

**Adam Gazzaley, M.D., Ph.D.**  
**Curriculum Vitae**

**Contact:**

University of California, San Francisco  
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<https://neuroscape.ucsf.edu>  
<https://www.comewander.com>  
<http://www.akiliinteractive.com/>



**Education:**

1982-1986 Bronx High School of Science, NYC  
 1986-1990 BS - Biochemistry, Binghamton University, NY  
 1990-1998 MD, PhD – Neuroscience (Dr. John H. Morrison)  
 Mount Sinai School of Medicine, NYC

**Postgraduate Training:**

1997 *Postdoctoral Fellow*  
 Mount Sinai School of Medicine, NYC  
 1998 - 1999 *Intern in Medicine*  
 Hospital of the University of Pennsylvania  
 1999 - 2002 *Resident in Neurology*  
 Hospital of the University of Pennsylvania  
 2002 - 2004 *Postdoctoral Fellow- Cognitive Neuroscience*  
 University of California, Berkeley  
 (Dr. Mark D'Esposito & Dr. Robert Knight)  
 2002 - 2005 *Cognitive Neurology Fellow*  
 University of California, San Francisco

**Faculty Appointments:**

2002 - 2007 *Attending Neurologist*  
 Northern California VA Medical Center  
 UCSF Medical Center  
 2005 - 2010 *Assistant Professor of Neurology and Physiology*  
 University of California, San Francisco  
 2009 - 2010 *Assistant Professor of Psychiatry, UCSF*  
 2005 - 2016 *Director of the Neuroscience Imaging Center*  
 University of California, San Francisco  
 2010 - 2014 *Associate Professor of Neurology, Physiology and Psychiatry*  
 University of California, San Francisco  
 2014 - Present *Professor of Neurology, Physiology and Psychiatry*  
 University of California, San Francisco  
 • Memory and Aging Center  
 • Center of Integrative Neuroscience  
 • Neuroscience Graduate Program  
 • Biomedical Sciences Graduate Program  
 • Bioengineering Graduate Program  
 • California Institute for Quantitative Biosciences  
 2019 *The David Dolby Distinguished Professor*  
*of Neurology, Physiology and Psychiatry*  
 2016 - Present *Executive Director, Neuroscape*

<b>Medical Licensure</b>	2002 – Present	California (A79274)
<b>Specialty Certification</b>	2004	American Board of Psychiatry & Neurology
<b>Awards/Honors</b>	1997	Krieg Cortical Kudos- Cortical Scholar Award
	1998	Mount Sinai - Basic Science Achievement Award
	1998	Morris Bender Award in Clinical Neurology
	2004	NIH Career Development Award
	2005	Laird Cermak Award
	2005	Pfizer/AFAR Innovations in Aging Award
	2006	Ellison Foundation New Scholar Award in Aging
	2009	UCSF Postdoctoral Association Outstanding Mentorship Award
	2012	Harold Brenner Pepinsky Early Career Award in Neurobehavioral Science
	2015	UCSF 150 <sup>th</sup> Anniversary Alumni Excellence Award
	2015	Elected Membership in American Society for Clinical Investigation
	2015	Society for Neuroscience – Science Educator Award
	2015	SAGE Center Distinguished Fellow
	2017	PROSE Award for <i>The Distracted Mind</i>
<b>Patents:</b>	2010	Patent Application US11/041504 (filed & pending) <i>“Method of Suppressing Irrelevant Stimuli”</i> Co-inventors: Michael Merzenich, Etienne de Villers-Sidani, Xiaoming Zhou, Jyoti Mishra
	2011	U.S. Patent No. 9,940,844 ( <b>Approved – US &amp; Japan</b> ) <i>“Enhancing Cognition in the Presence of Distraction and/or Interruption”</i> Sole Inventor <b>Licensed – Akili Interactive Labs</b>
	2014	Patent Application US15/50258 (filed & pending) <i>“Methods of Enhancing Performance on a Cognitive Task By Improved Self-Regulation of Internal Distraction and Computer Readable Medium and Devices for Practicing the Same”</i> Sole Inventor
	2014	Patent Application US15/56677 (filed & pending) <i>“Methods of Enhancing Cognition and Systems for Practicing the Same”</i> Sole Inventor <b>Licensed – Akili Interactive Labs</b>
	2016	Patent Application 62/371,607 (filed & pending) <i>“Methods of Cognitive Fitness Detection and Training and Systems for Practicing the Same”</i> Co-Inventor: Jyoti Mishra
<b>Advisor / Consultant:</b>	2000 - 2009	Ram Capital
	2004 - 2017	Foundation Ventures
	2008 - 2011	AFAR’s National Scientific Advisory Council
	2008 - 2010	Lifelong living, learning and Longevity (L4), CA

2009 - 2014	Neurofocus
2008 - 2016	Neuroscouting
2010	Pfizer
2011 - 2017	DirectionFive
2012	IDEO
2013 - 2015	Fitstar
2014 - 2016	Nielsen
2014 - 2017	GE Ventures
2014 - 2017	Rio Grande
2015 - 2016	TEDMED
2015 - 2018	Sync Project
2015 - 2017	GE Healthymagination
2015 - 2017	Enso
2016 - 2017	Apple
2016 - 2017	MaxPlay
2017	Deloitte

**Active**

2010 - Present	ElMindA
2011 - Present	Akili Interactive Labs
2013 - Present	High Fidelity
2014 - Present	Neuroelectrics
2015 - Present	JAZZ Venture Partners
2016 - Present	Magic Leap
2016 - Present	Vizzario
2016 - Present	Rapid Science
2017 - Present	The Void
2017 - Present	MindMaze
2017 - Present	Sensync
2019	AxonPark
2019	Oooh
2019	Empatica
2019	MyndVR
2019	Halo

**Co-Founder/  
Chief Science Advisor:**

2011 - Present	Akili Interactive Labs
2015 - Present	Jazz Venture Partners
2017 - Present	Sensync

**Boards:**

2011 - 2015	ESCoNS (non-profit)
2013 - 2017	DirectionFive (non-profit)
2015 - 2018	President's Council on Fitness, Sports & Nutrition (non-profit)
2014 - Present	Akili Interactive Labs
2017 - Present	Sensync
2019	California Academy of Sciences (non-profit)

**Editorial Boards:**

2002 - 2004	SAGE KE- <i>Science</i> online
2010 - 2015	Neuroimage
2011 - 2015	Games for Health: Research, Development, and Clinical Applications (G4H)

2011 Ad-hoc Editor: Proceedings of the National Academy of Science  
2012 - 2015 Translational Neuroscience  
2013 - 2017 Frontiers in Neuroscience for Young Minds  
2017 - Present BrainFacts.org

**Journal Reviewer:**

Nature	Neuron
Nature Neuroscience	Journal of Neuroscience
Proceedings of the National Academy of Science	Brain
Psychological Science	Cerebral Cortex
Science Translational Medicine	Neuropsychologia
Neurobiology of Aging	Neuroimage
Neuroscience	Neuroinformatics
Journal of Cognitive Neuroscience	Psychology and Aging
Cognitive, Affective and Behavioral Neuroscience	Neurocase
Annals of Neurology	Experimental Brain Research
Brain Research	Behavioral Neuroscience
European Journal of Neuroscience	Human Brain Mapping
Biological Psychiatry	Cortex
Aging, Neuropsychology and Cognition	Current Biology
Hippocampus	Psychophysiology
Neuroscience & Biobehavioral Reviews	Psychological Bulletin
Journal of Experimental Psychology	Cognitive Science
Attention, Perception & Psychophysics	

**Grant Reviewer:**

National Institute of Health  
NIA Program Project Grant (2011)  
NIH Special Emphasis Panel (2012)  
NIH Sensory, Perceptual & Cognitive Processes Study Section (2012)  
NIH Director's Early Independence Award (2015)  
National Science Foundation (2007, 2012) UK Alzheimer's Society  
Department of Defense Canadian Foundation for Innovation  
Layton Alzheimer Disease Center Louisiana Board of Regents  
American Federation of Aging Research UC Presidential Fellowship  
UCSF Limited Submission Selection Committee (2011)

**Professional Societies:**

American Academy of Neurology  
Cognitive Neuroscience Society  
Organization for Human Brain Mapping  
Society for Behavioral and Cognitive Neurology  
Society for Neuroscience  
New York Academy of Science  
Memory Disorders Research Society (by election)  
American Neurological Association (by election)

**Neuroscape:**

**Faculty**

Theodore Zanto, PhD - Adjunct Assistant Professor; Neurology  
Peter Wais, PhD - Assistant Professor; Neurology  
Joaquin Anguera, PhD - Adjunct Assistant Professor; Neurology & Psychiatry  
Melina Uncapher - PhD Adjunct Assistant Professor; Neurology

**Specialists**

David Ziegler, PhD  
Lara Staples, PhD  
Roger Anguera  
Christopher Beitel, PhD

***Postdoctoral Fellows***

Courtney Gallen, PhD  
Jessica Younger, PhD  
Caoilainn Doyle, PhD  
Arseny Sokolov, MD

