KAMIL UGURBIL

CURRICULUM VITAE

Center for Magnetic Resonance Research
University of Minnesota Medical School
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Birth date: July 11, 1949

Education

1971	A.B.	Columbia College, Columbia University (Physics)
1974	M.A.	Columbia University (Chemical Physics)
1976	M. Phil.	Columbia University (Chemical Physics)
1977	Ph.D.	Columbia University (Chemical Physics)

Academic Appointments

2003 - Present	Chair Professor	McKnight Presidential Endowed Chair Professor, University of Minnesota
1991 - Present	Director	Center for Magnetic Resonance Research (CMRR), University of Minnesota
2003 - 2008	Director	Max Planck Institut für Biologische Kybernetik, Hochfeld Magnetresonanz Zentrum, Tübingen, Germany
1985 - present	Professor	Departments of Radiology, Neurosciences, and Medicine, University of Minnesota
1996 - 2003	Chair Professor	Margaret & H.O. Peterson Chair of Neuroradiology, University of Minnesota
1982 - 1985	Associate Professor	Dept. of Biochemistry, University of Minnesota
1979 - 1982	Assistant Professor	Biochemistry Department, Columbia University
1977 - 1979	Postdoctoral Fellow	Bell Laboratories

Honors and Awards

2014 **Richard Ernst Medal** and **Lecture** (ETH, Zürich)
2014 Elected into **National Academy of Inventors**
2013 Appointed to the fifteen member **BRAIN initiative Working group**
2013 **Erwin Hahn Lecture**, Erwin Hahn Institute, Essen, Germany
2013 Elected to **Academy of Device Innovators**, University of Minnesota
2011 **Honorary Doctorate** (Doctorate Honoris Causa), University of Maastricht, Netherlands
2010 **Human Connectome Project** Award from NIH, Co-Principle Investigator
2010 **Centennial Lecture**, University of Florida, Gainesville
2010 **5th Annual Glen D. Dobben Memorial Lecture**, University of Illinois, Chicago
2009 **Sir Peter Mansfield Lecture** ESMRMB (European Society of Magnetic Resonance in Medicine and Biology)
2009 Elected **Fellow of the International Society of Magnetic Resonance** (ISMAR) Fellow. (2009 is the first year ISMAR established ISMAR Fellowship)
2007 Elected into the **Institute of Medicine, the National Academies (USA)**
2005 Elected into the **American Academy of Arts and Sciences**
2005 **Honorary Doctorate** (Doctorate Honoris Causa), University of Utrecht, Netherlands
2004 **Segerfalk Lecturer**, University of Lund, Sweden
2003 **McKnight Presidential** Endowed Chair Professorship, University of Minnesota
2001 **Science Day Lecturer**, Swiss Federal Institute of Technology (EPFL), Lausanne
1996 **Margaret & H.O. Peterson Chair** Professorship, University of Minnesota

1997 Inducted as **Fellow, International Society of Magnetic Resonance in Medicine (ISMRM)**
1996 **Gold Medal** from the International Society of Magnetic Resonance in Medicine
1993 **Werner-Gren Distinguished Lecturer**, Karolinska Institute, Stockholm
1983 **NIH Research Career Development Award**
1980 **Irma T. Hirschl Career Scientist** Award
1976 Recipient of **Hammett Award** for **Original and Distinguished Research**
1974 **Columbia University, Graduate Faculties Alumni Scholar**

Appointments on Advisory and Editorial Boards

2014 - Advisory Editor, *Neural Computation* Journal
2013 - 2014 "BRAIN" Initiative Working Group
2012- National Institute of Mental Health (NIMH), Board of Scientific Advisors
2006 - European Research Council (ERC), Life Science Panel
2000 - 2013 Stanford University MR Center, Palo Alto, California; Advisory Board
2001 - 2006 Journal of Neurophysiology; Editorial Board
1987 - 2003 NMR in Biomedicine; Journal Editorial Board
1997 - 2003 Medical College of Wisconsin, MR Center; Advisory Board
1997 - 2002 Max Planck Institute, Leipzig, Germany; Program Review Board (Fachbeirat)
1997 - 2000 Scientific Program Committee International Society of Magnetic Resonance Imaging
1996 - 1999 Journal of Magnetic Resonance (JMR); Associate Editor
1989 - 1994 Biochemical Journal; Journal Editorial Board
1988 - 1994 National Magnet Lab, Massachusetts Institute of Technology; Advisory Board
1988 - 1991 Trustee of the Society of Magnetic Resonance in Medicine
1987 - 1989 Center for Nuclear Imaging Research (CNIR), University of Alabama; Advisory Board

Research Interests

My central research interest is the development and application of ultrahigh field magnetic resonance (MR) methods for neuroimaging, particularly for imaging of brain activity (functional imaging (fMRI)), and combining these methodological and instrumentation developments with neuroscience applications in the human and animal brain to advance our understanding of brain function in health and disease.

