Web coverage of various wire reports included 13wham.com, 365Gay.com, ABC.com, ACTU.Wanadoo.fr, Advocate.com, Avert.org, Azprensa.com, bol.ops-oms.org, Biz.yahoo.com, TheBodyPro.com, CapitolHillBlue.com, Cyberpresse.ca, DrKoop.com, DrudgeReport.com, E-Licco.com, ElIndependiente.com, Forbes.com, Fr.News.Yahoo.com, France2.fr, Gay.com, GayNews.it, Habersaglik.com, HealthCentral.com, Health24.com, Hetnieuwblad.com, HLN.be, Innovations-Report.com, Intramed.net, KaiserNetwork.org, KCRW.com, KGET.com, KLAS.com, KPHO.com, KRON.com, KVVU.com, Lanacio.com.ar, La-Croix.com, Lex18.com, JoinTogether.org, Neuf.fr, News.Yahoo.com, Newswatch50.com, Nouvelobs.com, RTLNews.com, Terretorioidigital.com, TheSunlink.com, Univision.com, Voila.fr, WFIE.com, WWAY.com and Xagena.it.

“AIDS Finds Sanctuary from Drugs in Brain”

<http://www.telegraph.co.uk/news/main.jhtml?xml=/news/2005/10/11/waids11.xml&sSheet=/news/2005/10/11/ixworld.html>

“Scans Show How HIV Attacks Brain”

<http://news.bbc.co.uk/1/hi/health/4319952.stm>

“HIV Thins Regions of the Brain”

<http://www.healthday.com/view.cfm?id=528460>

“HIV Reduces Brain Tissue”

[http://www.advocate.com/news\\_detail\\_ektid21606.asp](http://www.advocate.com/news_detail_ektid21606.asp)

### III.F. EDITORIALS

- Newsday (New York). Invited Editorial: *Violence and the Teenage Brain*, Editorial on Adolescent Brain Research. Wednesday, May 23, 2001. Reprinted in:
- The Wichita Eagle (Kansas). *Brains of Teens and Adults aren't Same*. May 26, 2001.
- St. Petersburg Times (Florida). May 28, 2001.
- The Journal Gazette (Fort Wayne, Indiana). *Brain research shows a teen-ager is not an adult*. May 28, 2001.
- Sun Sentinel (Florida). Friday, June 1, 2001.

Reprinted in: *Coursebook for the Criminal Justice Institute*, Washington State Bar Association, Sept. 2002.

### III.G. RADIO

- BBC World Service. Interviewed on *The World Today*. International News Program, aired in Europe and Asia. Reported on our study on genetics, brain structure and IQ (November 2001).
- BBC Radio 4. Interviewed on drivetime national news program. Reported on our study on genetics, brain structure and IQ (November 2001).



- Radio: Radio America (*Interview*, Dateline: Washington, March 9, 2000)
- KFI Talk Radio (Los Angeles, March 9, 2000).
- Osgood Files. CBS News Radio. National radio broadcast by Charles Osgood. Radio Interview on Brain Development and Language Acquisition in Childhood (Feb. 18, 2003).

On schizophrenia:

- KCSN Radio Network, Northridge, California. Interview on Brain Imaging in Schizophrenia (October 1, 2001).

On Alzheimer's Disease:

- KFI Talk Radio (News Interview; Los Angeles, February 10, 2003).
- Deutschland Radio Berlin (Germany; 10 minute Radio Interview; February 12, 2003)

### **III.H. TV INTERVIEWS & DOCUMENTARIES**

On Brain Development:

- Reuters Television and Syndicates (Europe). Television Interview on Mapping Brain Growth Patterns in Children (Aired in Europe, March 10, 2000).
- Channel One U.S. Educational Network. Television Interview on Brain Development (Aired in Schools, March 10, 2000).
- Channel 4, U.K. *Double Exposure: The Learning Brain*, Producers: Dagmar Charlton and Fiona Scott. Television Interview on Imaging Brain Development. Monday May 8, 2000; To air: May 2001.
- NDR-Hamburg Television Network, Germany. Producers: Irina Bosse. Television Interview on Brain Plasticity, MRI Scanning, and Imaging Brain Development. Monday May 15, 2000; To air: Fall 2000.
- Discovery Health Channel. *Fires of the Mind*. Producer: Steve Eder. Television Interview on Mapping and Visualizing Brain Development. Aired: May 2001.
- CNN Newsroom. Producer: Janice MacDonald. Television Interview on MRI Scanning, Brain Growth across Ages 3-15, Linguistic Development. Friday May 26, 2000; Aired: December 7-11, 2000, on CNN, CNN International News Networks. Transcript available at: [http://www.loni.ucla.edu/~thompson/MEDIA/CNN/cnn\\_nr.html](http://www.loni.ucla.edu/~thompson/MEDIA/CNN/cnn_nr.html)

On schizophrenia:

- Reuters Television and Syndicates (Europe). Television Interview on Mapping Brain Changes in Schizophrenia (Aired in Europe and 800 syndicated TV stations, October 1-8, 2001).
- Discovery Health Channel and Syndicates. Mentorn Productions, Living Pulse (London). Television Interview on Brain Mapping Advances Schizophrenia (Aired in US, Europe, India, and France, Nov.-Dec. 2002 and 2003).

On Alzheimer's Disease:

- KABC Channel 7 Television (Los Angeles). Television Interview on Mapping Brain Changes in Alzheimer's Disease (Aired February 7, 2003).
- Dr. Dean Edell, San Francisco TV Program (May 2003). Television Interview.

- NBC Channel 17 TV News (May 7, 2003). Television Interview.
- ABC Channel 12 TV News, Michigan (April 22, 2003). Television Interview.
- ScienceCentral TV Syndicates (April 29, 2003), and Ivanhoe TV Syndicates (April 18, 2003). Television Interview.
- Eyewitness News, West Virginia (April 9, 2003). Television Interview.
- Austin 8 TV News (April 14, 2003) ). Television Interview.
- WCPO 9 Cincinnati TV News (April 22, 2003). Television Interview.
- WSAW 7 Wisconsin TV News (April 22, 2003). Television Interview.
- WIS Channel 10 TV News, South Carolina (April 24, 2003). Television Interview.

Additional Media Coverage:

**New York Times**, June 13 2008. Interview on Schizophrenia Progression: Expert Q+A with Paul Thompson.

**New York Times Health Section**, Sept 13 2008. Time Lapse Maps of Brain Development.

**Harvard Magazine**, Sept.-Oct. 2008. Teen Brain Development.

#### IV. PEER REVIEW ACTIVITIES

##### A. PEER-REVIEWER FOR:

##### Number of Papers Reviewed (1998-)\*

<u>Nature Neuroscience</u>		2
<u>Nature Genetics</u>		1
<u>Proceedings of the National Academy of Sciences</u>		2
<u>Journal of Computer Assisted Tomography</u>	7	
<u>IEEE Transactions on Medical Imaging</u>		10
<u>NeuroImage</u>		11
<u>Neuron</u>	1	
<u>Journal of Neuroscience</u>		1
<u>Computer Vision and Image Understanding</u>	2	
<u>Computer Vision and Pattern Recognition</u>	5	
<u>Medical Image Analysis</u>		3
<u>Elsevier Trends in Pharmacological Science and Technology</u>	1	
<u>IEEE Transactions on Biomedical Engineering</u>		3
<u>IEEE Transactions on Visualization and Computer Graphics</u>	1	
<u>Human Brain Mapping</u>	5	
<u>American Journal of Psychiatry</u>		1
<u>Neuroreport</u>		1
<u>Laterality</u>		1
<u>Journal of Electronic Imaging</u>	1	
<u>Neural Networks</u>		1
<u>American Journal of Mental Retardation</u>		1
<u>Neuropsychology</u>		1
<b>TOTAL</b>		<b>(51)</b>

\*this list includes academic journals, and excludes IEEE engineering conferences, where it is typical to assign 6 to 10 papers to each reviewer on the Program Committee (*see under* Committee Service).

## GUEST EDITED THE FOLLOWING JOURNAL SPECIAL ISSUES

**NeuroImage**    **Special Issue on Mathematics in Brain Imaging (IPAM Summer School)**  
**Sept. 2004**  
**Co-Editors: Paul Thompson, Mike Miller,**  
**Russ Poldrack, Tom Nichols, Tilak Ratnanather**  
**20 papers**

**IEEE Transactions on Medical Imaging**  
**Special Issue on Computational Neuroanatomy**  
**April 2007**  
**Co-Editors: James Gee and Paul Thompson**  
**16 papers selected; 70 reviewed**

**Human Brain Mapping**  
**Special Issue on Genomic Imaging**  
**June 2007**  
**Co-Editors: Paul Thompson, Tomas Paus, David Glahn**  
**13 papers**

**NeuroImage**    **Special Issue on Mathematics in Brain Imaging (IPAM Summer School)**  
**Jan. 2009**  
**Co-Editors: Paul Thompson, Mike Miller,**  
**Russ Poldrack, Tom Nichols, Keith Worsley, Jonathan Taylor**  
**20 papers**

## IV.B.i. BOOK PROPOSAL REVIEWER FOR:

### **Springer Press, Germany**

- Reviewed Book Proposals for the Springer Press *Mathematics and Visualization* Series; included research titles on partial differential equations, differential geometry, level-sets, and computer vision approaches in medical image reconstruction and analysis.

## IV.B.ii. BOOK CONSULTANT FOR:

### **Blackbirch Press, Woodbridge, CT**

- Served as consultant and proof-reader for 4 educational textbooks, published by Blackbirch Press in 2001. The books introduce the anatomy and function of the brain, and are intended for advanced high school students in Grades 6-9. The first of the books highlights our research on brain development in children. The books are entitled:

The Physical Brain / By Faith Brynie. Woodbridge, CT. Blackbirch Press, 2001. Scientific Consultant, Paul Thompson. ISBN #1-56711-423-7. 64pp.

Perception / By Faith Brynie. Woodbridge, CT. Blackbirch Press, 2001. Scientific Consultant, Paul Thompson. ISBN #1-56711-423-7. 64pp.

Addiction / By Susan Papa, Steve Miller. Woodbridge, CT. Blackbirch Press, 2001. Scientific Consultant, Paul Thompson. ISBN #1-56711-421-0. 64pp.

Neurological disorders / By Connie Goldsmith. Woodbridge, CT. Blackbirch Press, 2001. Scientific Consultant, Paul Thompson. ISBN # 1-56711-422-9. 64pp.