***Alumni***

<u>Postdocs:</u>	Wes Clapp, PhD	Founder; NeuroScouting LLC
	Tracy Warbrick, PhD	Postdoc; Forschungszentrum Jülich, Germany
	Nathan Cashdollar, PhD	Post-Doc; University of Trento, Italy
	Jonathan Kalkstein, MD, PhD	Associate Psychiatrist, SFGH and UCSF
	Jacob Bollinger, PhD	Data insights scientist Bright Media Corporation
	Theodore Zanto, PhD	Adjunct Assistant Professor, Neurology, UCSF
	Jyoti Mishra, PhD	Assistant Professor, Psychology, UCSD
	Peter Wais, PhD	Assistant Professor, Neurology, UCSF
	Joaquin Anguera, PhD	Adjunct Assistant Professor, Neurology & Psychiatry, UCSF
	Bradley Voytek, PhD	Assistant Professor, Psychology, UCSD
	Judy Pa, PhD	Assistant Professor, Neurology, USC
	Martine Schouwenburg, PhD	Post-Doc, Amsterdam University
	Yixuan Ku, PhD	Associate Professor at School of Psychology and Cognitive Science, East China Normal University
	David Zeigler, PhD	Specialist, Neurology, UCSF
	Gabe Aronovich, MD	MindStrong
	WanYu Hsu, PhD	Halo Neuroscience

**University Service:**

2006 - 2016	Founding Director of UCSF Neuroscience Imaging Center (NIC)
2006 - 2011	Search Committees: <ul style="list-style-type: none"><li>• Sarlo-Ekman Endowed Chair in the Study of Human Emotion (Psychiatry)</li><li>• Two clinical/translational research psychiatrists (Psychiatry)</li><li>• [Co-chair] Multiple Sclerosis Chair (Neurology)</li></ul>
2008 - 2011	Mission Bay Planning Committee Faculty Co-Chair
2009 - present	Neurology Department Strategic Finance Committee
2010 - present	Neurology Department Division Chief
2011 - present	Research Advisory Committee for Institutional Research and Academic Career Development Award (IRACDA)
2011 - present	UCSF Industry Relations Advisory Group
2012 - present	UC Berkeley Brain Imaging Center Advisory Committee
2012 - 2014	UCSF Mission Bay Art Committee
2012- present	UCSF Digital Health Research Committee
2012- present	UCSF Resource Allocation Program Digital Health Research Review Committee
2013	UCSF Neuroscience Clinical Research Advisory Committee
2014	UCSF 150 <sup>th</sup> Anniversary Forums and Lectures Subcommittee
2016 - present	Founding Director of UCSF Neuroscape

**Public Service:**

2006	Organized West Coast Siemens fMRI workshop
2006 - 2009	Founding Organizer of Bay Area Neuroscience Gathering

2006 - 2010	Secretary-Treasurer of San Francisco Bay Area Society for Neuroscience Chapter
2008	Local Organizing Committee, Human Brain Mapping Meeting, SF, CA
2008 - 2009	Planning Committee for L4: Lifelong Living, Learning & Longevity project
2008 - present	Organizing Committee - Bay Area Memory Meeting
2009	Society for Neuroscience's Capitol Hill Day
2010	Symposium Chair - Human Brain Mapping Meeting, Barcelona, Spain
2010 - 2014	Public Education and Communication Committee - Society for Neuroscience
2011	Scientific Committee & Symposium Chair - International Conference on Cognitive Neuroscience (ICON XI), Mallorca, Spain
2011	Co-Founder of Entertainment Software & Cognitive Neurotherapeutics Society (ESCoNS)
2011 - 2015	Co-organizer of ESCONS Meeting (2011, 2013, 2015)
2011	Technology Summit Panel Chair – CNS Summit, FLA
2012	Contributor to Society for Neuroscience Brainfacts.com
2012	Co-Director, Inaugural Workshop on Cognitive Aging, Cold Spring Harbor Laboratory, NY
2014	Advisor and reviewer for IOM consensus report “Public Health Dimensions of Cognitive Aging”
2014 – 2017	Scientific Advisor to President’s Council on Fitness, Sports & Nutrition
2015 – 2016	Co-organizer of X-Tech Symposium

## **Scholarships/Grants:**

### ***Past***

1990 - 1992	Rudin L&R Medical Scientist Training Program (MSTP) Scholarship
1992 - 1994	Achaelis Medical Scientist Training Program (MSTP) Scholarship
1995 - 1996	Dana Foundation Predoctoral Scholarship
1996 - 1997	Dana Foundation Postdoctoral Scholarship
2002 - 2004	American Federation for Aging Research (AFAR) Postdoctoral Grant
2002 - 2004	NIH National Research Service Award (NRSA) Postdoctoral Grant
2002 - 2008	NIH LRP Award
2004 - 2009	NIH K08 (Role: PI) - Career Development Award
2005 - 2009	Pfizer/AFAR Innovations in Aging Research Grant (Role: PI)
2006 - 2010	Ellison Medical Foundation - New Scholar Award in Aging (Role: PI)
2006 – 2010	Eisai/Pfizer (Role: PI) “Cholingeric system role in mild cognitive impairment”
2009 - 2011	Robert Wood Johnson Foundation (Role: PI) Games for Health Research
2007 - 2011	Posit Science - “Cognitive Training of Top-down Modulation in Normal Aging” (Role: PI)
2009 - 2012	NIH/NIA R01; Administrative Supplement (Role: PI)
2011 -2012	UCSF Clinical and Translational Science Institute (CTSI) T1 Catalyst Award (Role: PI)
2008 - 2013	NIH/NIA R01 (Role: PI) “Neural Mechanisms Underlying Cognitive Aging”
2011 -2013	NIH R21 (Role: PI) “Mechanisms of self-regulation of internal distraction”
2009 - 2014	NIH/NIA R01 (Role: Co-I) “Eye Movement Control in Normal Elderly and MCI”
2011 - 2014	Center17 (PI: Gazzaley) “Neuroscience research in Psychiatry and Geriatrics”
2013 - 2015	Keck Futures Initiative (PI: Gazzaley): “Closing the Loop Between the Brain and the Digital World”
2013 - 2015	Keck Futures Initiative (co-PI: Gazzaley) “Nature and Cognitive Restoration: How Does the Brain Behave in a Non-digital World?”
2014 - 2015	Richard Lounsbery Foundation: Achieving Cognitive Enhancement via Rhythm Training
2014 - 2015	Grammy Foundation: Reversing age-related neuro-cognitive decline with rhythm

2012 - 2016 NIH/NIMH R01 (PI: Gazzaley): Causal dynamics in neural networks underlying top-down modulation

2011 - 2016 NIH/NIA R01 (PI: Kramer; Role: Co-I): Cognitive and Behavioral Control in FTD

2012 - 2017 NIH/NIA R01 (PI: Gazzaley)  
*Neural Mechanisms of Learning to Resolve Interference in Younger and Older Adults*

2013 - 2018 NIH/NIMH R34 (co-PI: Gazzaley/Arean)  
*Can mental health apps work in the real world? A feasibility pilot study*

2015 - 2018 How I Decide Foundation (PI: Gazzaley)  
*Cognitive Control Training for Enhancing Decision Making Abilities*

2015 - 2018 NSF (PI: Gazzaley) *Science of Learning*

**Current**

2015 - 2020 NIH/NIA R01 (PI: Gazzaley)  
*Enhancing Cognitive Control in Older Adults with Complementary Interventions*

**Mentored Grants**

2007 UCSF School of Medicine Dean's Summer Research  
- Brian Toy (MD student)

2007 - 2009 University of California Office of the President's Postdoctoral Fellowship  
- Wesley Clapp (Postdoc)

2007 - 2008 Sandler Research Fellowship  
- Tim Verstynen (Postdoc)

2007 - 2008 Larry L. Hillblom Center for the Biology of Aging Research Fellowship  
- James Chadick (graduate student)

2008 UCSF School of Medicine Dean's Summer Research  
- Arul Thangavel (medical student)

2007 - 2012 NIH Loan Repayment Program (LRP)  
- Jacob Bollinger, Jon Kalkstein, Joaquin Anguera, Judy Pa, Ted Zanto

2008 - 2011 VA Research Fellowship  
- Jonathan Kalkstein (Postdoc)

2008 - 2010 NIH ROI Minority Supplement  
- Joaquin Anguera (Postdoc)

2010 - 2013 IRACDA Scholars in Science (ISIS) Fellowship  
- Joaquin Anguera (Postdoc)

2011 - 2014 IRACDA Scholars in Science (ISIS) Fellowship  
- Bradley Voytek (Postdoc)

2009 - 2012 NIH Postdoctoral NRSA Fellowship  
- Ted Zanto (Postdoc)

2009 - 2014 NIH K08 - Career Development Award  
- Judy Pa (Assistant Professor; Neurology)

2010 UCSF Postdoc research award (PDRA)  
- Ted Zanto, Jyoti Mishra

2010 Post-doctoral breakthrough in Biomedical Research  
- Jyoti Mishra (Postdoc)

2010 - 2011 Doris Duke Fellowship

2011 - 2016	- Arul Thangavel (Medical Student) NIH K99/R00 - Career Development Award
2012 - 2015	- Lisa Bauer (Postdoc; Nursing) NIH K24 - Midcareer Award
2012 – 2015	- Pat Arean (Professor; Psychiatry) NIH K01 - Career Development Award
2013 – 2014	- Kaja LeWinn (Assistant Professor; Psychiatry) University of California Office of the President's Postdoctoral Fellowship - Bradley Voytek (Postdoc)

## Presentations by Invitation (675 total):

### Highlights

**Public Showcases:** Applied Brilliance, Nerd Nite, Sci Foo, SXSW (x5), FutureMed, TedX (x3), Commonwealth Club (X6), WHO Global Forum, Living Well Summit, Dreamforce, NVIDIA GTC, Learning and the Brain, Fjord Kitchen, Mozart & Mind, Science Café, Milken Institute Global Conference, Cal Academy of Science Nightlife, Wonderfest, Bohemian Grove- Museum Talk, Summit Series, AARP Annual Meeting (x6), TEDMED co-host, Exponential Medicine, Israeli BrainTech, Wisdom 2.0, Wired Health, Neurogaming, Summit at Sea, Near Future, Further Future, LASER, X Tech, Ecosperity, Aspen BrainLab, Aging 2.0, Lightening in a Bottle, Fortune Brainstorm Health, KES, CES Summit, Deposit Conference, A-Fest, Transformative Technology (X2) Awakened Future Summit, Virtual Health, INTERFACE Health Int'l Summit