My research brings together physics and instrumentation with physiology and neurochemistry to assess cerebral function and underlying physiology and morphology. fMRI was first achieved simultaneously by two independent teams; one was the team led by me and my colleague Seiji Ogawa from Bell laboratories that carried out experiments in the laboratory that I lead, the Center for Magnetic Resonance Research (CMRR) at the University of Minnesota, This development has been followed by a large body of seminal work from my laboratory on the mechanisms of coupling between magnetic resonance detected signals and neuronal activity, including studies of cerebral physiology and bioenergetics carried out using MR imaging (MRI) as well as novel MR spectroscopy techniques that enable the detection of neurochemicals and intracellular reaction rates in the brain non-destructively.

An integral part of my research effort includes development of improved instrumentation and image acquisition methods that push the boundaries of neuroimaging, particularly as related to brain function and connectivity. The development of ultrahigh fields for MRI and fMRI was pioneered in my group in the context of this aim, based on the discovery that increasing magnetic fields offered unique advantages for functional mapping provided the challenges posed by higher fields can be overcome. The combined effort in untangling the mechanisms operative in fMRI signals and parallel technological advances have produced some of the most advanced application of neuroimaging in general and functional brain imaging in particular, and are increasingly used world-wide.

Recently, these advances are being extended to mapping the macro-connectome of the human brain

under the auspices of the Human Brain Connectome project launched by the NIH Neuroscience Blueprint initiative.

Unique Research Funding Awards:

- Co-Principal investigator leading the Washington University-University of Minnesota consortium that was awarded the Human Connectome Project, an NIH Neuroscience Blueprint initiative, which aims to map the human brain macro-connectome (http://humanconnectome.org/).
- Principal investigator of a Biotechnology Research Center grant from the National Center for Research Resources, NIH; this grant supports, uninterrupted since 1993, ultrahigh field MR methodology development with particular emphasis on neuroimaging and functional brain imaging. (http://www.cmrr.umn.edu/research/)
- Principal Investigator of one of four NIH Neuroscience Blueprint grants awarded to establish Neuroscience Center Cores.

Professional Societies

The International Society for Magnetic Resonance in Medicine
The Society of Neuroscience

INVITED LECTURES (This list contains invitation up to and including October 2006. Lectures given in 2006-2009 were *not* tracked. A separate list for is provided for invited Lectures in 2009 and later)

1. Third Annual Conference on Molecular Structural Methods in Biological Research, Stanford, CA, 1977.
2. Gordon Conference on Biopolymers, Plymouth, NH, 1978.
3. American Physical Society, New York, NY, March 1980.
4. Xth International Conference on Magnetic Resonance in Biological Systems, Stanford, CA, September 1982.
5. Winter meeting of the Norwegian Biochemical Society, January 1984.
6. 1984 Pacific Slope Biochemical Conference, University of California, Santa Cruz, CA, July 1984.
7. Third Annual Scientific Meeting of the Society of Magnetic Resonance in Medicine, New York, NY, August 1984.
8. XI International Conference on Magnetic Resonance in Biological Systems, Goa, India, September 1984.
9. Conference on Cardiovascular Imaging, Bethesda, MD, September 16-18, 1984.
10. Conference on NMR of Living Systems, Stockholm Sweden, December 1984.
11. 5th Annual Scientific Meeting at the Society of Magnetic Resonance in Medicine, Montreal, Canada, August 1986.
12. Conference on *in vivo* NMR Spectroscopy, New York Academy of Sciences, New York, NY, September 1986.
13. Annual Meeting of the American College of Cardiology, March 1987.
14. American Chemical Society Meeting, Chicago, IL, June 1987.
15. Southern Regional NMR Conference, September 1987.
16. Annual Meeting of the American College of Cardiology, March 1988.