#### **IV.C. GRANT APPLICATION REVIEWS, STUDY SECTIONS, ADVISORY PANELS:**

##### **National Library of Medicine, National Institutes of Health, 1999 Grants Program, June 21-22 1999**

- Served on Study Section and *Technical Evaluation Group* (TEG), June 21-22 1999, Bethesda, MD. Reviewed Grants for the National Library of Medicine Initiative entitled:

*The Visible Human Project: From Data to Knowledge*

##### **National Library of Medicine, National Institutes of Health, 1999 Grants Program, August 9-10 1999**

- Served on Study Section and *Technical Evaluation Special Emphasis Panel*, August 9-10 1999, Los Angeles Conference Center, CA. Reviewed Consortium Contract Grants for the National Library of Medicine Initiative entitled:

*An Advanced Imaging API for Medical Image Segmentation and Registration*

##### **Center for Scientific Review, National Institutes of Health, 1999 Small Business Innovation Research (SBIR)/Small Business Technology Transfer (STTR) Grants Program, November 12 1999**

- Primary Reviewer, served on Study Section, November 12 1999. Governor's House Hotel, Washington DC. Reviewed for Phase II Small Business Innovation Research Program.
- Primary Reviewer, served on Study Section, August 8, 2000. Reviewed for Phase II Small Business Innovation Research Program.

##### **Alzheimer's Disease Association, 1999 Grants Program**

- Reviewed several grants for the ADA, whose proposals for 1999 focused on interventions in Alzheimer's Disease and covered both basic science and clinical research initiatives.

##### **National Institute for Child Health and Human Development (NICHD), National Institutes of Health, 2000 Grants Program, December 6-8 2000**

- Served on Study Section and Site Visit Review panel, December 6-8 2000, for a 3-day Site Visit to the Children's National Medical Center, Washington DC. Reviewed NeuroImaging Cores and Center Grant Application for the siting of a Mental Retardation Research Center (MRRC; one of four nationally) at the Children's National Hospital, Georgetown University, and George Washington University. Chair: Thomas Woolsey, M.D.; SRA: Norman Chang, Ph.D., NICHD.

##### **National Center for Research Resources (NCRR), National Institutes of Health, 2001 Grants Program, February 21-23 2001**

- Served on Study Section and Reverse Site Visit Review panel, February 21-23 2001, for a 3-day Reverse Site Visit in Washington DC. Reviewed P41 Technical Research and Development Cores and Resource Grant Application for the siting of an NCRR National Resource in Functional Neuroimaging at the Kennedy Krieger Institute (KKI) of the Johns Hopkins School of Medicine, and the Center for Imaging Science, Johns Hopkins University. Chair: Thomas Budinger, M.D., Ph.D.; SRA: Tracy Orr, Ph.D., NCRR.

**National Science Foundation (NSF), 2002 Grants Program, June 17-20 2002**

- Served on Study Section, June 17-20 2002, for a 2-day panel reviewing seventy-five neuroscience grants. This initiative is the first NSF program to fund cognitive neuroscience projects. Program Officer: Larry Parsons, Ph.D., NSF.

**National Institute of Mental Health (NIMH), 2002 Grants Program, July 15 2002**

- Served on Study Section, July 16-17 2002, reviewing Neuroscience Grants. Program Officer: Ben Xu, Ph.D., and Henry Haigler, Ph.D.

**National Institute of Biomedical Imaging and Bioengineering (NIBIB), 2003 Grants Program, July 21-23 2003, Bethesda, MD**

- Served on Study Section, July 21-23 2003, reviewing grants for Image Guided Interventions program at NIBIB. Program Officer: Michael Oxman, Ph.D., Chair: Warren Grundfest, M.D., Ph.D.

**Referee for Research Council of Norway, Grants Program, September 2003**

- Grant reviewer for program in Computational Mathematics and Applications, Research Council of Norway, September 2003. SRA: Gudmund Høst, Dr. Scient., Program Coordinator for Norges forskningsråd.

**Referee for Danish Technical Research Council, Denmark, Grants Program, October 2003**

- Grant reviewer for proposals submitted to the Council's "Framework" and "Engineering Research Center" programs, Danish Technical Research Council, October 2003. SRA: Ewa Beldzinski, Danish Research Agency, Danish Technical Research Council.

**Center for Scientific Review, National Institute of Allergy and Infectious Diseases/National Institutes of Health, 2004 Small Business Innovation Research (SBIR)/Small Business Technology Transfer (STTR) Grants Program, April 27, 2004**

- Primary Reviewer, served on Study Section, Reviewed for Small Business Innovation Research Program, SRA: Kenneth Roebuck, Ph.D.

**National Center for Research Resources (NCRR), National Institutes of Health, Site Visit, June 21-23, 2007**

- Served on Study Section and Site Visit Review panel, June 21-23 2007, for a 3-day Site Visit in Boston. Reviewed P41 Technical Research and Development Cores and Resource Grant Application for the siting of an NCRR National Resource at Brigham Women's Hospital. Chair: Michael W. Vannier, M.D.

**IV.D. NATIONAL ADVISORY PANELS:**

**National Academy of Sciences, and Institute of Medicine (IoM), May 2, 2001**

- Served on Advisory Panel and Presented Research to National Academy of Sciences, Board on Children and Families, Cecil and Ida Green Building, 2001 Wisconsin Ave., N.W. Chairs: Michele Kipke, Ph.D., David Hamburg, Carnegie Foundation, and Donna E. Shalala, former Health and Human Services Secretary.

**Administration for Children, Youth & Families, Dept. of Health and Human Services (HHS), Washington DC, May 2001**

- Served as consultant on advisory panel for led by Stan Chappell, program officer at the the DHHS *Federal Youth Services Bureau*. Presented recent research, in panel discussions, on childhood brain development for policy-makers involved in the care of runaway and homeless children.

**National Institute for Alcoholism and Alcohol Abuse (NIAAA) Advisory Panel, September 9-11, 2001, Washington DC**

- Served on Advisory Panel and presented research at a special workshop and brainstorming plenary session at the National Institute of Alcoholism and Alcohol Abuse, Bethesda, MD. Chair: Allen Tannenbaum, Ph.D., Georgia Tech University, and Dr. Enoch Gordis, Director of the NIAAA, **September 11, 2001**.

**Advisory Board Member, Medical Image Analysis and Display Group, Univ. of North Carolina at Chapel Hill (PI: Steve Pizer PhD, UNC Dept. Computer Science)**

- Served on Advisory Committee, 4-day visit to Univ. of North Carolina to advise the MIDAG group on their medical image analysis research program. **Sunday Nov. 7-Tuesday Nov. 9 2004**.
- Served on Advisory Committee again (2005). Advised Steve Pizer, Guido Gerig's MIDAG group at UNC on composition of their Program Project and outside collaborations. **Nov. 15, 2005**.

**IV.E. NATIONAL SCIENTIFIC COMMITTEE SERVICE:**

• **IEEE Program Committee (MMBIA 2000)**

*Workshop on Mathematical Methods in Biomedical Image Analysis (MMBIA)*, Hilton Head Island, South Carolina, June 11-12 2000; Workshop sponsored by the IEEE Technical Committee on Pattern Analysis and Machine Intelligence.

• **SPIE Program Committee (MMMI 2000)**

*Conference on Mathematical Methods in Biomedical Imaging*, 'Mathematical Modeling, Estimation, and Imaging', San Diego, California, July 30-August 4, 2000; Proceedings published in SPIE vol. 4121; meeting held in coordination with the Society for Industrial and Applied Mathematics (SIAM) and the SPIE 45<sup>th</sup> Annual Meeting on Optical Science and Technology.

• **IEEE Program Committee (MMBIA 2001)**

*Workshop on Mathematical Methods in Biomedical Image Analysis (MMBIA)*, Kauai Island, Hawaii, December 4-8 2001 Workshop sponsored by the IEEE Technical Committee on Pattern Analysis and Machine Intelligence.

• **IEEE Program Committee (ISCI 2002)**

*2002 IEEE International Symposium on Biomedical Imaging (ISBI): Macro to Nano*, July 7-10, Ritz Carlton Hotel, Washington, D.C. Chairs: Michael Unser PhD, EPFL, Switzerland, and Zhi-Pei Liang PhD, University of Illinois.

• **IEEE Program Committee (ICPR 2002)**

*International Conference on Pattern Recognition 2002*, Quebec City, Canada, 11-15 August 2002; Chair: Nicholas Ayache PhD, INRIA, France.

- **MICCAI 2002 Program Committee**

*Fifth International Conference on Medical Image Computing and Computer Assisted Intervention 2002* (MICCAI 2002), University of Tokyo, Tokyo, Japan, September 25-28, 2002; Chair: Ron Kikinis MD, Boston.

- **WBIR 2003 Program Committee**

*2nd World Congress on Brain Image Registration (WBIR 2003)*. University of Pennsylvania, Philadelphia, June 24, 2003. Chairs: Jim Gee PhD and Twan Maintz PhD.

- **MICCAI 2003 Program Committee**

*Sixth International Conference on Medical Image Computing and Computer Assisted Intervention 2003* (MICCAI 2003), University of Toronto, Canada, November 1-4, 2003; Chair: Nicholas Ayache PhD, INRIA, and Guido Gerig PhD, Univ. of North Carolina.

- **ICCV 2005 Program Committee**

*International Conference on Computer Vision*, Beijing, China, Oct. 2005; also served on Program Committee and reviewed papers for the Workshop on Medical Image Analysis in Radiology (MIAR; Chair: Yanxi Liu, Ph.D.) at the same meeting.

- **ISBI 2006 Program Committee**

*IEEE International Symposium on Biomedical Imaging (ISBI)*, Washington DC, April 6-9, 2006.

- **MICCAI 2006 Program Committee, and Program Committee for the Workshop on Mathematical Foundations of Computational Anatomy (MICCAI 2006)**

*9th International Conference on Medical Image Computing and Computer Assisted Intervention 2006* (MICCAI 2006), Copenhagen, Denmark, October 2006.

#### **IV.F. TUTORIAL WORKSHOP ORGANIZER:**

- **Institute for Pure & Applied Mathematics, Conference Organizer, May 21-24 2001**

With 4 other UCLA faculty (Simon Cherry, Eitan Tadmor, Guillermo Sapiro, and Arthur Toga), organized a 4-day conference at UCLA at the Institute for Pure and Applied Mathematics, entitled:

*Imaging in Medicine and the Neurosciences* (May 21-24, 2001).