**Countries:** US, Portugal, Italy (X6), Holland (x2), Spain (x4), Germany (x13), Japan (x4), Columbia, India (x7), Canada (x4), Australia (x8), UK (x3), Malaysia, France (X3), Brazil (X2), Saudi Arabia (X2), Israel (X3), Turkey, Ireland, China (X8), Switzerland (X7), Africa, International Waters, Cuba, Singapore, BVI, Mexico

**Universities:** UC San Francisco, UC San Diego, UC Davis, UC Berkeley, UC Santa Barbara, UC Irvine, UC Los Angeles, SF State, Mount Sinai, Duke U, Stanford, Wayne State, U Toronto, Oxford U, U Arizona, UT Dallas, MIT, Harvard, Max Planck - Berlin, U Amsterdam, Florida Atlantic U, U British Columbia, Kyoto U, U Rochester, Brandeis U, U Michigan, U Miami, U Illinois Champagne-Urbana, Ohio State, Yale, U of Missouri, Washington University, Bar Ilan University, Salk Institute, Trinity College, Johns Hopkins University, Johns Hopkins Medical Center, UT Austin, Columbia U, Eastern China Normal University, CHUV, Vanderbilt, U Vermont, U of Geneva, , German Sport University Cologne, University Munich, Imperial College London, SIVA Shanghai,

**Companies:** Pfizer, Apple, Sony, Zynga, Amazon, IDEO, Proctor & Gamble, Google, General Electric, Theravance, Takeda, Nielsen, Unicharm, Posit Science, Fjord, NVIDIA, Oculus, GE Ventures, Dolby, Knoll, Microsoft, Puretech Ventures, Siemens, Zynga, Biogen, Salesforce, RedBull, Tamasek, Samsung, IFF, Meyer Sound, Dolby Labs, Fortune, Takeda, Google X, Linked-In, Deloitte, Doximity, Autodesk, Napa Valley Reserve, Wall Street Journal, First Republic, Philips, Economist, Deloitte,

**Foundations:** Gates Foundation, AARP, AFAR, Ellison Foundation, ALFA, NAKFI, YPO, Alzheimer's Assoc, AAAS, Institute of Music and Neurological Functions, American Academy of American Colleges, Robert Wood Johnson Foundation, How I Decide, Wellcome Trust, Museum of Natural History

**Mash-ups:** Magician (Robert Strong); Musicians (Mickey Hart – *Grateful Dead*; Rob Garza – *Thievery Corporation*); Technologist (Philip Rosedale – *Second Life/High Fidelity*); Scientist (Daphne Bavalier); Meditation Leader (Jack Kornfield), Author (Tim Ferriss), Actor/Director (Jon Favreau), Science Fiction Writer (Rob Reid), Neuroscientist (Matthew Walker)

International= (I), National= (N), Regional= (R)

### 1997

1. (R) Hippocampus Club, Rockefeller University, NY
2. (N) American Association of Anatomists, Cajal Club, New Orleans, LA



**2003**

3. (R) Primary Care Practitioners, San Francisco, CA

**2004 10 presentations**

4. (R) Northern California Consortium, UCSF, CA
5. (R) Neuropsychology Conference, VA Medical Center, Martinez, CA
6. (R) Neurology conference, Woodstock, NY
7. (R) Internal medicine physicians conference, Woodstock, NY
8. (R) Memory and Aging Center Grand Rounds, UCSF, CA
9. (R) Neurology Grand Rounds, NYU, NY
10. (R) Translational Neuroscience Interdepartmental Seminar, Mount Sinai, NY
11. (R) Cognition & Perception Seminar, NYU Psychology & Center for Neural Science, NY
12. (R) Frontiers in Neurology and Neuroscience, UCSF, CA
13. (R) Center for Cognitive Neuroscience Seminar, Duke University, NC

**2005 25 presentations**

14. (R) University of Toronto, Dept of Psychology, Ebbinghaus Empire Lecturer, Canada
15. (R) UCSF Dept. of Physiology, CA
16. (R) San Francisco Psychiatric Society, CA
17. (R) Posit Science Corporation, San Francisco, CA
18. (R) Langley Porter Psychiatric Institute, UCSF, CA
19. (R) Pfizer Regional District Meeting, Berkeley, CA
20. (R) Magnetic Resonance Unit, San Francisco VA Medical Center, CA
21. (R) Memory Disorders Research Society, Cermak Award Presentation, AZ
22. (R) University of Miami VA Medical Center, Geriatrics Grand Rounds, FL
23. (R) Psychology Dept., Stanford University, CA
24. (R) 15 Presentations to community physicians on the aging brain

**2006 31 presentations**

39. (I) Neurobiology of Aging Brain Symposium, Tasmania, Australia
40. (N) New York Academy of Sciences – Imaging and the Aging Brain, New York, NY
41. (R) UCSF VA Medical Center, Geriatrics Dept., San Francisco, CA
42. (R) California Pacific Medical Center, Psychiatry Dept Grand Rounds, San Francisco, CA
43. (R) Gladstone Institute of Neurological Disease, San Francisco, CA
44. (R) Earnest Gallo Clinic and Research Center, Emeryville, CA
45. (R) Interdisciplinary Forum on Cognitive Neuroscience and Neuroimaging, UCSF, CA
46. (R) Geriatrics Interest Group, UCSF, San Francisco, CA
47. (R) From Molecules to Medicine, UCSF, San Francisco, CA
48. (R) Smith-Kettlewell Eye Research Institute, CA
49. (R) Ask-a-Scientist Seminar, Bazaar Café, San Francisco, CA
50. (R) 20 Presentations to community physicians on the aging brain

**2007 21 presentations**

70. (N) NIH Cognitive Aging Summit, Washington DC
71. (N) West Coast Siemens fMRI Workshop, UCSF, CA
72. (R) Cognitive Neuroscience Forum, University of California, Berkeley, CA
73. (R) Grand Rounds, Peninsula Medical Center, Burlingame, CA
74. (R) Brain and Cognition Seminar Series, University of Illinois, Champaign-Urbana, IL
75. (R) Mount Sinai MSTP Student Career Seminar, NY
76. (R) UCSF Memory and Aging Center Seminar, CA
77. (R) Functional Imaging Symposium, presented by Gallo center and IND, CA
78. (R) 13 Presentations to community physicians on the aging brain

**2008 24 presentations**

91. (I) Human Brain Mapping Workshop, Melbourne, Australia
92. (N) American Federation of Aging Research Annual Meeting, Santa Barbara, CA
93. (R) McKnight Seminar Series, University of Arizona, AZ
94. (R) Brain Mapping Seminar Series, UCLA, CA
95. (R) Medical Advances that Will Shape our Future, San Francisco, CA
96. (R) Mount Sinai Neurology Grand Rounds, NYC, NY
97. (R) UCSF Memory and Aging Center Grand Rounds, CA
98. (R) Aging Research Seminar Series, Stanford University, Veteran's Hospital, CA
99. (R) Cognitive Neuroscience Forum, University of California, Berkeley, CA
100. (R) Center for Learning in Retirement, San Francisco, CA
101. (R) Brain Talk, Apple Store, San Francisco, CA
102. (R) Brain Talk, Apple Store, Soho, NYC
103. (R) UCSF Foundation, San Francisco, CA
104. (R) Memory & the Aging Brain, Science Café, Atlas Café, San Francisco, CA
105. (R) UCSF Neuroscience graduate program retreat, Monterey, CA
106. (R) City College's Older Adults Department, The Sequoias, San Francisco, CA
107. (R) 8 Presentations to community physicians on the aging brain

**2009 27 presentations**

115. (I) Hippocampal Research Conference, Verona, Italy
116. (I) Congress on Anti-Aging Medicine and Biomedical Technologies, Portugal
117. (N) AcademiX 2009 (Apple): Technological Innovation and Education, Salt Lake City, UT
118. (N) Association for Psychological Science – Invited Address, San Francisco, CA
119. (N) Medical Education Conference (Apple), Cupertino, CA
120. (R) Cognitive Neuroscience Seminar Series, Veteran's Hospital, Martinez CA
121. (R) Formal Seminar Series, Buck Institute for Age Research, Marin, CA
122. (R) Institute of Gerontology Colloquium Series, Wayne State, Detroit MI
123. (R) Theravance, Inc., San Francisco, CA
124. (R) Distinguished Speaker Colloquium, San Francisco State University, CA
125. (R) Center for Brain Health, UT Dallas, TX
126. (R) Cognitive Neuroscience Forum, University of California, Berkeley, CA
127. (R) Rossmore Retirement Community, Walnut Creek, CA
128. (R) Brain Health Symposium at the Commonwealth Club, San Francisco CA
129. (R) AARP Annual meeting, LV, CA
130. (R) Science Salon Series Talk, Vibrant Brains, San Francisco, CA
131. (R) Lifelong, Living and Learning, Wellness Lecture Series, UCSF Foundation, San Francisco, CA
132. (R) City College's Older Adults Department, The Sequoias, San Francisco, CA
133. (R) Marin County Commission on Aging, Marin, CA
134. (R) 8 Presentations to community physicians on the aging brain