17. Annual Meeting Federation of American Societies for Experimental Biology (FASEB), May 1988.
18. US-Italy Cardiovascular Conference, June 1988.
19. Conference on Emerging Technologies for Simultaneous Spatial and Spectral Resolution in *in vivo* NMR, June 1988.
20. Gordon Conference on NMR in Biology and Medicine, 1988.
21. XIII International Conference on Magnetic Resonance in Biological Systems, August 1988.
22. Soc. of Magnetic Resonance in Medicine, Annual Conference, August 1988.
23. International Conference on Magnetic Resonance Spectroscopy and Imaging, Winnipeg, Manitoba, February 1989.
24. AICHE Conference, St. Paul, MN, February 1989.
25. *In Vivo* Magnetic Resonance Workshop, San Francisco, CA, March 1989.
26. Energy and Myocardial Ionic Homeostasis, Baltimore, MD, May 1989.
27. Annual Meeting of the Association of University Radiologists, Seattle, WA, May 1989.
28. Society of Nuclear Medicine Annual Meeting, St. Louis, MI, June 1989.
29. Topical Workshop on Localized NMR Spectroscopy, Max-Plank Institut, Gottingen, FRG, June 1989.
30. American Heart Association Meeting, Santa Fe, NM, July 1989.
31. Physiological Society, Annual Meeting, October 1989.
32. American Chemical Society, Miami, FL, September 1989.
33. Japan NMR meeting, Tokyo, Japan, November 1989.
34. American Chemical Society, Pacific Basin Meeting. Workshop on NMR spectroscopy, Honolulu, HI, December 1989.
35. National Institutes of Health Workshop on Sudden Cardiac Death, September 1990.
36. Society of Magnetic Resonance Imaging, Annual Meeting, Feb. 1990.
37. Workshop on *in vivo* Magnetic Resonance Spectroscopy, San Francisco, CA, March 1990.
38. Workshop on Special Topics in Medical Magnetic Resonance, Whistler, British Columbia, July 1990.
39. Workshop on *in vivo* Magnetic Resonance Spectroscopy, St. Louis, MO, March 1991.
40. Annual Meeting of the International Society for Heart Research, Cincinnati, OH, June 1991.
41. Seeing into Materials; Imaging Complex Structures, Princeton, N.J., May 6-8, 1991.
42. Annual Meeting of the Society of Magnetic Resonance in Medicine, teaching program, San Francisco, CA, August 1992.
43. Southwestern Regional NMR Meeting, Santa Fe, NM, June 1991.
44. Society of Magnetic Resonance in Medicine, 1991 Annual meeting teaching session
45. Living NMR, Bijvoet Symposium, Utrecht, Netherlands, September 1991.
46. NMR in Biology and Medicine, Madrid, Spain, November 1991.
47. Workshop on Cardiovascular NMR , Atlanta, GA, December 1991.
48. In Vivo Spectroscopy Workshop, San Francisco CA, March 1992.
49. ENC Conference, Assilomar, CA, March 30 - April, 1992.
50. Second International Sokolov Conference on Magnetic Resonance Spectroscopy and Imaging, Winnipeg, Manitoba, May 8 - 9, 1992.
51. Princeton Conference, Detroit, MI, May 29 - 30, 1992.
52. High Field Imaging and Spectroscopy, Bethesda MD, June 1992.
53. Society of Magnetic Resonance in Medicine, 1992 annual Conference, Educational Program, Berlin, Germany, August 1992.
54. XV International Conference on Magnetic Resonance in Biological Systems, Jerusalem, Israel

August 1992.