As part of the program, hosted a one-day NCCR-sponsored workshop, with 80 participants from around the U.S., entitled:

*Workshop on the Mathematics of Brain Mapping* (May 24, 2001). The workshop was a joint venture between the UCLA Laboratory of Neuro Imaging and the UCLA Institute for Pure and Applied Mathematics.

- **Workshop on Computational Anatomy, Conference Organizer, December 7 2001**

Organized schedules, invitations, and logistics for a one-day intensive brain imaging workshop at UCLA Laboratory of Neuroimaging Resource, with 40-50 participants from around the U.S.

- **Workshop on Deformable Models in Biomedical Imaging, Organizer, MICCAI 2002, Japan, Sept. 2002**

Organized schedules, invitations, and logistics for a half-day intensive brain imaging workshop at the MICCAI conference in Japan.

- **Workshop on Mapping Brain Degeneration, Organizer, Human Brain Mapping 2003, New York City, June 2003**

Organized schedules, invitations, and logistics for a morning course/workshop at the HBM2003 conference in New York.

- **Summer School on Mathematics in Brain Imaging, Conference Organizer, July 12-23 2004 (265 attendees, 2 weeks)**

Organized speakers, schedule, invitations, and logistics, and journal Special Issue, for a 2-week brain imaging workshop at UCLA Institute of Pure and Applied Mathematics, with 265 participants from around the U.S. and overseas. Organized with Mike Miller, Ph.D., Johns Hopkins University, and Mark Green, Ph.D., IPAM Director. Planned Functional Neuroimaging week with Russ Poldrack Ph.D., Tom Nichols, Ph.D.

- **IPAM Workshop on Image Processing for Random Shapes: Applications to Brain Mapping, Geophysics, and Astrophysics" May 21-25 2007.**

Program Committee with Guillermo Sapiro, Keith Worsley, Stan Osher, Peter Jones, and others. Organized speakers, schedule, and logistics, for a 1-week mathematical imaging workshop at UCLA Institute of Pure and Applied Mathematics.

#### **IV.G. UCLA COMMITTEE SERVICE:**

- **Basic Science Compensation Plan Committee, UCLA Dept. Neurology, March 2002-present**

This committee establishes rules governing the negotiation of salary, consulting income, and outside income, in the UCLA Department of Neurology.

- **Appointments and Promotions Committee, UCLA Dept. Neurology, Oct. 2004-present**
- **Neurology Dept. Representative, UC Legislative Assembly (Academic Senate), July 2004-July 2007**
- **Ad hoc Tenure Review Committee Member, Campus-Level Appointments and Promotions Committee (CAP), 2007**
- **Bridge Funds and Competitive Awards Committee, UCLA Dept. Neurology, Oct. 2007-present**

#### **V. TEACHING AND MENTORING:**

A major educational goal has been mentoring and training students in both medical and basic science degree programs, at undergraduate, graduate, and post-M.D. levels.



## **V.A. Graduate Students and Post-Doctoral Trainees Mentored 1994-2006:**

<b>Student</b>	<b>Project(s)</b>
<b>Post-M.D.</b>	
Sean Haney, M.D.	A Dynamic Framework to Detect Change in Tumor Growth (with Tim Cloughesy MD, Jeffrey Alger PhD)
<b>Graduate (PhD, MD/PhD)</b>	
Katherine Narr	Brain Mapping in Schizophrenia (Neuroscience PhD Program)
Rebecca Blanton	Pediatric Neuroimaging and Developmental Disorders (Neuroscience PhD Program)
Constantine Raftopoulos	The GL-Transform: A New Tool for Pattern Analysis in Medical Images (Computer Science PhD Program; interim military service, to Sep. 2000)
David Rex	Encoding and Analyzing Stereotaxic Variation of Human Brain Function (MD/PhD, MSTP/Neuroscience PhD Program)
Allan Mackenzie-Graham	Variations in Cortical Organization with Handedness and Gender (Neuroscience PhD Program, Rotation Student)
Uma Karmarkar	Functional Organization of Language Cortex (Neuroscience PhD Program, Rotation Student)
Suman Bhattacharya	Bayesian Pattern Recognition for Neuroimaging Data (Biostatistics PhD Program)
Daniel Rubins	A Digital Atlas of Micro-PET Data based on Scanning of Small Animals (MD/PhD, MSTP/Biomedical Physics PhD Program)
Theo Van Erp	Mapping Genetic Contributions to Brain Structure in Schizophrenia (Psychology PhD Program)
Alison Clements Burggren	Mapping Early Brain Change in ApoE Genotyped Elderly Subjects At Risk for Alzheimer's Disease (Neuroscience PhD Program, currently Rotation Student)
Andrew Frew	Brain Mapping in Tumor Patients: Imaging, Genetics and Therapy (Biomedical Physics PhD Program)
Siamak Ardekani	Nonlinear Registration Algorithms for Medical Image Databases (Biomedical Engineering PhD Program)

Alain Pitiot	Automated Analysis of Medical Images (Exchange Student, University of Paris, and INRIA, Sophia-Antipolis, France; Engineering & Computer Science PhD Program)
Christine Vidal	Mapping Early Brain Changes in Childhood-Onset Schizophrenia (Exchange Student, University of Jussieu, France; Psychology PhD Program, University of Jussieu; and UCLA Neuroengineering PhD program applicant)
Donna Roybal	Mapping Longitudinal Brain Change in Those At Genetic Risk for Alzheimer's Disease (2 <sup>nd</sup> Year Medical Student and AFAR Scholar – Visiting Summer Student)
Allen Lu	Biomedical Engineering Master's Student
Agatha Lee	Biomedical Engineering PhD Student
Ming Chang Chiang MD	Biomedical Engineering PhD Student
Janet Cruz	Biomedical Engineering PhD Student (Neuroengineering Program, Rotation Student)
Lara Foland	Neuroscience PhD Student
Jon Morra	Biomedical Engineering PhD Student
Jason Stein	Neuroscience PhD Student
April Ho	Neuroscience PhD Student
Neda Jehandshad	Medical Informatics/BME PhD Student

**V.B. Undergraduate Students Mentored (UCLA Student Research Program and 199 Honors Thesis Program; number of publications shown, for each undergraduate student, in parentheses):**

*\*Supervised Honors Thesis*

Aelia Khan (5 years)	Quantification of 3D Neuroanatomic Variability (5)
Jacob Moussai (3 years)*	Cortical Variability and Asymmetry in Aging and Dementia (5)
Shahin Zohoori (2 years)	Abnormal Cortical Anatomy in Alzheimer's Disease (3)
Joshua Mogy (1 year)*	Hippocampal/Ventricular Anatomy in Aging and Dementia (2)
Jonathan Aron (1 year)*	Probabilistic Atlas of the Alzheimer's Brain (2)
Robert Lin (1 year)*	Quantification of 3D Neuroanatomic Variability (2)
Timur Karaca, Abhishek Tiwari	Cryosection-PET Image Registration (with Mike Mega, MD PhD) (2)
Nancy Koras, Alvie Beday	Corpus Callosum Structure in Dementia and in Elderly Twins (1)
Adam Zaffos	MRI Morphometry in Twins (1)
Jessica Coryell	Caudate/Thalamic Anatomy in Subjects At Risk for Dementia (1)
Amir Goldkorn	Sulcal Patterns in Dementia and Schizophrenia (5)
Alain Pitiot* (Exchange Student)	Automated Structure Identification in Medical Images (1)
Chris Zoumalan* (2.5 years)	Creating an Alzheimer's Disease Brain Atlas (with Mike Mega, MD PhD)
Chris Lindshield	Creating an Alzheimer's Disease Brain Atlas (with Mike Mega, MD PhD)
Mohamed Khaledy	Mapping Genetic Contributions to Brain Structure in Schizophrenia
Elizabeth Kwong (Visiting Medical Student)	Population-Based Average Hippocampal Models in Mild Cognitive Impairment and Alzheimer's Disease (with Mike Mega, MD PhD)

Michael Hong*	Mapping Longitudinal Brain Changes in Alzheimer's Disease
David Gravano	Mapping Longitudinal Brain Changes in Alzheimer's Disease
David Herman*	Mapping Longitudinal Brain Changes in Alzheimer's Disease
Sue Han	Mapping Longitudinal Gray Matter Changes in Alzheimer's Disease
Victor Gabrielian	Mapping Brain Change in Childhood-Onset Schizophrenia
Anil Nair	Mapping Brain Change in Childhood-Onset Schizophrenia
Lauren McLemore	Childhood Schizophrenia, 2 quarters, 2002
Snehal Shah	Childhood Schizophrenia
Sasan Sani	Childhood Schizophrenia
Andrew Ren	Childhood Schizophrenia
Nayoung Lee	Johns Hopkins REU Scholar 2002: Drug Addiction Research
Yihong Sui	UC LEADS Scholar 2002: Autism and Childhood Schizophrenia Research; UC Award for Top UC Student, Presented in Sacramento
Yasaman Alaghband	MRI in Williams Syndrome (with Becca Dutton); <b>Two 199 Honors Theses</b>
Nazanin Izadpanah	Planum Temporale in Autism; <b>199 Honors Thesis</b>
Ben Tseng	Longitudinal Parametric MRI in Glioblastoma (with Andy Frew)
Jessica Lee	MRI in methamphetamine users (with Kira Hayashi)
Sharon Lee	Mapping Brain Change in HIV/AIDS and Mapping Cerebellar Change in Williams Syndrome; <b>Two 199 Honors Theses</b>
Marina Barysheva	MRI in methamphetamine users (with Kira Hayashi)
Andrew DeGiorgio	Mapping Alzheimer's disease and gene effects on the brain (with Sarah Madsen, Christina Avedissian), 2008
Ivan Pandoy	Mapping Alzheimer's disease effects on the Basal Ganglia. <b>199 Honors Thesis</b> , 2008.
Suh Lee	Tensor Based Morphometry in Alzheimer's Disease (with Xue Hua), 2007-2008

## V.B.II Neuroengineering Summer Program

**As member of the Neuroengineering faculty, hosted and mentored students enrolled in the UCLA Summer Intern Program (Director: Allan Tobin, Ph.D., and Alan Paul, Ph.D., UCLA Brain Research Institute) and UC LEADS Scholars Program (Director: Richard Weiss, Ph.D.):**