**2010 32 presentations**

142. (I) SharpBrains Virtual Summit: Technology for Cognitive Health and Performance
143. (I) SPIE/HVEI International Conference, CA, USA
144. (I) Frontal Lobe Conference, Toronto, Canada
145. (I) Neurocognitive Networks 2010, Florida, USA
146. (I) The Dallas Aging and Cognition Conference, Texas, USA
147. (I) Symposium Chair & Presenter, Human Brain Mapping Meeting, Barcelona, Spain
148. (I) Games for Health Conference, Boston USA
149. (I) Gordon Conference, Inaugural meeting on the Neurobiology of Aging, Waterville Valley, NH
150. (I) Neurocritical Care Society Annual meeting, San Francisco, CA
151. (N) The Dallas Aging and Cognition Conference, Dallas, TX

152. (N) Neurocognitive Networks meeting, Boca Raton, FLA
153. (N) Ellison Foundation Colloquium on the Biology of Aging, Woods Hole, MA
154. (N) AARP annual meeting, Orlando, FLA
155. (N) Applied Brilliance Conference, Ojai, CA
156. (N) Meeting for Apple engineers in education division, Cupertino, CA
157. (R) Department of Psychology, UC Santa Barbara, CA
158. (R) QB3-CCA Symposium, UCSF, CA
159. (R) Department of Psychology, Yale University, CA
160. (R) Department of Psychology, Harvard University, Boston, MA
161. (R) Brain Aging Neuroimaging Group, Mass General Hospital, Boston, MA
162. (R) Communications Department, Stanford University, CA
163. (R) Neurosurgery Grand Rounds, UCSF, CA
164. (R) The San Francisco Writer's Grotto, SF, CA
165. (R) Health & Wellness for older adults, Jewish Community Center, SF CA
166. (R) Villa Marin Retirement Community, Marin, CA
167. (R) Science Salon Series Talk, Vibrant Brains, Foster City Jewish Community Center, CA
168. (R) San Francisco Public Library, SF, CA
169. (R) UCSF Neuroscience graduate program retreat, Monterey, CA
170. (R) Molecules to Medicine Symposium, UCSF, CA
171. (R) Osher Lifelong Learning Institute, San Francisco State University, CA
172. (R) fMRI Speaker Series, University of Michigan, IL
173. (R) Nerd Nite, SF, CA

**2011 48 presentations**

315. (I) Dallas Aging and Cognition Conference, Texas
316. (I) SharpBrains Virtual Summit
317. (I) German Science Foundation – Aging Workshop, Berlin, Germany
318. (I) International Conference on Neural Networks- “From Brains to Machines”, San Jose, CA
319. (I) Entertainment Software and Cognitive Neurotherapeutics Society Meeting (ESCoNS), SF, CA
320. (I) International Cognitive Neuroscience Society Meeting, Cognitive Aging, Spain
321. (I) International Cognitive Neuroscience Society Meeting, WM and Attention, Spain
322. (I) Games for Health Europe, **Keynote** Address, Amsterdam, NL
323. (N) Multitasking Meeting, Stanford University, CA
324. (N) Learning & the Brain Conference: Igeneration meeting, SF, CA
325. (N) TEDx San Jose, CA – “The Distracted Mind”
326. (N) National Science Teacher's Association, SF, CA
327. (N) KQED Lecture, SF, CA
328. (N) Puretech Ventures, Boston, CA
329. (N) AARP annual meeting, Los Angeles, CA
330. (N) Mind Matters – Proctor & Gamble, Cincinnati, OH
331. (N) CNS Summit, FLA
332. (R) Career Development meeting, University of California, Berkeley, CA
333. (R) Department of Psychology, Brandeis University, MA
334. (R) McGovern Institute Symposium, MIT, MA
335. (R) Applied Brilliance Salon: The shape of the Future, SF, CA
336. (R) Puretech Ventures, Boston, CA
337. (R) SF Neurological Society Annual Meeting, Monterey, CA
338. (R) Cognitive Control Conference, UC Berkeley, Berkeley, CA
339. (R) UCSF Memory and Aging Center Grand Rounds, SF, CA
340. (R) Alzheimer's Association Northern CA, Santa Cruz, CA
341. (R) Wirehead Talkback, SF Playhouse, SF, CA

- 342. (R) Mini-medical school, UCSF, CA
- 343. (R) Personalized Health Project Summit, SF CA
- 344. (R) Siemens Headquarters, Erlangen, Germany
- 345. (R) Research Centre Jülich, Germany
- 346. (R) German Center for Neurodegenerative Diseases (DZNE) - Bonn, Germany
- 347. (R) Max Planck Institute for Human Development, Berlin, Germany
- 348. (R) Postdoctoral Fellow Bootcamp, UCSF, SF, CA
- 349. (R) Commonwealth Club, SF, CA
- 350. (R) TechCentralSF, Gamification Panel, SF, CA
- 351. (R) Langley Porter Neuroscience Seminar Series, UCSF, SF, CA
- 352. (R) PACCTR Seminar, UCSF, SF, CA
- 353. (R) Department of Psychology, University of Amsterdam, NL
- 354. (R) Department of Neurology and Neurological Sciences, Stanford University, CA
- 355. (R) Commonwealth Club of California, Social Networking and the Brain, SF, CA
- 356. (R) Mini-medical school, UCSF, CA
- 357. (R) Retraining the Brain, UCSF, CA
- 358. (R) Neuroscience & Psychology, Florida Atlantic University, FLA
- 359. (R) York House High School, Vancouver, Canada
- 360. (R) Brain Research Center, University of British Columbia, Canada
- 361. (R) Max Planck Institute for Human Development, Berlin, Germany
- 362. (R) Grattan Elementary School (4<sup>th</sup> grade), SF, CA

**2012 42 presentations**

- 222. (I) Unicharm Co. – Berkeley, CA
- 223. (I) Assisted Living Federation of America (ALFA), “Aging”, Annual Meeting, Dallas, TX
- 224. (I) Assisted Living Federation of America (ALFA), “Alzheimer’s Disease”, Annual Meeting, TX
- 225. (I) IDEO Executive Leadership Meeting, SF, CA
- 226. (I) NIMH Cognitive Remediation for Mental Disorders Meeting, Washington DC
- 227. (I) SharpBrains Virtual Summit
- 228. (I) Cold Spring Harbor, Inaugural Cognitive Aging Workshop, “Prefrontal Cortex”, NY
- 229. (I) Cold Spring Harbor, Inaugural Cognitive Aging Workshop, “Aging Prefrontal Cortex”, NY
- 230. (I) 8<sup>th</sup> Forum of Parkinson's Disease and Geriatric Neurological Disease, Kyoto, Japan
- 231. (I) Kokoro Research Center, Kyoto University, Japan
- 232. (I) Neuromarketing meeting, Bogota, Columbia
- 233. (N) Recent Advances in Neurology, SF, CA
- 234. (N) South by South West (SXSW), Austin, TX
- 235. (N) Leadership Legacy Life (L3), SF, CA
- 236. (N) ANA’s Translational and Clinical Research Course for Clinician-Scientists, SF, CA
- 237. (N) American Society for Stereotactic and Functional Neurosurgery, SF, CA
- 238. (N) Games for Health, Boston, MA
- 239. (N) KQED Forum – NPR
- 240. (N) White House – Games: Impact on Attention and Well-Being, Washington, DC.
- 241. (N) Annual AARP meeting – Gala presentation with Mickey Hart (Grateful Dead), New Orleans
- 242. (N) Gates Foundation – Engagement and Academic Tenacity, Boston, MA
- 243. (N) Neurotech Leader’s Forum, SF, CA
- 244. (N) NAKFI Informed Brain in a Digital World Conference, LA, CA
- 245. (N) Audio Engineering Society, “The Future is now”, SF, CA
- 246. (N) Institute of Medicine, Cognitive aging planning meeting, DC
- 247. (N) American College of Neuropsychopharmacology meeting, FLA
- 248. (R) Young Presidents Organization, Northern California Chapter, SF, CA

- 249. (R) San Quentin Prison, CA
- 250. (R) Society for Neuroscience Staff, DC
- 251. (R) Center for Visual Science, University of Rochester, NY
- 252. (R) Health 2.0; SF chapter, CA
- 253. (R) Stanford Institute for Neuro-innovation and Translational Neuroscience Seminar, CA
- 254. (R) Department of Physiology Annual Retreat, UCSF, CA
- 255. (R) Commonwealth Club, with Matt Richtel (NYT columnist and Pulitzer Prize winner), CA
- 256. (R) Plymouth Place Retirement Community, Chicago, CA
- 257. (R) Commonwealth Club, CA
- 258. (R) Pepinsky Early Career Award Presentation, Columbus Ohio
- 259. (R) UCSF Memory and Aging Center, Grand Rounds, SF, CA
- 260. (R) UCSF Psychiatry Department, Grand Rounds, SF, CA
- 261. (R) UCSF Neurology Grand Rounds, SF, CA
- 262. (R) Center for Neural Engineering and Prostheses – UCB/UCSF, CA
- 263. (R) Children's Day School (7<sup>th</sup>/8<sup>th</sup> grade), SF, CA