55. Conference on Energy Production in Hypertrophied Hearts, Beaune, France, September 9 - 11, 1992.
56. World Conference on Superconductivity, Munich, Germany, September 16 - 18, 1992.
57. Cardiovascular Science and Technology Conference, Bethesda, MD, December 12- 14, 1992.
58. XII Annula Meeting of GERM, (Groupe d'Etude en Resonance Magnetique), Gien, Toulon, France, Mach 28 - April 2, 1993.
59. Annual Meeting of the American Society of Neuroradiology, Vancouver, May 13-20, 1993.
60. 40th Annual Meeting of the Society of Nuclear Medicine, Categorical Seminar Course, Toronto, Canada, June 7, 1993.
61. Workshop on Functional Imaging, June 17-20, 1993.
62. Science Innovation' 93, Boston, MA, August 6-10, 1993.
63. Society of Magnetic Resonance in Medicine, 1993 annual Conference, Educational Program, New York, NY, August 1993.
64. 2nd International Conference on Magnetic Resonance Microscopy (The Heidelberg Conference), Heidelberg, Germany, September 6-9, 1993.
65. Conference on Brain Plasticity. Dana Point, CA, October 27-29, 1993.
66. 1st Midwest Course on Functional Magnetic Resonance Imaging Milwaukee, WI, November 6, 1993.
67. 9th TMIN Symposium, "New Horizon's in Neuropsychology", Tokyo, Japan, November 24 - 25, 1993.
68. Annual Meeting of the American Association for the Advancement of Science, San Francisco, CA, February 18 - 23, 1994.
69. 38th Annual Meeting of the Biophysical Society, New Orleans, LA, March 6 - 10, 1994.
70. 19th Princeton Conference, Boston, MA, March 18-20, 1994.
71. Functional MRI Workshop, Amsterdam, The Netherlands, April 13 - 14, 1994.
72. 42nd Meeting of the AUR, Boston, MA, May 3 - 8, 1994.
73. 77th Canadian Society for Chemistry- Conference and Exhibition "Biomedical NMR Spectroscopy", Winnipeg, Canada, May 29 - June 2, 1994.
74. XIX CINP Congress, "Symposium on Neuroimaging in Children and Adolescents", Washington, D.C., June 27 - July 1, 1994.
75. Symposium "Neuroscience 1994 Finland", Kuopio, Finland, June 17 - 18, 1994.
76. Society of Magnetic Resonance, 1994 annual Conference, Educational Program, San Francisco, CA, August 6-12, 1994.
77. Society of Magnetic Resonance, 1994 annual Conference, Main Program (Plenary Talk), San Francisco, CA, August 6-12, 1994.
78. XVIth International Conference on Magnetic Resonance in Biological Systems. Amsterdam, August 14-19, 1994.
79. Workshop on Magnetic Resonance Techniques and Epilepsy Research, October 6-8, 1994.
80. The Use of Functional MRI for Studies of Brain Development and Developmental Psychopathology, MacArthur Foundation Chicago, IL, November 1994.
81. Salk Institute McDonnel-Pew Center for Cognitive Neuroscience, Planning meeting for fMRI, October 26, 1995.
82. Functional Magnetic Resonance Imaging Workshop, University of Wisconsin, Madison, WI, November 5, 1994.
83. European Congress of Radiology, Vienna, Austria, March 5-9, 1995.
84. Advances in Physiological Chemistry by In Vivo NMR, Woods Hole, Massachusetts, March 22-24,

1995.

85. 82nd Annual Assembly of the Swiss Society of Medical Radiology- 100th year of Rontgen Celebrations. Zurich, Switzerland, August 13 – 18, 1995.
86. International Society for Magnetic Resonance (ISMAR)- 1995 Annual Meeting. Sydney, Australia, July 16 - 22, 1995.
87. Federation of European Biological Societies (FASEB), Annual Meeting, Basel, Switzerland, August 24 -29, 1995.
88. Radiological Society of North America, Chicago, IL, November 30, 1995.
89. XIth Conference The Bio-clinical Interface "Recent Advances in Psychiatry" Rouffach, France, September 20 -22, 1995.
90. 4th Annual Bristol-Myers Squibb Symposium on Cardiovascular Research "Animal Models of Cardiac Dysfunction", Minneapolis, MN, September 28 - 29, 1995.
91. 10th International Tokyo Institute of Psychiatry Symposium "Visualization of Information Processing in the Human Brain" Recent Advances in MEG and Functional MRI" Tokyo, Japan, October 12 - 133, 1995.
92. The American Physical Society, Fall meeting of the Division of Nuclear Physics, Bloomington, IN, October 25 -28, 1995.
93. 3rd Conference on the Application of Magnetic Resonance to the Cardiovascular System, sponsored by the American Heart Association San Francisco, CA, January 13 - 17, 1996.
94. Fourth Scientific Meeting and Exhibition of the International Society of Magnetic Resonance in Medicine, April 27 - May 3, 1996.
95. XIIth International Biophysics Congress, Amsterdam, The Netherlands, August 11 -16, 1996.
96. XVIIth International Conference on Magnetic Resonance in Biological Systems, Keystone, CO, August 18 -23, 1996.
97. 22nd European Congress of Neuroradiology and VI Advanced Course, Milan, Italy ,September 17-21, 1996.
98. Garmisch Meeting, Garmisch, Germany, January 22 - 26, 1997.
99. Minnesota Highfield Workshops, University of Minnesota, March 7 -10, 1997.
100. 7th Chianti Workshop on Magnetic Resonance, San Miniato, Italy, May 25 -31, 1997.
101. 24th Congress, Scandinavian Society of Anesthiologists, Stockholm, Sweden, June 10-13, 1997.
102. IMA Workshop - Statistics in the Health Science, University of Minnesota, July 14-18, 1997.
103. Analysis of Neural Data, Marine Biological Labs, Woods Hole, MA, August 18-22, 1997.
104. XII Biological Psychiatry Meeting, Rouffach, France, September 24-26, 1997.
105. Perfusion Imaging Workshop, Bethesda, MD, October 20, 1997.
106. Digital Summit, Minneapolis, MN, October 22, 1997.
107. ISMRM Fast MRI Workshop: Methodological Perspectives and Advances in Cardiac, Neuro, Angiography and Abdominal Imaging, Asilomar Conference Center, Monterey, CA, October 27-29, 1997.
108. High Field NMR: A New Millennium Resource, Washington, DC, January 15-16, 1998.
109. The 4th AHA, 1st SCMR Conference on MR of the Cardiovascular System, Atlanta, GA, January 30-February 1, 1998.
110. Massachusetts General Hospital MRI Conference, Kauai, Hawaii, February 16-21, 1998.
111. Bioengineering Research: Building the Future of Biology and Medicine, Washington, DC, February 27-28, 1998.
112. McDonnell Foundation Workshop: Cerebral Metabolism and Human Cognition: New Approaches to Functional Neuroenergetics, St. Louis, MO, May 20-21, 1998.
113. Conference: Functional Mapping of the Human Brain, Montreal, Canada, June 8 - 10, 1998.