### 2001

Leslie Lusk	Univ. of Pennsylvania	Neuroengineering Summer Intern, 2001 (8-week visit; return research visit, March 5 to 7, 2003)
Del Leistritz	University of Tulsa, OK	Neuroengineering Summer Intern, 2001

(8-week visit). Project: Computational Approaches for the Detection of Alzheimer's Disease

## 2002

Nayoung Lee	Johns Hopkins University	Neuroengineering Summer Intern, 2002 (8-week visit). Project: Hippocampal Mapping in Methamphetamine Abusers
Yihong Sui	UCLA Biochemical Engineering	UC LEADS Program Scholar, 2002 (8-week visit). Project: Medial Temporal Maps in Childhood-Onset Schizophrenia

## V.B.III Visiting Investigators Mentored

Paul Rasser, M.Sc.	Visiting Research Fellow, University of Adelaide	1-Year Internship, 2001: Imaging in Schizophrenia, Jan.-Dec. 2001 Exchange Grant with U. Sydney (Dr. Philip Ward)
Nitin Gogtay, M.D.	Visiting Investigator, NIMH	Summer Internship, 2001: Imaging in Childhood-Onset Schizophrenia, June 25-August 8, 2001
Chris I. Zoumalan	Medical Student, Univ. Wisconsin	Summer Internship, 2001: Mapping the Medial Cortex in Alzheimer's Disease
Wil McClay, M.Sc.	Engineering Student, Tulane Univ.	Summer Internship, 2001: Cortical Surface Parameterization
Christian Gaser, Ph.D.	Postdoc, Univ. of Jena, Germany	3 week visit, April 2003; deformation Morphometry; 2 <sup>nd</sup> 3 week visit April-May 2004; 2 week visit March 2005
Manish Dalwani	Graduate Student in Psychiatry Univ. of Texas, San Antonio	2 week visit, August 2003; cortical mapping in bipolar adults
Francesca Sabbatoli	Graduate Student in Mathematics Univ. of Brescia, Italy	Two 2-3 month visits, 2004; cortical and hippocampal mapping in Alzheimer's disease, and FTD
Ginny Ng MD, Gareth Barker PhD	Inst. Psych., London	1 week visit, April 2005; cortical maps in twins
Wil McClay, Ph.D.	Postdoc, Livermore Labs (LLNL)	Joint postdoc working on image registration, starting April 2005; co-mentor on his LLNL grant

Facundo Memoli	PhD student, U. Minnesota	Postdoc working on level set methods, 2 day visit, April 2005
Julie Price, Ph.D.	Assoc. Prof., U. Pittsburgh	K award recipient, working on PET-MRI Correlation in Alzheimer's disease 3 day visit, Oct. 24-26 2007
Naama Bernea-Gorlay	Postdoc, Stanford	RO3 award recipient, learning cortical complexity methods 2 day visit, July 17-18 2008 (with Lara Foland, Sarah Madsen)
Elizabeth Walter	Postdoc, Stanford	RO3 award recipient, learning cortical complexity method 2 day visit, July 17-18 2008 (with Lara Foland, Sarah Madsen)
Marlon Quinones	Asst Prof, UT San Antonio	NARSAD recipient, learning cortical mapping methods to study inflammatory effects in bipolar illness 2 week visit, July 14-25 2008 (with Lara Foland, Sarah Madsen)
Cyrus Raji	MD/PhD student, U. Pittsburgh	To learn tensor based morphometry methods for use in the Cardiovascular Health Study 3 week visit, August 1-22 2008 (with April Ho)
Miguel Burgaleta	PhD student, U. Madrid	To learn DTI analysis methods for correlation of fiber integrity and cognition in a large database Aug 1-Dec 1 2008 (with Marina Barysheva, Agatha Lee)

#### **V.B.IV. Mentoring of Assistant Professors on K01 Grants (Mentored Research Scientist Development Awards)**

Served as K01 award Mentor/Advisor for:

Todd Lencz, Ph.D.	Assistant Professor of Psychiatry Albert Einstein College of Medicine and Hillside Hospital, New York	NIMH Mentored Research Scientist Award 2001-2002
Liana Apostolova MD	Assistant Professor of Neurology	UCLA; Beeson Award; Primary Mentor
Carrie Bearden PhD	Assistant Professor of Psychiatry	UCLA; Co-Mentor

## **V.C. CLASS TEACHING:**

### **I. M132 Structure & Function of the Nervous System:**

- Prepared and gave introductory lectures on structural and functional neuroanatomy; prepared quizzes, review sessions; graded midterms, finals and term papers; also helped students with private tutoring.

### **II. Biostatistics 230: Statistical Graphics (Fall 1999):**

- Lecturing to advanced PhD students in Biostatistics; introduced students to the major types of mathematics and statistics used in neuroimaging, brain mapping, and medical image analysis; discussed major research challenges in brain imaging; gave software demonstrations of major software packages used to analyze brain images.

### **III. Anatomy Workshops, UCLA Lab of Neuro Imaging (Quarterly, 1994-99):**

- Recruited, supervised and trained students in neuroanatomy, and in mathematical and computational techniques for image analysis. Supervised individual projects graduate and undergraduate projects on brain mapping, cryosection, MR, PET and histologic image processing and statistical analyses of neuroimaging data. Please see attached letters from students.

### **IV. Teaching the Mathematics of Neuroimaging through Animation (Educational Videos; Summer 1999-)**

- Created a series of educational video sequences, teaching the mathematical and technical approaches used in neuroimaging through the use of graphics and animation. Video segments are designed to introduce neuroimaging concepts to lay audiences and students at a high school/early undergraduate level. This animation series will be expanded in the coming years, supported by grant funding from the National Center for Research Resources (NCRR; joint work with John Bacheller, Rico Magsipoc, and Arthur Toga).

### **V. Functional Neuroimaging Class M285**

- Guest lectured for Mark Cohen and Russ Poldrack's graduate class on functional neuroimaging (2-hour lecture). November 23, 2004. Topic: Brain Image Registration and Brain Atlases in Neuroimaging.

## **V.D. UCLA SEMINAR TEACHING:**

### **University of California Los Angeles, Department of Mathematics**

*Mathematical/Computational Strategies for Mapping the Human Brain*, Invited Speaker, UCLA Mathematics Seminar Series, Host: Prof. Tony Chan, Chair, UCLA Dept. Mathematics, **November 20, 1997.**

### **University of California Los Angeles, Department of Statistics**

*Encoding Structural and Functional Information in Human Brain Image Databases*, Invited Speaker, UCLA Seminars in Statistics, Host: Prof. Ker-Chau Li, UCLA Dept. of Statistics, **February 27, 1997.**

### **University of California Los Angeles, Dept. of Biomathematics**

*Detection and Quantification of Anatomic Abnormalities using a Probabilistic Atlas of the Human Brain*, Invited Speaker, UCLA Seminars in Biomathematics, Host: Carol Newton, M.D., Ph.D., UCLA Dept. of Biomathematics, **April 4, 1996.**

**University of California Los Angeles, Division of Brain Mapping, Dept. of Neurology**

*Pathology Detection using a Probabilistic Reference System for the Human Brain*, Invited Speaker, UCLA Human Brain Mapping Seminars, Host: John Mazziotta, M.D., Ph.D., UCLA Dept. of Neurology, **March 11, 1998.**

**University of California Los Angeles, Neuroscience Grand Rounds, Dept. of Neurology**

*Detection and Mapping of Abnormal Brain Structure in Development and Disease using Neuroimaging*, Invited Speaker, UCLA Neurology Grand Rounds, Host: Robert C. Collins, M.D., Chair, Dept. of Neurology, **April 22, 1998.**

**University of California Los Angeles, Division of Brain Mapping, Dept. of Neurology**

*Challenges in Population-Based Brain Mapping: Dynamic, Disease-Specific and Probabilistic Brain Atlases*, Invited Speaker, UCLA Human Brain Mapping Seminars, Ahmanson-Lovelace Brain Mapping Center, Host: John Mazziotta, M.D., Ph.D., UCLA Dept. of Neurology, **March 10, 1999.**

**Veteran's Administration (VA) Hospital, West Los Angeles, CA**

*Challenges in Population-Based Brain Mapping*, Invited Speaker, Hosts: Eric Cheng, M.D., Chief Resident, and Claude Wasterlain, M.D., UCLA Dept. of Neurology and VA Medical Center, **October 1, 1999.**

**University of California Los Angeles, Department of Statistics**

*Mathematical and Statistical Challenges in Population-Based Brain Imaging*, Invited Speaker, UCLA Seminars in Statistics, Host: Prof. Rick Schoenberg, UCLA Dept. of Statistics, **February 1, 2000.**

**University of California Los Angeles, Department of Biostatistics**

*Mathematical and Statistical Challenges in Brain Mapping*, Invited Speaker, UCLA Seminars in Biostatistics, Hosts: Prof. Dorota Dabrowska, UCLA Dept. of Biostatistics, **February 9, 2000.**

**University of California Los Angeles, Crump Institute for Molecular Imaging (CIMI), Department of Medical and Molecular Pharmacology**

*An Introduction to Current Challenges in Brain Mapping*, Invited Speaker, Seminars in Imaging and Instrumentation, Host: Prof. Simon Cherry, Associate Director, Crump Institute for Molecular Imaging, 3:00PM, **November 29, 2000.**

**University of California Los Angeles, Institute for Pure and Applied Mathematics**

*Mathematical Challenges in Population-Based Brain Mapping*, Invited Speaker and Session Chair, Workshop on Mathematics and Modeling in Brain Mapping, Conference on Imaging in Medicine and Neurosciences, May 21-25 2001, UCLA Institute for Pure and Applied Mathematics, Hosts: Eitan Tadmor PhD, Stan Osher PhD, and Tony Chan PhD, **May 24, 2001.**

**University of California Los Angeles, Institute for Pure and Applied Mathematics**

*Brain Image Analysis: Recent Advances and Current Mathematical/Computational Challenges*, Invited Speaker, Workshop on Scientific Data Mining (SDM2002), January 14-18 2002, UCLA Institute for Pure and Applied Mathematics, Hosts: Chandrika Kamath PhD, Lawrence Livermore Labs., and Padhraic Smyth PhD, UC Irvine, **January 15, 2002.**

**University of California Los Angeles, Neuroscience Grand Rounds, Dept. of Neurology**

*Brain Imaging in Diseased Populations: Recent Advances and Future Promise*, Invited Speaker, UCLA Neurology Grand Rounds, Host: Robert C. Collins, M.D., Chair, Dept. of Neurology, **January 23, 2002.**