**2013 56 presentations**

- 264. (I) TEDx ABS – Mumbai, India – “Closing the Loop between our Brain and Education”
- 265. (I) ABS- Unplugged Conference- 2 Lectures; “The Distracted Mind”, Mumbai, India
- 267. (I) ABS- Unplugged Conference- 2 Lectures; “Plasticity across the Lifespan”, Mumbai India
- 269. (I) ABS- Unplugged Conference- 2 Lectures; “Mind and Brain”, Mumbai India
- 271. (I) FutureMed – Singularity University, CA
- 272. (I) Annual Baycrest Rotman Research Institute Neuroscience Conference, Toronto, CA
- 273. (I) Fjord global presentation, SF, CA
- 274. (I) ESCONS-2, LA, CA
- 275. (I) Aging and Cognition 2013, Dortmund Germany
- 276. (I) Stimulating Brain function, Barcelona Spain
- 277. (I) Cognitive Enhancement, Barcelona Spain
- 278. (I) Science Foo, Google Campus, CA
- 279. (I) HYASTA CEO Conference, Half Boon Bay, CA
- 280. (I) WHO Global Forum on Innovation for Ageing Populations – ‘Cognitive training’, Kobe Japan
- 281. (I) WHO Global Forum on Innovation for Ageing Populations - ‘Future Innovations’, Kobe Japan
- 282. (N) University of California Foundation, CA
- 283. (N) Cognitive Remediation Conference, NYC, NY
- 284. (N) Games, Learning and Society (GLS) Conference, Madison, WI
- 285. (N) TMS course lecturer, Beth Israel Medical Center, Boston, MA
- 286. (N) Games for Health, Boston, MA
- 287. (N) Nielsen, SF, CA
- 288. (N) SoCap, SF, CA
- 289. (N) Living Well Summit, 3 Lectures, Vail, CA
- 290. (N) Congressional Neuroscience Caucus, 2 Lectures, Washington DC
- 292. (N) Health 2.0, Santa Clara, CA
- 293. (N) Annual AARP Meeting, Atlanta, GA
- 294. (N) International Neuroethics Society, SD CA
- 295. (N) Dreamforce, Unusual Thinkers Series, SF CA
- 296. (N) Sandy Hook Symposium, SF CA
- 297. (R) Young Presidents Organization, Barbary Coast Chapter, Half Moon Bay, CA
- 298. (R) UC Irvine Distinguished Lecture on Brain, Learning and Memory, Irvine, CA
- 299. (R) UC Irvine Center for the Neurobiology of Learning and Memory Seminar, Irvine, CA
- 300. (R) Fjord Kitchen panel, Future of wearable technology, SF, CA
- 301. (R) Menlo School Workshop, CA

- 302. (R) Capacitor Lab Workshop, CA
- 303. (R) Multidisciplinary Research Colloquium Series in Aging, USC, CA
- 304. (R) Presidio Hill School (7<sup>th</sup>/8<sup>th</sup> grade), SF, CA
- 305. (R) Science Online Bay Area, SF, CA
- 306. (R) Mozart and the Mind Series, Scripps, SD, CA
- 307. (R) SF Music Tech Summit, SF, CA
- 308. (R) Neuroscience of Magic, SF, CA
- 309. (R) UCSF Foundation Board of Directors, SF CA
- 310. (R) The Terraces, Los Altos, CA
- 311. (R) UCSD Cognitive Neural Systems Seminar, SD, CA
- 312. (R) UIUC Neuroscience Colloquia, Champaign-Urbana IL
- 313. (R) UCSF Discovery Talk, SF CA
- 314. (R) Meyer Sound, Berkeley CA
- 315. (R) UCSF OSR, SF CA
- 316. (R) Stanford University, "Neuroscience of Magic, Palo Alto CA
- 317. (R) MVLA Parent Education Series, Los Altos, CA
- 318. (R) The Battery – Inaugural speaker, SF CA
- 319. (R) GE BOD Meeting, NYC

**2014 74 presentations**

- 320. (I) Takeda Neuroinnovation Symposium, Deerfield, IL
- 321. (I) NVIDIA GTC – Panel session, San Jose CA
- 322. (I) NVIDIA GTC, San Jose CA
- 323. (I) Games for Change, NYC
- 324. (I) Milken Institute Global Conference, CA
- 325. (I) Oxford University, UK
- 326. (I) Digital Education Show Asia, Kuala Lumpur Malaysia
- 327. (I) Digital Education Show Asia, - Symposium session, Kuala Lumpur Malaysia
- 328. (I) ESCAN, Dortmund Germany
- 329. (I) Cold Spring Harbor Symposium: Cognition, NY
- 330. (I) Frontiers in Neuroscience Symposium, Buzios Brazil
- 331. (I) Le Web, Paris, France
- 332. (I) WPO, SF CA
- 333. (I) TEDMED 2014 cohost - "*We just don't know*", SF, CA
- 334. (I) TEDMED 2014 cohost "*Human Nature Inside and Out*", SF, CA
- 335. (I) TEDMED 2014 cohost "*Don't you dare talk about this*", SF, CA
- 336. (I) Dreamforce 2014, SF, CA
- 337. (I) GE - Whitney Conference 2014, NY
- 338. (I) Reddit AMA
- 339. (I) WSJ.D Live, Laguna, CA
- 340. (I) Atlantic Philanthropies, UCSF, CA
- 341. (I) SharpBrains Summit
- 342. (I) Exponential Medicine, SD, CA
- 343. (I) Brain Trust IV – GE Healthcare, DC
- 344. (N) Learning and the Brain, SF CA
- 345. (N) Learning and the Brain, SF CA
- 346. (N) SXSW – Interactive, Austin, TX
- 347. (N) SXSW – Music, Austin, TX
- 348. (N) Mozart and the Brain, SD, CA
- 349. (N) Summer Institute in Cognitive Neuroscience, Santa Barbara, CA
- 350. (N) Society for Neuroscience Social Issues Roundtable, Washington DC

- 351. (N) Bohemian Grove - Museum Talk, CA
- 352. (N) AARP Annual Meeting, San Diego, CA
- 353. (N) AARP Annual Meeting – Salon, San Diego, CA
- 354. (N) Member Access Pacific –, Portland OR
- 355. (N) ESA’s 5<sup>th</sup> Annual Games & Learning Summit, LA CA
- 356. (N) Institute of Medicine (IOM) – Cognitive Aging Workshop, Irvine CA
- 357. (N) NIMH Outreach Partnership Program Webinar
- 358. (N) Entrepreneur’s Club, SF CA
- 359. (N) Summit Series, Eden, Utah
- 360. (N) CNC Annual Symposium, Stanford CA
- 361. (N) Learning and the Brain, Boston MA
- 362. (N) International Society for Neurofeedback and Research (ISNR), Irvine CA
- 363. (N) Brain Trust IV – GE Healthcare, DC
- 364. (R) Nerd Nite, SF CA
- 365. (R) UCSF Digital Health Seminar, SF CA
- 366. (R) Frontiers of Science – UCSF, SF, CA
- 367. (R) Sony Computers/PlayStation, San Mateo, CA
- 368. (R) Zynga Z-series, SF, CA
- 369. (R) Oculus VR, Irvine CA
- 370. (R) Osher Lifelong Learning Institute, Berkeley, CA
- 371. (R) California Academy of Science – Nightlife, SF, CA
- 372. (R) Beyond Academia Conference, Berkeley, CA
- 373. (R) UC Davis M.I.N.D. Institute, Sacramento, CA
- 374. (R) Neuroscape Lab Launch Event, SF, CA
- 375. (R) GE Ventures, CA
- 376. (R) NIH STEP Forum, Bethesda, MD
- 377. (R) Duke University, Durham, NC
- 378. (R) NIMH Mental Health Services Meeting, Bethesda, MD
- 379. (R) Digital Health Summer Summit, SF CA
- 380. (R) Buck Institute Seminar, Marin CA
- 381. (R) Alzheimer’s Australia, Melbourne, Australia
- 382. (R) Alzheimer’s Australia, Melbourne, Australia
- 383. (R) BioMelbourne Network, Melbourne, Australia
- 384. (R) Arc Fusion Talk, SF, CA
- 385. (R) SmartNight Out, Yerba Buena Center, SF, CA
- 386. (R) Synaptic Hour – Capacitor Dance - Yerba Buena Center, SF, CA
- 387. (R) Distinguished Speaker Series, University of Missouri
- 388. (R) Brain Machine Interface Seminar, UC Berkeley
- 389. (R) Rossmoor Senior Adult Community, Walnut Creek, CA
- 390. (R) CPMC grand rounds, SF CA
- 391. (R) Commonwealth Club, SF CA
- 392. (R) Bohemian Club – Museum Talk, SF CA
- 393. (R) American Museum of Natural History - Sackler Brain Course, NYC

**2015 66 presentations**

- 394. (I) Israel Brain Tech 2015, Tel Aviv, Israel
- 395. (I) Wisdom 2.0, SF, CA
- 396. (I) TOBAT Medical Student Congress, Ankura Turkey
- 397. (I) Wired Health 2015, London UK
- 398. (I) Microsoft CEO Summit, Seattle WA
- 399. (I) Sci Foo – Google, Santa Clara CA