114. Enrico Fermi School of Physics in Lake Como; Magnetic Resonance Investigation of the Brain Milan, Italy, June 28 - June 3, 1998.
115. 29th AMPERE –13th ISMAR Joint Conference on Related Phenomena; Berlin, Germany, August 2-7, 1998.
116. First International Conference on Functional Brain Imaging in Neurology and Psychiatry; Athens, Greece, September 12-15, 1998.
117. Mayo Clinic and University of Minnesota Joint Symposium on Neuroscience, Rochester, MN, March 5, 1999.
118. MCP Hahnemann University Research Day, Drexel University, Philadelphia, PA, May 5-6, 1999.
119. International Society for Magnetic Resonance In Medicine, Philadelphia, PA, May 23-28, 1999.
120. 5th International Conference on Functional Mapping of the Human Brain, Dusseldorf, Germany, June 23-26, 1999.
121. Workshop Spectroscopy, Microscopy & fMRI Applications, Vienna, Austria, July 2-4, 1999.
122. Brain Imaging Symposium-IBRO Jerusalem, Israel, July 11-15, 1999.
123. Lauterbur Symposium, Chicago, IL, September 17-18, 1999.
124. NCI Imaging 2020 Conference Caltech, September 26-30, 1999.
125. Cognitive Neuroscience, Institute of Neurology, Welcome Department of Cognitive Neurology, London, February 15-18, 2000.
126. International Society for Magnetic Resonance In Medicine, Denver, CO, April 2-7, 2000.
127. Experimental NMR Conference (ENC) Asilomar, CA, April 10-13, 2000.
128. Biomedical Information Engineering Workshop Istanbul, Turkey, June 24-28, 2000.
129. Satellite Meeting on Diagnostic NMR, Siena, Italy, August 15-19, 2000.
130. XIX International Conference on Magnetic Resonance in Biological Systems, Florence, Italy, August 20-25, 2000.
131. Autumn School in Cognitive Neuroscience, Oxford, England, September 26-29, 2000.
132. HFSP 11th Workshop: New Approaches and Emerging Concepts in Functional Neuroenergetics, Strasbourg, Germany, October 10-12, 2000.
133. Workshop on “Understanding the BOLD Phenomena and its Applications”, Chapel Hill, NC, October 26-28, 2000.
134. International Society of Magnetic Resonance in Medicine, Glasgow, Scotland, April 21-27, 2001.
135. 9th Chianti Workshop, San Miniato, Italy, May 26-June 1, 2001.
136. Organization of Human Brain Mapping, Brighton, England, June 9-14, 2001.
137. Magnet Technology Conference, Geneva, Switzerland, September 24-28, 2001.
138. GDCh Jahrestagung Chemie 2001, Wursburg, Germany, September 25-27, 2001.
139. NIMH/NIH Workshop, Laguna Beach, CA, January 9-11, 2002.
140. 43rd ENC Meeting, Asilomar, CA, April 14-19, 2002.
141. Athens Brain Conference, Athens, Greece, May 8-12, 2002.
142. McGovern Institute Symposium, MIT, Boston, MA, May 13-14, 2002.
143. International Society for Magnetic Resonance in Medicine, Honolulu, HI, May 18-24, 2002.
144. 16th European Experimental NMR Conference, Prague, Czech Republic, June 9-14, 2002.
145. Office of National Drug Control Policy Demand Reduction Technology Symposium, Cambridge, MA, July 8-10, 2002.
146. European Society for Magnetic Resonance in Medicine and Biology 2002, Cannes, France, August 22-25, 2002.
147. Gordon Research Conference, New London, NY, July 28-August 2, 2002.
148. Brainstorm 2002: The Future of Neuroimaging, Athens, Greece, September 19-21, 2002.
149. International Symposium on Highfield MRI in Clinical Applications, Bonn, Germany, October 11-