**UCLA/Los Angeles Psychiatric Institute (LAPSI), Sawtelle Blvd., Los Angeles, CA**

*The Child and Adolescent Brain: What Neuroimaging Reveals About Development*, Guest Speaker, Host: Regina Pally, PhD, UCLA Neuropsychiatric Institute, 8:00 PM – 9:00 PM, CME Accredited Course, **February 25, 2002.**

**UCLA Life Course Development Seminar, Los Angeles, CA**

*Brain Mapping in Development, Dementia, and Schizophrenia*, Guest Speaker, joint with Tyrone Cannon PhD, Professor and Chair, UCLA Psychology. Hosts: Neal Halfon PhD, Dept. Pediatrics, Patricia Greenfield PhD, UCLA Psychology, and Lenny Rome PhD, Dean of Research, UCLA School of Medicine; UCLA Faculty Center, 12 noon to 2PM, **November 21, 2002.**

**UCLA Psychosis Seminar, Dept. Psychology, Los Angeles, CA**

*New Brain Imaging Strategies for Studying Schizophrenia: Mapping Dynamic, Genetic, and Drug Effects*, Guest Speaker. Host: Keith Nuechterlein PhD, Neuropsychiatric Institute, UCLA School of Medicine; 10 to 11AM, **December 6, 2002.**

**UCLA Brain Matters Seminar, Dept. Neurology, Los Angeles, CA**

*Brain Imaging in Alzheimer's Disease, Schizophrenia, and Development: New Advances and Challenges*, Guest Speaker. Host: Catarina de Carvalho, Dept. Neurology, UCLA School of Medicine; Oldendorf Room, 4 to 5PM, **February 10, 2003.**

**IPAM Program on Research in Industrial Projects for Students (RIPS), Dept. Mathematics, Los Angeles, CA**

*Mathematics and Brain Mapping*, Guest Speaker to Summer School Students. Host: Mark Green, Dept. Mathematics, IPAM Conference Room. **August 22, 2003.**

**UCLA Neuropsychiatric Institute Grand Rounds, Los Angeles, CA**

*Mapping Brain Changes in Alzheimer's Disease, Schizophrenia and Development, Mini-Series on Geriatric Psychiatry*, Host: Anand Kumar MD, UCLA NPI, **April 6 2004.**

**VI. UNIVERSITY/DEPARTMENTAL SERVICE**

**VIA. ACADEMIC COMMITTEE SERVICE, 1999- (served on 36 PhD committees)**

**I. PhD Advisory Committee and Dissertation Committee Service (please also see Section III).**

<b>Student</b>	<b>Degree Department</b>	<b>Project(s)</b>
1. Katherine Narr	PhD	<b>Neuroscience</b> Brain Mapping in Schizophrenia <b>Oral PhD Exam: November 30, 1999</b> <b>Midstream: June 7 2001</b> <b>Final Defense: 2002</b>



2. Rebecca Blanton	PhD	<b>Neuroscience</b>	Pediatric Neuroimaging & Developmental Disorders <b>Oral PhD Exam: April 10, 2000</b> <b>Midstream: Jul 12 2001</b> <b>Final Exam: Nov 21 2003</b>
3. Daniel Rubins	PhD	<b>Biomedical Physics</b>	Brain Mapping with Positron Emission Tomography <b>Oral PhD Exam: August 11, 2000</b> <b>Defense: May 27 2003</b>
4. Alison Burggren	PhD	<b>Neuroscience</b>	Early Detection of Alzheimer's Disease using Functional Imaging and ApoE Genotyping <b>Oral PhD Exam: July 31, 2001</b> <b>Midstream Exam: Dec 16 2002</b> <b>Final Exam: Dec 1 2003</b>
5. Andrew Janke	PhD	<b>*Biomedical Physics</b>	<b>External Thesis Examiner</b> <b>PhD Completed: January 2003.</b> <b>*University of Queensland, Australia</b>
6. Allan Mackenzie-Graham	PhD	<b>Neuroscience</b>	Atlases of the Mouse Brain <b>Oral PhD Exam: Apr 29, 2003</b> <b>Midstream Exam: Oct 3 2005</b> <b>Defense Exam: March 24 2006</b>
7. Alain Pitiot	PhD	<b>Computer Science</b>	Brain Image Segmentation <b>Final Defense: Nov 26 2003</b> <b>(in France)</b> <b>Co-Chair with Nicholas Ayache</b>
8. Haihong Zhuang	PhD	<b>Biomedical Eng.</b>	Brain Image Segmentation <b>Defense: Oct 11 2006</b>
9. Yuan Xu	PhD	<b>Biomedical Eng.</b>	Hippocampal Shape Analysis <b>Prospectus Exam: Nov 20 2003</b> <b>Final Defense: Feb 25 2008</b>
10. Janelle Taylor	PhD	<b>Neuroscience</b>	Language Systems in Autism, Childhood Onset Schizophrenia and Epilepsy <b>Oral PhD Exam: Feb 12 2004</b>
11. David Rex	MD/PhD	<b>Neuroscience</b>	Brain Image Analysis Pipelines <b>Oral PhD Exam: March 16 2004</b> <b>Midstream Exam: May 18 2004</b> <b>Defense Exam: July 2 2004</b>

12. Meredith Braskie	PhD	<b>Neuroscience</b>	Brain Mapping in ApoE Subjects <b>Oral PhD Exam: Apr 12 2004</b> <b>Midstream Exam: Oct 27 2005</b> <b>Defense Exam: Oct 9 2006</b>
13. Andy Frew	PhD	<b>Biomedical Physics</b>	Brain Mapping in Tumor Patients <b>Oral PhD Exam: May 4 2004</b> <b>Final Defense: Nov 14 2005</b>
14. Mark Moelich	PhD	<b>Mathematics</b>	Automated Target Tracking <b>Final Defense: May 11 2004</b>
15. Triet Le	PhD	<b>Mathematics</b>	BMO Functions in Image Analysis <b>Oral PhD Exam: June 9 2004</b> <b>Defense Waived: May 2006</b> <b>PhD Received: June 5 2006</b>
16. Siamak Ardekani	PhD	<b>Biomedical Physics</b>	Atlases of DTI and Parametric MRI <b>Oral PhD Exam: 2004</b> <b>Defense Exam: Nov. 2 2005</b>
17. Hillary Protas	PhD	<b>Biomathematics</b>	Brain Mapping Using Level Sets <b>Oral PhD Exam: July 27 2004</b>
18. Terrance Williams	PhD	<b>Psychology</b>	Schizophrenia and ERPs <b>Oral PhD Exam: August 26 2004</b> <b>Defense Exam: June 4 2007</b>
19. Linh Lieu	PhD	<b>Mathematics</b>	K-Functionals for Image Denoising <b>Oral PhD Exam: Sept. 14 2004</b> <b>Final Defense: May 22 2006</b>
20. Libby O'Hare	PhD	<b>Neuroscience</b>	Brain Mapping and the Cerebellum <b>Oral PhD Exam: Dec. 20 2004</b> <b>Final Defense: May 7 2008</b>
21. Fred Park	PhD	<b>Mathematics</b>	Image Restoration via Total Variation, Inpainting, and Texture Removal <b>Oral PhD Exam: Oct. 7 2005</b>
22. Erh-Fang Lee	PhD	<b>Neuroscience</b>	Brain Atlas of the C57BL6 Mouse <b>Oral PhD Exam: Oct. 21 2005</b> <b>Defense: July 12 2007</b>
23. Jennifer Ogren	PhD	<b>Neurobiology</b>	Brain Mapping in Epilepsy <b>Oral PhD Exam: Oct. 31 2005</b> <b>Defense: May 27 2008</b>

24. Xue Hua	PhD	Neuroscience	Tensor Morphometry in Autism <b>Oral PhD Exam: Mar 6 2006</b>
25. Ming Chang Chiang MD	PhD	Biomedical Eng.	Fluid Morphometry and DTI <b>Oral PhD Exam: Aug 17 2006</b> <b>Final Defense: Jan 14 2008.</b>
26. Ronald Lok Ming Lui	PhD	Mathematics	Surface Modeling in Brain Mapping <b>Oral PhD Exam: Sep 6 2006</b> <b>Defense: May 28 2008</b>
27. Igor Yanovsky	PhD	Mathematics	Nonlinear Image Registration <b>Oral PhD Exam: Dec. 4 2006</b> <b>Defense: April 8 2008</b>
28. Caroline Brun	PhD	Biomedical Physics	Riemannian Tensor Morphometry <b>Oral PhD Exam: Dec 12 2006</b>
29. Bin Dong	PhD	Mathematics	Spherical Wavelet Transforms <b>Oral PhD Exam: Dec 12 2006</b>
30. Agatha Lee	PhD	Biomedical Engineering	Deformation Morphometry and DTI to Map Gene Effects on Brain <b>Oral PhD Exam: Dec 13 2006</b>
31. Lara Foland	PhD	Neuroscience	fMRI and MRI in Bipolar Illness <b>Oral PhD Exam: Dec 15 2006</b>
32. Tin Man Lee	PhD	Biomedical Physics	Diffusion Tensor Image Analysis <b>Oral PhD Exam: March 16 2007</b> <b>Defense: April 16 2008</b>
33. Ilhwan Jo	PhD	Mathematics	Tracking Axons in Confocal Microscopy <b>Oral PhD Exam: March 16 2007</b>
34. Jason (Ginmo) Chung	PhD	Mathematics	Atlas-Guided Chan-Vese MRI GM/WM Segmentation <b>Defense: April 19 2007</b>
35. Hussain Tameem	PhD	Biomedical Engineering	Radiological Image Segmentation <b>Oral PhD Exam: May 15 2007</b> <b>PhD Passed: May 2008</b> (Defense Waived)
36. Shishir Dube	PhD	Biomedical Engineering	Medical Image Segmentation <b>Oral PhD Exam: June 15 2007</b> (Defense Waived)