400. (I) International Academy of Trial Lawyers, Seattle OR
401. (I) Digital Education Show Africa (Johannesburg)
402. (N) AAAS Science & Technology Policy Fellow Seminar, DC
403. (N) White House - OSTP Workshop: Bridging Neuroscience and Learning, DC
404. (N) Summit Series, Utah
405. (N) Annual Advances in Neurology, Half moon bay, CA
406. (N) Business Council Meeting, Menlo Park, CA
407. (N) Singularity University Conference, Tel Aviv, Israel
408. (N) SXSW Interactive, Austin TX
409. (N) AARP Annual Meeting, Miami FLA
410. (N) AARP Annual Meeting – Salon, Miami FLA
411. (N) GE Healthcare
412. (N) Global Cre8 Summit, Tianan Cyber Park, Shenzhen China
413. (N) Wearable Devices & Brain Health 2015, NYC
414. (N) Mind Body Green – Revitaltize, Tuscon Arizona
415. (N) Amazon Healthcare, Seattle WA
416. (N) Transformative Technology Conference, Palo Alto, CA
417. (N) NAS digital media panel, SD, CA
418. (N) GSV Executive Summit, Colorado
419. (N) BrainFutures Conference, Annapolis, MD
420. (N) Tedx Sonoma, CA
421. (N) Institute of Music and Neurological Function, 20<sup>th</sup> Anniversary, NYC
422. (N) American Association of Medical Colleges – Medical Education meeting, MD
423. (N) American Association of Medical Colleges – Medical Education meeting, MD
424. (N) Summit at Sea, International Waters
425. (N) Summit at Sea – ARC Fusion, International Waters
426. (N) Biogen Tech Symposium Keynote, Boston CA
427. (R) Distinguished Lecture Series, UC-Davis Center for Mind & Brain, CA
428. (R) Distinguished Visiting Speaker’s Series, Dept of Psychology, Washington University, MO
429. (R) Pacific Union Club – Ends and Means luncheon, SF CA
430. (R) KAUST, Saudi Arabia
431. (R) King Abdulaziz Medical Center, Saudi Arabia
432. (R) Pacific Union Club, SF CA
433. (R) Commonwealth Club, Lafayette CA
434. (R) Hearst Innovation Lab, SF CA
435. (R) Bar Ilan University, Tel Aviv, Israel
436. (R) San Francisco Symphony luncheon, SF CA
437. (R) Advancing Wellbeing Seminar – MIT Media Lab, Boston MA
438. (R) Dolby Labs, Cupertino CA
439. (R) Apple Studio Team, Cupertino CA
440. (R) Apple Special Projects, Cupertino CA
441. (R) Neuroscience Seminar Series, Salk Institute, SD CA
442. (R) Trinity College, Dublin Ireland
443. (R) IDEO, Palo Alto CA
444. (R) Knoll Inc, SF, CA
445. (R) Aging Gracefully Chamber, SF, CA
446. (R) Neurogaming Conference, SF, CA
447. (R) CERSI Advisory Board meeting, Stanford University, CA
448. (R) SF Chamber of Commerce, SF, CA
449. (R) Informed Health 2015, SF CA
450. (R) Nueva Innovative Learning Conference, CA



- 451. (R) BSSR – NIH
- 452. (R) Nima Capital, NYC
- 453. (R) RWJF – What’s Next Health, NJ
- 454. (R) Johns Hopkins University, Baltimore MD
- 455. (R) Neurology Grand Rounds, Johns Hopkins Medical Center, Baltimore MD
- 456. (R) INI- Music of the Mind, LA CA
- 457. (R) SAGE Center Distinguished Fellow Lecture, SB CA
- 458. (R) TAG – UCSF, CA
- 459. (R) MIT Press, Boston CA

**2016 70 presentations**

- 460. (I) Imperial College of London and GE Healthymagination, London UK
- 461. (I) International Conference on Music Perception and Cognition, SF CA
- 462. (I) World Congress on Psychophysiology, Havana Cuba
- 463. (I) Ecosperity Conference 2016, Singapore
- 464. (I) Samsung CEO Summit, CA
- 465. (I) Wellcome Trust Frontiers, Ware UK
- 466. (I) XPrize Adventure Trip, SF CA
- 467. (I) Partners HealthCare Connected Health, Boston MA
- 468. (I) The View, Turino Italy
- 469. (I) The View, Turino Italy
- 470. (I) Fortune Brainstorm HEALTH, San Diego, CA
- 471. (I) Singularity talk - Necker Island
- 472. (I) Singularity talk - Necker Island
- 473. (I) Pfizer Global Corporate Affairs Meeting, NYC
- 474. (N) Leaders Sport Performance Summit (RedBull), LA, CA
- 475. (N) National Council for Behavioral Health, Las Vegas, NV
- 476. (N) Near Future Summit, San Diego, CA
- 477. (N) National Capital Area Traumatic Brain Injury (TBI) Research Symposium, Bethesda
- 478. (N) CNS meeting symposium, NYC
- 479. (N) Vision Monday, NYC
- 480. (N) Games for Change/Tribeca Film Festival, NYC
- 481. (N) Further Future, Nevada
- 482. (N) HOW Design Live, Atlanta, GA
- 483. (N) Brain Health and Performance Summit, Ohio
- 484. (N) X-Tech (with Tim Ferris), SF, CA
- 485. (N) X-Tech, SF, CA
- 486. (N) Rosenman Institute Symposium, SF CA
- 487. (N) Games for Change, NY NY
- 488. (N) Fusion 2016 Executive Summit, Washington DC
- 489. (N) Aspen BrainLab, Aspen CO
- 490. (N) Research Advisory Committee on Gulf War Veterans’ Illnesses, SF CA
- 491. (N) One Mind, SF CA
- 492. (N) CACUBO, SF CA
- 493. (N) Aging 2.0 SF CA
- 494. (N) TEAAM-I, NY
- 495. (N) NAESM, DC
- 496. (N) UCSF Chancellors Circle, SF CA
- 497. (N) UCLA - Neuroscience, Psychiatry and Art conference, LA
- 498. (N) The Ethics of Emerging Technologies Workshop, SD, CA
- 499. (N) Design in Healthcare conference, SF CA

- 500. (R) UCLA Neuroscience Seminar Series, LA, CA
- 501. (R) YPO, LA, CA
- 502. (R) Informed Health Summit, SF, CA
- 503. (R) Sales Force Health and Well Being Speaker Series, SF, CA
- 504. (R) UT Austin Neuroscience seminar series, Austin, TX
- 505. (R) UC Berkeley Cognitive Neuroscience seminar series, Berkeley, CA
- 506. (R) HowiDecide Foundation Dinner, Villanova, PA
- 507. (R) HowiDecide Foundation Breakfast, Villanova, PA
- 508. (R) UT Dallas – Center for Brain Health, Dallas, TX
- 509. (R) OHSU Brain Awareness, Portland OR
- 510. (R) Picci Memorial Lecture, Oakland, CA
- 511. (R) Leonardo Art Science Evenings (LASER), SF CA
- 512. (R) IMHRO, SF, CA
- 513. (R) UCSF Health Executive Council, SF CA
- 514. (R) Upload Collective, SF CA
- 515. (R) SFMOMA panel (Meyer Sound)
- 516. (R) Nueva Salon, SF, CA
- 517. (R) Columbia University, Psychiatry Dept, NY
- 518. (R) Plug and Play, Sunnyvale CA
- 519. (R) ECNU - Shanghai China
- 520. (R) IFF, NJ
- 521. (R) CHUV, Lausanne Switzerland
- 522. (R) CVIR UCSF, CA
- 523. (R) Franklin Institute, Philadelphia PA
- 524. (R) COBTEK Seminar, Nice France
- 525. (R) Dolby Family Roundable, SF CA
- 526. (R) Commonwealth Club, SF CA
- 527. (R) Upload Collective, SF CA
- 528. (R) Samovar Tea talk, SF CA
- 529. (R) Thrive Global, NYC

**2017      68 presentations**

- 530. (I) Cognitive Neuroscience Society Keynote, SF CA
- 531. (I) Applied Brilliance, Tulum Mexico
- 532. (I) ASU-GSV Summit 2017, Salt Lake City, UT
- 533. (N) TIGER 21, Boca Raton, FLA
- 534. (N) Founders Fund – Brain Health, SF CA
- 535. (N) Golden Door, SD CA
- 536. (N) Digital-Health Related Clinical Trials, SF CA
- 537. (N) UCB/UT Dallas Brain Health Symposium, Berkeley CA
- 538. (N) Cognitive Aging Summit III, DC
- 539. (N) TTL/Vanguard conference, Boston MA
- 540. (N) Venturebeat interview with Rob Reid, Oakland CA
- 541. (N) Fortune Brainstorm HEALTH, SD CA
- 542. (N) Multi-sensory meeting keynote, Nashville TN
- 543. (N) X Tech Expo - Interview with Jon Favreau, SF CA
- 544. (N) X Tech Expo Keynote, SF CA
- 545. (N) Lightning in a Bottle, Bradley CA
- 546. (R) Kepler's Books, Menlo Park CA
- 547. (R) World's Fair Nano, SF CA
- 548. (R) Brian Change to Mind, SF CA

- 549. (R) Academic Business Officers Group, SF CA
- 550. (R) Mind Science Foundation - Distinguished Speaker Series, San Antonio TX
- 551. (R) California Education Leadership Symposium, LA CA
- 552. (R) UCSF Neurology Grand Debates, SF CA
- 553. (R) SXSW - GE Improv Science, Austin TX
- 554. (R) MIT bookstore, Boston MA
- 555. (R) Etkin lab, Stanford University, Palo Alto CA
- 556. (R) Memory and Aging Center Grand Rounds, UCSF, SF CA
- 557. (R) Drinks with Doctors, The Battery, SF CA
- 558. (R) Move for Minds - Equinox Sports Club, SF CA
- 559. (I) Phillips Neuroimaging leadership meeting, New Orleans LA
- 560. (N) E3- ESA Annual Games & Learning Summit, LA CA
- 561. (I) 2b AHEAD Future Congress, Wolfsburg Germany
- 562. (R) Max Plank Institute, Berlin Germany
- 563. (R) Commonwealth Club with Jack Kornfield, Mill Valley CA
- 564. (N) Yonder Mountain, Eden Utah
- 565. (R) Bread and Roses, Ross CA
- 566. (I) IAGG, SF CA
- 567. (R) New Venture Club, Redwood City, CA
- 568. (R) Games for Change (NYC) 20 min (VR talk)
- 569. (N) KES, São Paulo, Brazil
- 570. (N) Napa Valley Reserve, St Helena CA
- 571. (N) BrainFutures 2017 Panel, DC
- 572. (N) BrainFutures 2017 Keynote, DC
- 573. (N) Takeda – Big Data Summit, Boston MA
- 574. (N) JazzVP LP meeting, Hong Kong
- 575. (N) MedImmune California Translational Science Forum, Mountainview CA
- 576. (R) Google X, CA
- 577. (R) Exploratorium, SF, CA
- 578. (R) University of Vermont, CA X 4
- 582. (R) Linked-In, SF CA
- 583. (R) BayLean, Apple Campus, CA
- 584. (R) Family Office Network, CA
- 585. (R) Assigned Judges Conference, Pomona, CA.
- 586. (R) UCSF Campaign Launch, SF CA
- 587. (R) Autodesk Summit – Future of Work, SF CA
- 588. (N) Psychology of Technology conference, Berkeley, CA
- 589. (R) Napa Valley Reserve, NYC
- 590. (I) International Conference on ADHD, Atlanta GA
- 591. (R) Learning and the Brain, Boston MA
- 592. (R) MITRE Innovation Speaker Series, DC
- 593. (N) CNS Summit, Boca Raton FLA
- 594. (N) International Conference on Ageing, Adelaide Australia
- 595. (N) Neurofeedback (rtFIN) Conference, Nara, Japan.
- 596. (I) SharpBrains Summit
- 597. (R) Joint Translational Neuroscience Seminar, Harvard & MIT, Boston CA