12, 2002.

150. Institute of Electrical and Electronics Engineers-Engineering in Medicine and Biology Meeting, Houston, TX, October 23-26, 2002.
151. Inaugural Functional Neuroimaging Symposium, Birmingham, AL, November 8-9, 2002.
152. First Eastern Mediterranean Congress of Magnetic Resonance Imaging & Second National Congress of Magnetic Resonance Imaging, Izmir, Turkey, December 12-14, 2002.
153. Institute of Electrical and Electronics Engineers-Engineering in Medicine and Biology Conference, Capri, Italy, March 20-22, 2003.
154. 44th Experimental Nuclear Magnetic Resonance Conference, Savannah, GA, March 30-April 4, 2003.
155. 9th International Congress on Schizophrenia Research, Colorado Springs, CO, April 1-2, 2003.
156. New NMR Strategies for Brain, Erice, Sicily, April 4-10, 200.3
157. University of Florida, Gainesville, FL, April 21-22, 2003.
158. Dartmouth, Hanover, NH, May 18-20, 2003.
159. Japan - Seiji Ogawa Symposium, May 20-25, 2003.
160. Symposium in Honor of Robert Shulman, New Haven, CT, June 17, 2003.
161. VISN Meeting, San Antonio, TX, July 11, 2003.
162. International Society for Magnetic Resonance in Medicine Eleventh Scientific Meeting and Exhibition, Toronto, Ontario, May 10-16, 2003.
163. 19th International Congress of Biochemistry & Molecular Biology, Toronto, Canada, July 20-24, 2003.
164. Society for Clinical Neurophysiology Annual Meeting, Freiburg, Germany, October 8-12, 2003.
165. Mini High-field Workshop, November 6-7, 2003.
166. 2nd International Conf on Chemistry and its Applications, Doha, Quatar, December 6-9, 2003.
167. Creative Concepts Conference, Vail, CO, December 11-14, 2003.
168. NMR: A Tool for Biology VI, Pasteur, France, February 2-4, 2004.
169. Biophysical Society, Annual Meeting, Baltimore, MD, February 14-18, 2004.
170. 3rd Annual Design of Medical Devices Conference, Minneapolis, MN, April 9, 2004.
171. Jornada Paulista de Radiologia Conference, Sao Paolo City, Brazil, April 21-24, 2004.
172. Segerfalk Lecture and Symposium, Lund, Sweden, May 6-8, 2004.
173. International Society for Magnetic Resonance in Medicine Twelfth Scientific Meeting and Exhibition, Kyoto, Japan, May 15-21, 2004.
174. Gordon Conference, Colby College, ME, August 8-13, 2004.
175. MIND Institute Meeting, Santa Fe, NM, October 7-10, 2004.
176. Headache Mediterranean Summer School, Santorini, Greece, October 9-12, 2004.
177. International Society of Magnetic Resonance Conference, Ponte Verda Beach, FL, October 24-28, 2004.
178. Frontiers of BioMedical Imaging Symposium, Chicago, IL, November 8-10, 2004.
179. Wissenschaftliches Symposium, Heidelberg, Germany, November 20, 2004.
180. Annual Meeting of Psychiatric Association of Turkey, 9th Annual Spring Symposium, Antalya, Turkey, April 13-17, 2005.
181. International Society for Magnetic Resonance in Medicine 13th Scientific Meeting and Exhibition, South Beach Miami, FL, May 5-13, 2005.
182. Gordon Conference on Magnetic Resonance, New London, CT, June 5-10, 2005.
183. Ultrahigh Magnetic Field MRI Symposium, Tokyo, Japan, October 1-3, 2005.
184. 2005 Minerva-Gentner Symposium, A Dive into Magnetic Resonance, Eilat, Israel, December 11-13, 2005.