37. Yunho Kim	PhD	<b>Mathematics</b>	Sobolev Space Denoising <b>Oral PhD Exam: Sept 25 2007</b>
38. Tungyou Lin	PhD	<b>Mathematics</b>	Variational Image Matching <b>Oral PhD Exam: Jan 24 2008</b>
39. Tom Goldstein	PhD	<b>Mathematics</b>	Compressed sensing for MRI <b>Oral PhD Exam: May 29 2008</b>
40. Wenhua Gao	PhD	<b>Mathematics</b>	Shape Modeling in MRI <b>Oral PhD Exam: Aug 19 2008</b>
41. Jon Morra	PhD	<b>Biomedical Engineering</b>	Automated Hippocampal Segmentation using Adaboost methods <b>Oral PhD Exam: Aug 21 2008</b>
42. Todd Tishler	PhD	<b>Neuroscience</b>	Mapping Brain Iron Content in Aging <b>PhD Defense Exam: Oct. 2008</b>
43. Liang Zhan	PhD	<b>Biomedical Engineering</b>	HARDI (High-Angular Resolution Diffusion Imaging) Analysis <b>Oral PhD Exam: Sep 8 2008</b>
44. Neda Jahanshad	PhD	<b>Biomedical Engineering</b>	Diffusion Image Analysis <b>Oral PhD Exam: TBD</b>

#### NON-UCLA:

- Leonid Teverovski      PhD      **Computer Science**      Nonlinear Image Registration  
**Oral Qual Exam: Oct 4 2006**  
(Carnegie Mellon University, Pittsburgh, PA; Chair: Yanxi Liu, PhD; Teleconference)
- Xavier Pennec      **Habilitation**      **Statistics**      Lie Groups for Tensor Modeling  
**Habilitation Defense: Dec 18 2006**  
(INRIA-Asclepios Team, Sophia-Antipolis, France; Chair: Nicholas Ayache, with Guido Gerig, Sir Michael Brady; Videoconference)

#### As Chair of Master's Thesis Committee:

Allen Lu      M.S.      **Biomedical Engineering (June 2006)**  
Meena Mani      MS      **Statistics (January 2007)**

#### Projected, 2008-9:

Jon Morra	PhD	<b>Biomedical Engineering</b>
Nathan Hageman	MD/PhD	<b>Medical Scientist Training Program/Neuroscience</b>
Liang Zhan	PhD	<b>Biomedical Engineering</b>
April Ho	PhD	<b>Neuroscience</b>
Jason Stein	PhD	<b>Neuroscience</b>
Neda Jehanshad	PhD	<b>Medical Imaging Informatics/Biomedical Engineering</b>

## **VI.B. OTHER UNIVERSITY RECRUITMENT AND ORGANIZING COMMITTEES**

### **Curriculum Committee, UCLA Inter-Departmental Graduate Program in Neuroscience, 1998**

- Reviewed proposals for new classes and seminars for the UCLA Inter-Departmental Neuroscience PhD program; discussed student evaluations and proposed alterations to the core and elective Neuroscience curriculum; presented individual students' petitions for curriculum changes to the committee; supported requests for new electives on behalf of individual students.

### **Interview Committee for:**

**Chief of Service Position, Olive View and Faculty Appointment, UCLA Neurology, February 1999**

**Neuro-Oncology Fellowship, and Faculty Appointment, UCLA Neurology, November 2000**

**Associate Professor in Neurosurgery for Olive View, and Faculty Appointment, UCLA Neurology, November 2000**

### **Interview Committee for Admissions to the UCLA Neuroscience PhD Program:**

- **March 1999**
- **February 2000**
- **March 2000**
- **February 2002**
- **February 2004**
- **February 2007**

### **Interview Committee for Admissions to the UCLA Neuroengineering PhD Program:**

- **March 2003**
- **March 2004**
- **February 2005**

### **Interview Committee for the UCLA Medical Scientist Training Program (MSTP):**

- **October 27 2005**
- **April 21 2006 (recruitment/placement day; interviewed candidates who had been offered places at UCLA)**
- **April 19 2007 (recruitment/placement day; interviewed candidates who had been offered places at UCLA)**

**Host and Neurology Guided Tour Organizer, Congressional Staff Visit to the UCLA Medical Center, April 9, 1999**

- Hosted visit of Sen. Barbara Boxer, Rep. Jerry Lewis' Congressional Staff to UCLA Medical Center, with video and imaging demonstrations at the *UCLA Laboratory of Neuro Imaging*

**L.A. County High Schools Program,**

**Visit of L.A. County High Schools to UCLA Research Laboratories, Saturday March 13, 1999**

- (With Arthur Toga) Co-hosted visit of 50 high school students and their science teachers to learn about neuroimaging and Brain Mapping at UCLA

**Visit of U.S. High Schools to UCLA and Drew Medical Centers, Friday June 30, 2000**

- (With Arthur Toga) Co-hosted visit of 50 high school students from around the U.S. to learn about brain mapping and medical research at UCLA

**Beverly Hills Unified School District (BHUSD) ‘Gifted and Talented Education’ (GATE) Program, Friday February 15, 2002**

- Hosted visit of 51 6<sup>th</sup> to 8<sup>th</sup> Grade school students from the L.A. area to learn about science and medical research at UCLA. Organized with Stacy Ingber, Ph.D., Jefferson Institute, Los Angeles.

**National Youth Leadership Forum**

**July 10, 2002**

- Hosted visit of 45 high school students from California to learn about medical research at UCLA.

**Steering Committee, UCLA Life Science Informatics (LSI) Program, Summer 1999**

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**VII. RESEARCH FUNDING FROM PRIVATE AND FEDERAL AGENCIES**

**PAST EXTRAMURAL GRANTS 1993-2008 (now completed):**

**1. Howard Hughes Medical Institute, Bethesda, MD 1994-1999**

Project: *Mathematical/Computational Strategies for Mapping the Human Brain*

Principal Investigator: Paul Thompson

Amount: \$146,000 over 5 years

**2. United States Information Agency, Washington DC, 1993-1998**

Project: *Mathematical/Computational Strategies for Analyzing 3D Human Brain Image Databases*

Principal Investigator: Paul Thompson

USIA Grant No. G-1-00001

**3. Fulbright Scholar, United States-United Kingdom Fulbright Commission, London, 1993-1998**

Project: *Interdisciplinary Ph.D. Program in Neuroscience, UCLA*

Principal Investigator: Paul Thompson

**4. Co-Investigator, National Institute for Neurological Disorders and Stroke (NINDS/NIMH R01 NS38753) 09/30/1998-08/31/2001**

Project: *Modeling Brain Morphology in 4D*

Role: Co-Investigator; Principal Investigator: Arthur Toga PhD

Amount: \$476,631

**5. Co-Investigator, National Science Foundation, Biological Instrumentation and Resources (BIR9322434) 1/1/94-1/1/99**

Project: *Adaptive Algorithms for A Deformable Brain*

Role: Co-Investigator; Principal Investigator: Arthur Toga PhD

**6. Co-Investigator, International Consortium for Brain Mapping, Human Brain Project Grant 9/1/1993-8/31/1998**

Project: *A Probabilistic Reference System for the Human Brain (Years 1-5)*.

Role: Co-Investigator; Principal Investigators: John Mazziotta MD PhD, Arthur Toga PhD

**7. Co-Investigator, International Consortium for Brain Mapping, Human Brain Project Grant 7/1/1998-6/30/2003 [Renewal of #6] (P20 MH/DA52176)**

Project: *A Probabilistic Reference System for the Human Brain (Years 6-10)*.

Role: Co-Investigator; Principal Investigators: John Mazziotta MD PhD, Arthur Toga PhD

Amount: \$1,100,000

**8. Co-Investigator, National Center for Research Resources (NCRR) Grant (RR05956) 9/1/1994-9/1/1998**

Project: *Quantitative Transformations of Digital Brain*

Role: Co-Investigator; Principal Investigator: Arthur Toga PhD

**9. Co-Investigator, National Institute of Aging (NIA) Grant 07/01/1999-06/30/2000**

Project: *Multi-Site Evaluation of Hippocampal Atrophy in Patients with Minimal Cognitive Impairment and Alzheimer's Disease*

Role: Co-Investigator; Principal Investigator: Jeffrey Cummings MD, Director, UCLA Alzheimer's Disease Center; Co-Investigators: Michael Mega MD PhD, Gary W. Small MD.

Amount: \$100,000 for one year

**10. Co-Investigator, NARSAD Distinguished Investigator Grant 07/01/2000-06/30/2001**

Project: *A Probabilistic Approach to the Study of Brain Structure in Psychiatric Disorders*

Principal Investigator: John Mazziotta MD PhD, Director, UCLA Brain Mapping Division

Role: Co-Investigator; Co-Investigators: Tyrone Cannon PhD, Arthur Toga PhD.

Amount: \$100,000 for one year

**11. Principal Investigator, NIMH Intramural Service Contract (PI: Thompson, P.) 02/21/2001-02/20/2002**

Project: *"Analysis of Longitudinal Brain Imaging Data in Childhood Onset Schizophrenia"*

This contract supports the analysis of brain images from children and adolescents with schizophrenia, with the goal of detecting disease-specific patterns of brain change and mapping rates of cortical tissue loss across multi-year time spans. Amount: \$30,000 Annually

**12. Co-Investigator, P41 Resource Grant 1998-2002 (RR13642)**

Project: *Multidimensional Brain Modeling and Mapping: A Neuroimaging Resource*

Principal Investigator: Arthur Toga PhD

Amount: \$630,357 (ANNUAL)

**13. Principal Investigator, UCLA Component (PI: Paul Thompson) National Institute of Mental Health (R01) 07/01/1999-06/30/2004**

Project: *Neuroimaging in First Episode Schizophrenia*

Principal Investigators: Robert Bilder PhD, Nathan Kline Institute, New York, NY;

Paul Thompson PhD, UCLA Component

Amount: \$293,564 over 5 years

**14. Principal Investigator, Core Project 1, National Programs of Excellence in Biomedical Computing (NPEBC) Computational Biology Grant 01/01/2002-12/31/2004**

Project: *Computational Biology from Genotype to Phenotype*

Co-Investigators: Arthur W. Toga PhD, Tony Chan PhD, Stan Osher PhD, Chris Lee PhD, Dan Valentino PhD

Amount: \$100,000 annual directs, for Core Project 1

**15. Co-Investigator, National Institute of Mental Health (NIMH PAS-99-060) Grant 10/01/1999-09/30/2004**

Project: *Mouse Brain Atlas for Functional Genomics:*

*A Multimodal Multidimensional (4D) Map of the Mouse Brain*

Principal Investigator: Arthur Toga PhD

**16. Co-Investigator, National Institute of Aging (NIA) RO1 Grant 07/01/2000-06/30/2005**

Competitive Renewal of Grant R01-AG13308

Project: *Functional MRI for Early Diagnosis of Alzheimer's Disease*

Principal Investigator: Gary Small MD, UCLA Neuropsychiatric Institute

Co-Investigator: Susan Bookheimer PhD, UCLA Brain Mapping Division

**17. Consultant/Collaborator, National Institute of Mental Health (P01) 1999-2004**

**Project:** *The Aging Brain: Vasculature, Ischemia, and Behavior*

Competitive Renewal of Program Project P01-AG12435

Principal Investigators: Helena Chui MD, University of Southern California (USC), and

Michael Weiner MD, VA Medical Center, University of California at San Francisco (UCSF).