**2018 44 presentations**

- 598. (I) CES Digital Health Summit, Las Vegas
- 599. (R) Cal Academy of Science - Thinks and Drinkers, SF CA
- 600. (I) BIG Axis Summit, Aruba

- 601. (R) The Academy, SF CA
- 602. (N) Golden Door, CA
- 603. (R) Computer History Museum, Mountain View, CA
- 604. (N) AAAS, Austin TX
- 605. (R) Optimal Wellness, Rossmore, CA
- 606. (R) Distinguished Brain Science Lectures, Geneva Switzerland
- 607. (N) Doximity, SF CA
- 608. (N) Deloitte, Dallas TX
- 609. (R) Distracted Mind talk, SF CA
- 610. (R) ASCPT, Florida
- 611. (N) Museum of Natural History with Mickey Hart, NYC (X 3)
- 614. (R) Center for Vital Longevity, Dallas
- 615. (R) UT Dallas
- 616. (R) UT Dallas
- 617. (N) First Republic – 2018 Deposit Conference, SF CA
- 618. (N) Munich Neuroscience Lecture Series, Munich, Germany
- 619. (I) ASP conference, Cologne, Germany
- 620. (I) ASP conference, Cologne, Germany
- 621. (I) Economist - Future of Neuroscience, Boston MA
- 622. (N) FFL Partner meeting, Half Moon Bay, CA
- 623. (I) A-Fest MindValley, Sardinia, Italy
- 624. (I) A-Fest MindValley, Sardinia, Italy
- 625. (N) EduTech Keynote, Sydney Australia
- 626. (N) AITD National Conference, Sydney Australia
- 627. (N) Attorneys' Liability Assurance Society, Carlsbad, California
- 628. (I) Nexxworks talk, SF CA
- 629. (L) AIM talk, Atherton CA
- 630. (L) Apple, Mountainview CA
- 631. (N) Sound Health: Music and the Mind - Kennedy Center, DC
- 632. (N) Golden Door - Bergdorf Goodman, NYC
- 633. (N) Zarrow Symposium Keynote, Tulsa AZ
- 634. (L) Abode Salon, Eselan CA
- 635. (I) World Knowledge Forum, Seoul Korea
- 636. (I) World Knowledge Forum, Seoul Korea
- 637. (I) World Frontiers Forum, Boston MA
- 638. (N) Digital Media and Developing Minds Congress, Cold Spring Harbor NY
- 639. (I) Deutsche Bank Innovation Lab, CA
- 640. (N) VR Privacy Summit, Stanford CA
- 641. (L) Werqwise, SF CA

**2019      34 presentations**

- 642. (I) Bill Gates – Global Good, Seattle WA
- 643. (L) Brain Power Hub, SF CA
- 644. (N) The Giving Pledge. LA CA
- 645. (N) TRISH AR/VR workshop, Online
- 646. (L) Entrepreneur Seminar, UCSF, CA
- 647. (L) Hack Mental Health, SF CA
- 648. (N) Virtual Medicine, LA CA
- 649. (L) IndieBio, SF CA
- 650. (L) Gilead Sciences - GTech Community, Foster City, CA
- 651. (N) Silicon Valley Bank Healthcare Connect, Sonoma, CA

- 652. (N) Logitech Cognitive Performer SF CA
- 653. (L) Healthcare Summit, Hangzhou China
- 654. (L) Jaio Tong Medical Center, Shanghai China
- 655. (L) Huashan Hosoiat, Shanghai China
- 656. (N) AIM retreat, Carmel CA
- 657. (N) Awakened Futures Summit - Psychedelics, Technology and Meditation, SF CA
- 658. (L) Gen Next, SF CA
- 659. (N) Aspen Brain Lab, Aspen CA
- 660. (N) McGovern Foundation Board meeting, SF CA
- 661. (N) Commonwealth Club, Mountainview CA
- 662. (L) The Battery, SF CA
- 663. (N) The Napa Valley Reserve, Napa CA
- 664. (N) Mayfield Annual conference , Menlo Park CA)
- 665. (L) Division of Psychiatry - Imperial College ,London
- 666. (I) Neurotech Conference, Lausanne Switzerland
- 667. (I) INTERFACE Health Int'l Summit, Vancouver CA
- 668. (I) INTERFACE Health Int'l Summit, Vancouver CA
- 669. (N) Chinese Neuroscience Society talk, Shanghai China
- 670. (L) Shanghai Institute for Visual Arts / SIVA, Shanghai China
- 671. (L) Innovative Learning Conference -Nueva School, Palo Alto CA
- 672. (N) Brain Health Project Symposium, SF CA
- 673. (N) NASA Symposium, SF CA
- 674. (N) Transformative Tech Conference, Palo Alto CA
- 675. (I) Nexxwork, SF CA

**Think tanks:**

- 2011 Applied Brilliance Salon: The shape of the Future, SF, CA
- 2012 White House – Games: Impact on Attention and Well-Being, Washington, DC.  
Games for Health Strategies, Portland, Maine  
NAKFI Informed Brain in a Digital World Conference, LA CA  
Institute of Medicine, Cognitive Aging Meeting, Washington DC
- 2013 Brain Health Summit- Meeting of Experts, Palo Alto CA  
President’s Circle, NAS/NAM/IOM, Washington DC  
Science Foo, Google, CA  
Health Games, Maine  
UCSF 2.0, San Francisco CA  
Brain Trust II – GE Healthcare, San Diego CA  
Human Performance Optimization Workgroup – NIH/DoD, Washington, DC
- 2014 Cognitive Design – US Army, San Francisco CA  
Cognition in the Wild (NAKFI grant) – Moab, Utah  
Brain Trust IV – GE Healthcare, DC
- 2015 White House – OSTP: Bridging Neuroscience and Learning  
Science Foo, Google, CA  
Brain Trust V- GE Healthcare, Geneva Switzerland
- 2016 Healthy Populations in the 21st Century, London UK  
Wellcome Trust Frontiers, Ware UK  
Dolby Family Roundable, SF CA
- 2017 Meeting on Methods in Cognitive Training, Boston MA  
Future of Work, Autodesk, SF, CA
- 2018 Technology for Compassion and Empathy Summit, CA

## Profiles:

- 1997: The Cortical Scholar Prize: Dr. Adam Gazzaley” *Cerebral Cortex* 7(5): 472 (1997)  
2003: Focusing on the Big Picture. Chen, I. *Science's SAGE KE* (10 September 2003).  
2012: Apple Video Profile: <https://www.youtube.com/watch?v=PDo9OK-5rqU>  
2015: Tim Ferris Show: <http://fourhourworkweek.com/2015/06/22/adam-gazzaley/>  
2015: The Legendary Life: <http://www.legendarylifepodcast.com/podcast/123-adam-gazzaley-biohacking-your-brain-for-health-focus-and-productivity/>  
2015: The Insight: <http://www.52-insights.com/adam-gazzaley-mind-games-neuroscience/>  
2015: People Behind the Science: <http://www.peoplebehindthescience.com/dr-adam-gazzaley/>  
2016: Brainfluence Project: <http://www.rogerdooley.com/ep-141-distracted-mind-dr-adam-gazzaley>  
2016: BrainMatters: <http://brainpodcast.com/post/146373100779/episode-42-enhancing-cognition-with-video-games>  
2016: Medscape: [http://www.medscape.com/viewarticle/868723#vp\\_2](http://www.medscape.com/viewarticle/868723#vp_2)  
2016: Pioneering Ideas: <https://soundcloud.com/rwif-podcasts/your-brain-on-games-rwif-pioneering-ideas-podcast-episode-12>  
2016: People Behind the Science: <http://www.peoplebehindthescience.com/dr-adam-gazzaley/>  
2016: The Doctor Paradox: <http://thedoctorparadox.com/adamgazzaley/>  
2016: Shrink Rap Radio: <http://shrinkrapradio.com/489-the-promise-of-technology-for-the-aging-brain-with-dr-adam-gazzaley/>