185. DFG Excellence Academy for Medical Technology, Munich, Germany, February 13-18, 2006.
186. Biomedical Magnetic Resonance Imaging and Spectroscopy at Very High Fields, Würzburg, Germany, February 16-18, 2006.
187. Ten Years of 3 Tesla- What is Next?, Berlin, Germany, February 20-21, 2006.
188. 31st FEBS Congress, Istanbul, Turkey, June 24-29, 2006.
189. Gordon Conference on In Vivo Magnetic Resonance, Mt Holyoke College, South Hadley, MA, July 23-26, 2006.
190. AFAR-NYAS Conf on Imaging the Aging Brain, New York, NY, May 16-17, 2006.
191. High Field Cardiovascular MR Workshop Sponsored by NIH, Washington, DC, September 21-22, 2006.
192. Horizons of NMR Based Research at the beginning of 21th Century, Ulm, Germany, October 13, 2006

INVITED LECTURES (2009 to date)

1. International Society of Magnetic resonance in Medicine. April 21, 2009; Honolulu, Hawaii
2. Human Brain Mapping (HBM) 2009: Keynote Lecture; San Francisco, USA. June 22, 2009
3. ESMRMB. Sir Peter Mansfield Lecture; Antalya, Turkey. October 1, 2009
4. EMBS. Keynote Lecture; September 4, 2009
5. Siemens 7T User Meeting LEIPZIG. September 13, 2009, Leipzig, Germany
6. Extremely High field MRI Workshop; Soul, South Korea for November 6, 2009
7. fMRI symposium: Institute of Neurobiology Queretaro (Mexico); November 18, 2009
8. University College LONDON; February 4, 2010, London, UK
9. OXFORD University; February 5, 2010, Oxford, UK
10. University of Florida Centennial Lecture; March 9, 2010
11. Montreal Neurological Institute; April 9, 2010, Montreal, Canada
12. Berlin, MR Symposium, Max Delbrueck Center; April 16, 2010 to April 17, 2010, Berlin, Germany
13. 51st ENC, Keynote Lecture; April 22, 2010. Daytona Beach, Florida
14. Copenhagen Ultrahigh field workshop; May 9, 2010
15. Biomedical Imaging Workshop. May 24, 2010, Minneapolis, MN
16. Chemistry-Biology Symposium at University of Minnesota, May 26, 2010
17. Human Brain Mapping (HBM) 2010: Advanced fMRI Course; June 6, 2010, Barcelona
18. World Wide Magnetic Resonance Conference July 4, 2010 to July 9, 2010; Florence, Italy
19. 5th Annual Glen D. Dobben Memorial Lecture, University of Illinois, Chicago
20. Duke University, Center for Molecular and Biological Imaging Symposium on Data Visualization, 12 December 2010
21. Lecture as Recipient of Honorary Doctorate from University of Maastricht; January 20, 2011, Maastricht, Netherlands
22. ASFNR Annual Meeting. Keynote Lecture, 4 March 2011
23. Gairdner Foundation. Hotchkiss Brain Institute Symposium, March 17, 2011, Calgary
24. UltraHighField (UHF) MR symposium, 24 June 2011, Berlin, Germany,
25. Stanford University, Department of Psychology, March 9, 2011
26. Keynote Lecture, International Conference on Medical Physics (ICMP), 17-20 April, 2011, Porto