**18. Co-Investigator, National Institute of Aging (NIA) Grant 12/01/2000-11/30/2005**

Project: *Toward a Multi-Modality Atlas of the Alzheimer's Brain*

Principal Investigator: Michael Mega MD PhD,

Co-Investigators: Jeffrey Cummings MD, Director, UCLA Alzheimer's Disease Center; Arthur Toga, PhD

Amount: \$1,908,229 over 5 years (\$250,000 annual direct costs)

**19. Co-Investigator, General Clinical Research Center (NCRR) Grant 10/01/2000-09/30/2005**

Project: *General Clinical Research Center: Brain Imaging Core*

Principal Investigators: Gerald S. Levey, Provost & Dean, UCLA School of Medicine, and Isidro B. Salusky, Program Director, UCLA Pediatrics

Co-Investigators: Arthur W. Toga PhD, John Mazziotta MD PhD, Roger P. Woods MD

Amount: \$4,541,759 over 5 years (\$804,234 annual direct costs)

**20. Co-Principal Investigator, R21 Neuroimaging Technology Grant 09/2002-8/2005**

Project: *Analyzing Functional & Structural MRI in FAS (Fetal Alcohol Syndrome) Children*

Co-Investigators:

Elizabeth Sowell PhD, Arthur Toga PhD, Ed Riley PhD, Susan Bookheimer PhD

Amount: \$300,000

**21. Chief Investigator, National Health and Medical Research Council (NHMRC, Australia) Grant 2003-2005**

Project: Brain imaging studies of auditory processing dysfunction in schizophrenia

Chief Investigators:

Ulrich Schall MD PhD, Centre for Mental Health Studies, University of Newcastle, Callaghan, NSW, Australia



Philip Ward PhD, Schizophrenia Research Unit, and Associate Professor of Psychiatry, University of New South Wales, Sydney, Australia

Pat Michie PhD, Depts. of Psychology and of Psychiatry and Behavioural Science, University of Western Australia

Paul Thompson PhD

NH&MRC Project Grant ID 252480; 2003: \$107,500; 2004: \$125,000 2005: \$125,000

(funded; no financial support permitted on Australian source grant; now ended)

## **CURRENTLY ACTIVE GRANTS (2007-):**

### **AS PI:**

#### **1. Principal Investigator, R01 Neuroimaging Technology Grant 2007-2012**

Project: *Computational Anatomy of High Field MRI/DTI*

Co-Investigators:

Guillermo Sapiro PhD, Arthur Toga PhD, Kamil Ugurbil PhD, Kelvin Lim MD

Amount: \$250K/yr for 5 years – AWARDED, June 2006 [score: 113, Percentile: top 0.7%].

#### **2. Principal Investigator, R01 NICHD/NIMH - UCLA Subcontract 2007-2012**

Project: *Genetics and Imaging in Healthy Twins*

Collaboration with: Margie Wright PhD, U. Queensland, Australia

Amount: \$1,700,000 over 5 years (Thompson component only) – Direct Costs \$200K in Yrs 1-3, \$250 in Yr 4, \$300K in Yr 5 – AWARDED, June 2006 [score: 100, Percentile: top 0.4%]. Start Date: April 1 2007.

#### **3. Principal Investigator, NIBIB R21 EB001561 Neuroimaging Technology Grant 05/01/2003-02/28/2006 (NCTE in progress)**

Project: *Algorithms to Detect Disease and Genetic Effects on the Brain*

Co-Investigators:

Tyrone Cannon PhD, Arthur Toga PhD; Consultants: Jay Giedd MD, Judith Rapoport MD

Amount: \$454,000; \$100,000 annual directs for 3 years

This project develops novel mathematics and computational algorithms for detecting genetic and disease effects on human brain structure.

#### **4. Principal Investigator, NCRR R21 RR019771 Neuroimaging Technology Grant 09/30/03-09/29/05 (1-year NCTE ended Sept. 2006)**

Project: *Novel PDEs for Cortical Mapping and Analysis in Disease*

Co-Investigators:

Guillermo Sapiro PhD, Arthur Toga PhD

Amount: \$323,450; \$125,000 annual direct costs for 2 years

This project develops a powerful computational framework to map disease effects on the brain. Creating a new direction in the field of computational anatomy, we build on revolutionary advances in the field of partial differential equations (PDEs) that allow geometric and statistical manipulation of surfaces.

#### **5. Principal Investigator of Core Project 1, P41 Resource Grant 08/01/2002-07/31/2007**

Project: *Computational Anatomy and Multidimensional Modeling: A Neuroimaging Resource*

Principal Investigator: Arthur Toga PhD

Amount: \$728,846 (Annual direct costs; \$100K annual directs for Thompson Core Project 1)

This proposal goes beyond current atlases and maps of brain that assume a static morphology and prohibit the examination of time varying changes, and develops the framework and tools to rigorously evaluate dynamic changes in brain structure and function focusing particularly on processes such as development, aging and the progression of specific diseases.

**6. Principal Investigator, R01 Component Project (Project 1) of UCLA Alzheimer's Disease Research Center (ADRC) Grant 2004-2008**

Project: *4D Brain Mapping in Alzheimer's Disease and Those At Risk*

Co-Investigators:

George Bartzokis MD, Arthur Toga PhD

Amount: \$125,000 annual directs for 5 years

**7. Principal Investigator, R01 Component Project (Image Analysis Subcontract) within the ADNI (Alzheimer's Disease Neuroimaging Initiative)**

09/30/04-09/29/06 (will have 2-year NCTE)

Overall PI: Mike Weiner, UCSF

Amount: \$100,000 annual direct costs (Thompson portion only)

**As Co-PI or Co-I:**

**8. Co-Investigator (10% time), National Library of Medicine (NLM)/National Institutes of Health Grant 2001-2006**

Project: *A Multidimensional Alzheimer's Disease Brain Atlas*

Principal Investigator: Arthur Toga PhD

Amount: \$237,500 (ANNUAL)

**9. Co-Investigator (10% time), NIBIB Human Brain Project Grant P01 EB001955 07/04/03 - 06/30/08**

Project: A Probabilistic Reference System for the Human Brain (Years 11-15)

Principal Investigator: John Mazziotta MD PhD

Amount: \$857,814 (ANNUAL)

**10. Co-Investigator (5% time), NINDS Epilepsy Program Project Grant, P01 NS002808-44A1 12/01/05-11/30/10**

Project: A Clinical Research Program for the Partial Epilepsies

Principal Investigator: Pete Engel MD PhD

Amount: \$999,808 annual

**11. Co-Investigator (1.5% time), NIBIB Swedish Twin Grant, 2R01MH052857-10 07/01/2005-06/30/2010**

Project: Neural Phenotypes for Schizophrenia and Bipolar Disorder (**Swedish Twin Grant**)

Principal Investigator: Tyrone Cannon PhD

Amount: \$517,000 annual, for 5 years

**12. Co-Investigator (Core C Co-Leader with Henry Huang; Project 3 Co-Leader with Susan Bookheimer; 10% time in Imaging Core and MRI Analysis RO1 Component Project), NIA Aging and Dementia Program Project Grant, PO1 AG025831-01**

Project: Amyloid Plaque and Tangle Imaging in Aging and Dementia (Program Project)

Principal Investigator: Gary Small MD  
Amount: TBA

**13. Co-Investigator (8% time), NIDA RO1**

Project: **1R01DA020726-01 Neural Systems and Inhibitory Control.**

PI: Edythe London PhD

Amount: \$16,857 Direct Costs & the corresponding Indirect Costs.

**13. Co-Investigator, NIH R21 MH075944 Grant 7/1/06 – 6/30/08**

Project: Mapping Brain Structure to Function in Bipolar Disorder.

PI: Lori Altshuler MD

Amount: Awarded, NARSAD Distinguished Investigator's award, April 2006.

**14. Co-Investigator (10% effort and 80% SRA support), NIH Grant R01 MH075007 12/01/06 - 05/30/11**

PI: Nelson Freimer MD PhD

Bipolar Endophenotypes in Population Isolates

Amount: \$461,168/year.

**15. Co-Investigator, Australian Research Council (ARC, Australia) Grant 2005, SR0566756**

Project: Application for funding to develop a software grid for data-sharing associated with the NISAD/LONI Virtual Brain Bank - The University of Newcastle

Chief Investigators: Dr FA Henskens, Dr PJ Johnston, Mr P Rasser, A/Prof PB Ward, A/Prof U Schall, Prof PT Michie, Prof V Carr, Dr PM Thompson

(now funded; no financial support permitted on Australian source grant)

**16. Co-Investigator, NSF-IRES Collaboration on Medical Imaging – UCLA School of Medicine and INRIA (Sophia-Antipolis).** Proposal number 6503749

Principal Investigator: Victor Vianu, UC San Diego; Co-Investigator: Nicholas Ayache PhD / Xavier Pennec, INRIA Sophia-Antipolis, France

Project: Brain-Atlas Associated Team (INRIA/UCLA)

Amount: no direct support; supports regular international exchange visits to graduate students and postdocs (awarded)

**GRANTS NOW PENDING, 2007-2011:**

**1. Principal Investigator, National Library of Medicine (NLM)/National Institutes of Health Grant 2007-**

Project: *A Multidimensional Alzheimer's Disease Brain Atlas*

Co-Investigators:

Arthur Toga PhD, George Bartzokis MD, Gary Small MD, Liana Apostolova MD

Amount: \$250,000 annually for 5 years (**will be funded**; score: 121, 4<sup>th</sup> percentile; competing continuation)

**2. Principal Investigator (UCLA subcontract),**

Project Title: Predictors of Alzheimer's Disease in Mild Cognitive Impairment;

NIH RO1 Grant, U. Pittsburgh (Oscar Lopez, PI)

Amount: 2% salary and 50% SRA support (pending, re-submitted Feb 1, 2007)

**Project Dates:** 12/01/07-11/30/2011

**Funds - Initial Period:** \$42,903 (Total Cost);

**Entire Period:** \$179,491 (Total Cost)

**Application #:** 2 R01 AG020098-06 (**will be funded**, award notice: June 6 2007).

**3. Principal Investigator (UCLA subcontract)**

Project: Bipolar Imaging Grant, UTHSCSA (Jair Soares, PI)

Amount: TBA (2% salary and 50% SRA support, pending, final revision submitted March 2006)

**4. Principal Investigator (UCLA subcontract)**

Project: HIV/AIDS NIH Grant, U. Pittsburgh (Jim Becker, PI)

Amount: 2% salary and 50% SRA support (pending, revision submitted Sept. 2006)

**5. Co-Investigator, NIH R01 Grant 2007-**

Project: *MPPF, FDDNP and fMRI Imaging in Alzheimer's Disease.*

PI: Susan Bookheimer PhD

Amount: TBA (pending, revision submitted 2006; scored 10<sup>th</sup> percentile; award likely)

**6. Co-Investigator, NIH Training Grant 2006-**

PI: Nelson Freimer MD PhD

Amount: TBA (pending)

**7. Co-Investigator, NIDA 1<sup>st</sup> RO1 Grant 2006-**

Project: *Cognitive Behavioral Therapy: Cortical Function, Emotion & Methamphetamine Abuse*

PI: Edythe London PhD

Amount: TBA (pending, submitted March 2006)

**8. Co-Investigator, NIDA 2<sup>nd</sup> RO1 Grant 2006-**

Project: *Impulsivity and Modafenil*

PI: Edythe London PhD

Amount: 10% salary, 30% support for SRA II (pending, will be funded)

**9. Co-Investigator, NIDA P20 Center Grant 2006-**

Project: *Methamphetamine Program Project*

PI: Edythe London PhD

Amount: TBA (pending)

**9. Co-Investigator, RO1**

Project: *Autism Grant*

PI: Jennifer Levitt MD

Amount: no salary support, no % effort

**10. Associate Investigator, NISAD (Australia) Medical Research Grant**

Project: *A Large-Scale Imaging Database for Schizophrenia Studies*

Principal Investigator: Philip Ward PhD, Associate Professor of Psychiatry, University of New South Wales, Sydney, Australia, and Scientific Director, Neuroscience Institute of Schizophrenia and Allied Disorders (NISAD), New South Wales, Australia

Co-Investigator: Professor Pat Michie, Depts. of Psychology and of Psychiatry and Behavioural Science, University of Western Australia

Amount: TBA (pending)

**11. Associate Investigator, NHMRC (Australia) Medical Research Grant**

Project: *Development of Sensitive Psychobiological Measures of Incipient Alzheimer's Disease*

Principal Investigator: Dr Brona O'Dowd

Co-Investigators: Dr Greig de Zubicaray, Dr Jonathan Chalk, Dr Stephen Rose, Dr Deming Wang  
Amount: \$331,299 spread over 3 years (pending)

**12. Co-Investigator (CI), NHMRC (Australia) Medical Research Grant**

Application ID 510276

Ward, P.B., Coltheart, M., Thompson, P.M.

Project Grant: Fractionating mismatch negativity deficits in schizophrenia and dyslexia using ERPs, fMRI and cortical surface matching.

2008: \$198,744 2009:\$168,500, 2010:\$136,750.

(no support, as US funding not allowed from Australian grant)

**SERVICE AS CONSULTANT ON GRANTS:**

**Steve DeKosky/Jim Becker (PI), U. Pittsburgh**

NIA PO1: U. Pittsburgh Alzheimer's Disease Center

Amount: \$38,000, active

**Chris Johnson (PI) and David Weinstein, U. of Utah, SCI Institute**

P41 Collaborative Grant - Collaborator

(no % effort, no salary support; active)

**John Fossella (PI), Assistant Professor of Psychiatry, Sackler Institute, Cornell University, transferred KO1 to Mount Sinai School of Medicine, New York, NY**

NIH KO1 NARSAD grant

Imaging and Genetics of Attention

(consultant and advisor; no salary support; active)

**Kamil Ugurbil (PI), CMRR Minnesota**

P41 Collaborative Grant - Collaborator

(no % effort, no salary support; pending, 2007)

**Caterina Rosano (PI), U. Pittsburgh**

RO1 Grant (scored 130, 5.9 percentile), July 2007-

Brain Anatomical Correlates of Mobility Control in the Oldest Old

(consultant, **awarded**)

**Jair Soares (PI), UTHSCSA Texas**

NIH K24: In Vivo Brain Mechanisms across the Bipolar Spectrum.

(consultant, no % effort, no salary support; pending)

**Howard Aizenstein (PI), U. Pittsburgh**

NIH R21 AG027858-01: Stratifying the Dementia Risk Associated with Subsyndromal Depressive Symptoms

(consultant, no % effort, no salary support; pending - resubmitted Oct. 2006)

**Peter Kochunov (PI), UTHSCSA Texas**

NIH K award

(consultant; no salary support; pending)

**Elizabeth Sowell (PI), UCLA**

NIH RO1: Longitudinal Mapping of Maturation Change in Brain Function-Structure Relationships (significant contributor; no salary support; pending)

**Ravi Bansal (PI), New York State Psychiatric Institute**

NIH R21: *Correlates of Brain Surface Morphometry with Developmental Psychopathologies* (consultant; no salary support; pending)

**Moo Chung (PI), University of Wisconsin-Madison**

NIH ADNI Ancillary Grant: *Validation of Voxel-Wise Morphometry and Its Application to AD*. (consultant; no salary support; pending)

**Allan Reiss (PI), Stanford**

NIH Grant: *Imaging Software and Methods for Mapping Brain Development*. (consultant; no salary support; pending)

**Naama Bernea-Goraly and Allan Reiss (PI), Stanford**

NIH RO3 Grant: *Investigation of cortical folding complexity in children with Autism, their Autism Discordant Siblings, and Controls* (consultant; no salary support; pending)

**Nick Allen (PI), Murat Yucel, and Julian Simmons, Victoria, Australia**

NHMRC (Australia) Grant: Drug use and adolescent brain and behavioral development: A prospective study. (consultant; no salary support; pending)

**David Wolk (PI), UPMC – University of Pittsburgh Medical Center, Dept Neurology**

NIH K23 award  
(consultant; no salary support; pending – score: 133, **will be funded**)

**Danielle Harvey (PI), UC Davis**

NIH K24 award  
(consultant; no salary support; first revision pending)

**Melita Daley (PI), UCLA**

NIH K award  
(**Co-Mentor** – with Ty Cannon and Jennifer Levitt; no salary support; **active**)

**David Glahn (PI), U. Texas Hlth Sci Ctr San Antonio**

RO1: Influence of Psychosis on Brain-Behavior Endophenotypes for Bipolar Disorder  
Subcontract, **Awarded**

**VIII. CURRENT RESEARCH COLLABORATORS:**

<b>Collaborator</b>	<b>Institution</b>	<b>Project</b>
Jay Giedd MD	NIMH	Mapping Brain Growth in Children

Elizabeth Sowell PhD	UCLA Neurology	Mapping Normal and Abnormal Brain Development
Judith Rapoport MD	NIMH	Childhood Onset Schizophrenia
Michael Mega MD PhD	UCLA Neurology	Probabilistic Atlas of the Alzheimer's Brain
Jeff Cummings MD	UCLA Alzheimer's Disease Center	Imaging in Dementia
John Mazziotta MD PhD	UCLA Neurology	Probabilistic Reference System for the Human Brain
Roger Woods MD	UCLA Neurology	Neuroanatomic Variability after Image Registration
Tim Cloughesy MD	UCLA Neurology	A Dynamic Framework to Detect Change in Tumor Growth
Jeff Alger PhD	UCLA Radiological Sciences	Tissue Classification in Malignant Glioma Patients
Jennifer Levitt MD and Jim McCracken MD	UCLA Child Psychiatry	Constructing a Pediatric Brain Atlas
Ivo Dinov PhD and De Witt Sumners PhD	Florida State Mathematics Dept. UCLA	Stochastic Algorithms in Functional Brain Image Analysis
Tonmoy Sharma MD	Institute of Psychiatry London, England	3D Brain Mapping in Schizophrenia
Robert Bilder PhD	Nathan Kline Institute, New York	Neuroimaging in First Episode Schizophrenia: Mapping Response to Antipsychotic Medication
Michael Weiner MD	UC San Francisco	Imaging in Aging and Alzheimer's Disease
Greig de Zubicaray PhD Andrew Janke PhD David Doddrell PhD	University of Queensland, Australia	Mapping Atrophic Rates in Alzheimer's Disease
James Semple PhD	SmithKline Beecham, UK	4D Imaging of Alzheimer's Disease
Nicholas Ayache PhD Xavier Pennec PhD	INRIA Sophia Antipolis, France	Mathematical methods to analyze brain variability
Guillermo Sapiro PhD	University of Minnesota Dept. of Engineering	Analyzing Cortical Data with PDEs and Harmonic Maps
Usha Sinha PhD	UCLA Radiology & IT Medicine	Automated Patient Scan Retrieval using Atlas-Based Segmentation

Tyrone Cannon PhD	UCLA Psychology	Discordance Studies of Brain Structure and Function in Schizophrenia
Susan Bookheimer PhD Michael Zeineh PhD Alison Burggren PhD	UCLA Brain Mapping	High-Resolution Hippocampal Mapping for Early Diagnosis of Alzheimer's Disease
Tony Chan PhD Luminita Vese PhD Yalin Wang PhD Stan Osher PhD	UCLA Mathematics	Level Set Segmentation of Brain Images
Pat Johnston PhD	University of New South Wales	Brain Mapping in Schizophrenia
Gary Small MD	UCLA Psychiatry	Early Detection of Alzheimer's Disease in ApoE4 Genotyped Subjects
Ed Bullmore MD PhD	University of Cambridge, UK	fMRI of Brain Development
Philip Ward PhD Assen Jablensky MD Ulli Schall MD PhD	University of New South Wales, Australia	Brain Imaging in Schizophrenia
Robert Nicolson MD	University of Toronto, Canada	Autism
Dave Weinstein PhD Gordon Kindlmann PhD	University of Utah Salt Lake City	Tensor Mapping & Visualization

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