Alegra, Brazil

27. Cold Spring Harbor Laboratory (CSHL), Workshop on Circuits and Connectivity in the Vertebrate Brain, July 17, 2011, Cold Spring Harbor
28. Fifth Workshop of CInAPCe Neurosciences Research Network, 9-13 August 2011; São Paulo, Brazil
29. National Institutes of Health, Seminar.17 August 2011. Bethesda, Maryland
30. 33rd Annual International Conference of the IEEE Engineering in Medicine and Biology (EMBC) Society, 1 Sept 2011, Boston
31. ISMRM Workshop on Mapping Functional Networks for Brain Surgery, 6-9 Sept 2011, Milan, Italy
32. Frontiers in Biomedical NMR Symposium 27 Oct 2011; Tel Aviv, Israel
33. 8th Annual Memphis BioImaging Symposium, 3-4 Nov 2011, Memphis, Tennessee
34. 13th National Medical Physics Congress, 17-19 Nov 2011; Çesme, Turkey
35. Lecture at The Institute for Therapeutics Discovery and Development, February 3, 2012
36. Workshop on Cerebrovascular Organization, 18-22 February 2012; Orlando, Florida
37. 3rd UltraHigh Field Magnetic Resonance symposium, Berlin B.U.F.F. 8 June 2012, Berlin Germany
38. 3rd Biennial Resting State Meeting, 5-8 Sept. 2012; Magdeburg, Germany. Plenary Lecture
39. World Congress on Medical Physics and Biomedical Engineering (WC2012), 26-31 May 2012, Peking, China. Plenary Lecture
40. Plenary Lecture ICMRBS (International Conference on Magnetic Resonance in Biological Systems), August 19-24, 2012, Lyon France
41. Lecture, ETH (Eidgenössische Technische Hochschule), Opening Symposium for the "Bruker-Richard R. Ernst Center of Excellence in Magnetic Resonance", September 18, 2012
42. Imaging in 2020 Conference, September 30 - Oct 4, 2012, Jackson Hole, Wyoming
43. Society of Neuroscience 2012 Annual Meeting (SfN, 2012), 13-17 October 2012, New Orleans
44. Lecture, Georgia Institute of Technology/Emery University, 11 December 2012
45. Plenary Lecture, Symposium to Celebrate Twenty years of fMRI, January 12-13, 2012
46. Opening Plenary Lecture, SCMR (Society of Cardiovascular Magnetic Resonance) 2013 Annual Meeting, February 1- 5, 2013
47. Stanford University Radiology Grand Rounds, February 5, 2013
48. ISMRM Ultra High Field Workshop, Amsterdam, Netherlands, March 2, 2013
49. Symposium in Brain Imaging in Nijmegen, Netherlands, March 6, 2013
50. International Society of Magnetic Resonance (ISMRM) 2013 Annual Meeting, 20-26 April 2013, Salt Lake City. Plenary Lecture on Human Connectome.
51. Cardiac MR Sunrise Course, ISMRM 2013 Salt Lake City, April 25, 2013
52. Lecture UCLA, May 2, 2013
53. International Society for Magnetic Resonance (ISMAR) 2013-18th Triennial Conference May 19-24 May 2013 Rio de Janeiro, Brazil. Plenary Lecture
54. Brain Dynamics Workshop Institute of Theoretical Applied Physics (ITAP), July 1, 2013 to July 4, 2013
55. Lecture, University of Iowa, September 12, 2013
56. Lecture for NIH Council of Councils, October 24, Bethesda, Maryland

57. Erwin Hahn Lecture, Erwin Hahn Institute, Essen Germany, Sept. 19, 2013
58. David Van Essen Symposium, October 14, 2013
59. 4th Siemens UHF User Meeting,, Nov 15-16, Vienna, Austria
60. Lecture, Duke University, November 26, 2013
61. Key Note: American Society for Functional Neuro-Radiology (ASFNR) Feb 17, 2014, Miami, Florida
62. Neuroscience Seminar at Stanford University. Feb 6, 2014, Stanford University, Palo Alto California
63. NIH P41 Director's Meeting, Mar 24, 2014, Washington DC
64. UT Southwestern Symposium on Imaging Brain Injury. May 1, 2014, Dallas, Texas
65. MR Center Opening Symposium Maastricht. May 19, 2014, Maastricht, Netherlands
66. Richard Ernst Medal Lecture, May 20, 2014, Zurich, Switzerland
67. Lecture, Sabancı University, İstanbul., May 28, 2014, Istanbul, Turkey
68. Neuroscience Congress, Istanbul. May 29, 2014, Istanbul, Turkey
69. Keynote Joint Turkish-German Symposium on Human Neuroscience Jun 5, 2014, Berlin, Germany
70. Berlin Ultrahigh Field Facility (BUFF) Ultra High Field SYMPOSIUM. Jun 20, 2014, Berlin Germany
71. Plenary Lecture: International Congress of Clinical Chemistry and Laboratory, Jun 22, 2014 to Jun 26, 2014, Istanbul, Turkey
72. Grand Rounds – UCSF Memory and Aging Center UCSF, Aug 8, 2014, San Francisco, CA 94158
73. 4th Biennial Resting-State Brain Connectivity Conference at MIT. Sep 11, 2014, MIT, Cambridge Massachusetts
74. Lecture at NIH, on Human Connectome Project, Sept 24, 2014, Bethesda Maryland
75. GE Global Research Whitney Symposium. Oct 20, 2014, Niskayuna, NY 12309
76. Seminar: CORNEL NYC. Oct 30, 2014, New York, NY
77. Mini Medical School. University of Minnesota, Oct 27, 2014
78. Seminar, UT Health Science Center, San Antonio, Nov 21, 2014

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