## Media Coverage:

2005	ABC News Forbes Magazine	BBC News	webMD
2006	Wall Street Journal	ABC News	
2007	Wired Magazine		
2008	TIME Magazine PBS Science Special The Guardian UK NPR	Wall Street Journal Scientific American Mind Telegraph UK	NBC Nightly News CBC Radio Popular Photography
2009	Discover Magazine San Francisco Magazine	The Today Show User Experience Magazine	BBC World Service News
2010	New York Times (X3) KALW radio Globe and Mail PBS Science Special	CNN/KSRO radio NPR- Science Friday SELF magazine Discover Magazine	Contra Costa Times WPR Oprah Magazine
2011	KQED Radio (X3) New York Times Science Magazine CNN Live National TV Wired USA Today New York Post Nature neuropod Alzforum news	SF Chronicle (X4) TIME US News & World Report LiveScience CBS News Radio Miami Herald Processor Magazine AARP Radio Futures in Biotech	CNN.com (X3) MSNBC Telegraph LA Times WebMD Sun Vancouver KALW public radio Dana Foundation website UCSF News
2012	New York Times (X2) AP Mobile	Wired Web MD	TIME Discover Magazine

	Wall Street Journal AARP video profile Xconomy i09 website Conde Nast Huffington Post	UCSF News Men's Health BBC Click! KQED Forum – NPR Financial Times; Germany Gavin Newsom TV show	SF Chronicle Wall Street Journal (online) Commonwealth Club/NPR Nature Forbes The Scientist
2013	NBC News CNN Boston Globe New York Times Wall Street Journal National Geographic Neurology Today ABC News	KLOS LA rock radio Discovery channel New Yorker NPR X 3 The Economist AlzForum Associated Press CBS News	Financial Times LA Times Globe and Mail Forbes BBC News UCSF News Nature News Al Jazeera America
2014	NPR New York Times National Geographic The Guardian ABC (Australian Nat'l TV) Boston Globe	Washington Post Wall Street Journal Wired UK Venture Beat The Age New York Times Magazine	SF Chronicle ABC National News NPR Science Friday Fast Company Globe and Mail The Verge
2015	Wired UK NPR – Morning Edition BBC NPR Fast Company Huffington Post	New York Times Mercury News The Insight KQED Xconomy	Playboy Magazine Tim Ferris Show New York Times PB Newshour Wall Street Journal
2016	NBC TODAY show Portland Tribune CNN Health Fortune	The Oregonian Forbes Science NPR	Wall Street Journal Medscape PBS News Hour Telegraph
2017	NBC TODAY show Venture Beat Wired Quartz	Wall Street Journal Scientific American CNBC Observer	Fortune The Verge Gamasutra Scientific American
2018	JAMA MSBC Wired	AAAS CNN	MM&M BBC
2019	JAMA MSBC	Reader's Digest Men's Health	Reuter's

## Publications (142 total)

<https://www.ncbi.nlm.nih.gov/pubmed/?term=gazzaley>

### Highlights

1. Plasticity of glutamate receptors. Earliest scientific contributions were on the plasticity of NMDA glutamate receptors in the hippocampus in response to aging, hormonal manipulations and brain lesions. Plasticity of both protein and mRNA levels at the subcellular domain were not well appreciated at this time. New methodology was developed using confocal microscopy to quantify changes, and utilized a novel multi-methodological approach (immunocytochemistry and in-situ hybridization) to explore concurrent protein and mRNA changes.
  - a. **Gazzaley, A.**, Siegel, S.J., Kordower, J.H., Mufson, E.J. and Morrison, J.H. Circuit-specific alterations of N-methyl-D-aspartate receptor subunit 1 in the dentate gyrus of aged monkeys. Proceedings of the National Academy of Science USA 93(7): 3121-5 (1996)
  - b. **Gazzaley, A.**, Weiland, N.G., McEwen, B.S. and Morrison, J.H. Differential regulation of NMDAR1 mRNA and protein by estradiol in the rat hippocampus. Journal of Neuroscience 16(21): 6830-8 (1996)
  - c. **Gazzaley, A.**, Benson, D.L., Huntley, G.W. and Morrison, J.H. Differential subcellular regulation of NMDAR1 protein and mRNA in dendrites of dentate gyrus granule cells after perforant path transection. Journal of Neuroscience 17(6): 2006-17 (1997)
2. Age-related changes in cognitive control. While it was appreciated from a behavioral perspective that older adults were vulnerable to a negative impact of interference, the neural basis of these age-related changes were not yet understood. Applying new methodology developed to assess functional connectivity (“Beta-series correlation approach”) and a multi-methodological approach of fMRI, sMRI and EEG, these studies characterized neural signatures of age-related alterations associated with the management of distractions and interruptions.
  - a. **Gazzaley, A.**, Cooney, J.W., Rissman, J., D’Esposito, M. Top-down suppression deficit underlies working memory impairment in normal aging. Nature Neuroscience 8(10), 1298-1300. (2005)
  - b. **Gazzaley, A.**, Clapp, W., Kelley, J., McEvoy, K., Knight, R., D’Esposito, M. Age-related top-down suppression deficit in the early stages of cortical visual memory processing. Proceedings of the National Academy of Science USA 105(35): 13122-13126. (2008) PMID: PMC2529045
  - c. Clapp, W., Rubens, M. & **Gazzaley, A.** A deficit in switching between functional brain networks underlies the impact of multitasking on working memory in older adults. Proceedings of the National Academy of Science USA 108: 7212–7217(2011) PMID: PMC3084135
  - d. Chadick, Z., Zanto, T., **Gazzaley, A.**, Structural and functional differences in medial prefrontal cortex underlie distractibility and suppression deficits in ageing. Nature Communications 5(4223): 1-12 (2014) PMID: 24979364 PMID: PMC4088291
3. Neural Mechanisms of Cognitive Control. New methodology was developed to assess functional connectivity, as well as a multi-methodological approach that integrated fMRI, sMRI, EEG and TMS to characterize neural mechanisms of top-down control. The network interactions that serve as a foundation for higher-order human control systems had not been well described. T
  - a. Clapp, W., Rubens, M.T., **Gazzaley, A.** Mechanisms of working memory disruption by external interference. Cerebral Cortex 20(4): 859-72 (2010) PMID: PMC2837090



- b. Wais, P., Rubens, M., Boccanfuso, J. & **Gazzaley, A.** Neural Mechanisms Underlying the Impact of Visual Distraction on Long-Term Memory Retrieval. Journal of Neuroscience (2010) PMID: PMC2919837
  - c. Zanto, T., Rubens, M., Thangavel, A. & **Gazzaley, A.** A causal role of the prefrontal cortex in top-down modulation of early visual processing and working memory. Nature Neuroscience 14: 656-661 (2011) PMID: PMC3083493
  - d. Chadick, J.Z. & **Gazzaley, A.** Differential coupling of visual cortical areas with the default network or frontal-parietal network based on task goals. Nature Neuroscience 14: 830-2 (2011) PMID: PMC3125492
4. Plasticity of Cognitive Control Processes. The development of training programs that evoke meaningful and sustainable changes in human cognition had been a major goal of neuroscientists, but one fraught with many challenges. Studies here involved a novel approach to the development of such cognitive enhancement tools, as well as rigorous methodology to validate them and assess transfer of benefits to non-trained cognitive domains.
- a. Anguera, Boccanfuso, Rintoul, Al-Hashimi, Faraji, Janowich, Kong, Larraburo, Rolle, Johnston, **Gazzaley**. Video game multitasking training enhances cognitive control in older adults. Nature 501: 97-101 (2013) PMID: PMC3983066
  - b. Mishra, J., de Villers-Sidani, E., Merzenich, M., **Gazzaley, A.** Adaptive Training Diminishes Distractibility in Aging across Species. Neuron 84: 1091-1103 (2014) PMID: PMC4264379
  - c. Mishra J, Anguera, J., **Gazzaley A.**, Video Games for Neuro-Cognitive Optimization Neuron 90(2), 214–218 (2016)
  - d. Ziegler Z, Simon A, Gallen C, Skinner S, Janowich J, Volponi J, Rolle C, Mishra J, Kornfield J, Anguera J, and **Gazzaley A.**, Closed-loop Digital Meditation Improves Sustained Attention in Young Adults Nature Human Behavior 3:746-757 (2019)

### **Books**

1. **Gazzaley, A** and Rosen, L. The Distracted Mind: Ancient Brains in a High-Tech World. MIT Press 2016

### **Empirical Research Papers**

2. **Gazzaley, A.**, Siegel, S.J., Kordower, J.H., Mufson, E.J. and Morrison, J.H. Circuit-specific alterations of N-methyl-D-aspartate receptor subunit 1 in the dentate gyrus of aged monkeys. Proceedings of the National Academy of Science USA 93(7): 3121-5 (1996)
3. **Gazzaley, A.**, Weiland, N.G., McEwen, B.S. and Morrison, J.H. Differential regulation of NMDAR1 mRNA and protein by estradiol in the rat hippocampus. Journal of Neuroscience 16(21): 6830-8 (1996)
4. **Gazzaley, A.**, Benson, D.L., Huntley, G.W. and Morrison, J.H. Differential subcellular regulation of NMDAR1 protein and mRNA in dendrites of dentate gyrus granule cells after perforant path transection. Journal of Neuroscience 17(6): 2006-17 (1997)
5. **Gazzaley, A.**, Thakker, M.M., Hof, P.R. and Morrison, J.H. Preserved number of entorhinal cortex layer II neurons in aged macaque monkeys. Neurobiology of Aging 18(5): 549-53 (1997)
6. Adams, M.M., **Gazzaley, A.** and Morrison, J.H. Attenuated lesion-induced N-methyl-D-aspartate receptor (NMDAR) plasticity in the dentate gyrus of aged rats following perforant path lesions. Experimental Neurology 172(1): 244-9 (2001)

7. Rissman, J.\* , **Gazzaley, A.\*** and D'Esposito, M. Measuring functional connectivity during distinct stages of a cognitive task. Neuroimage 23(2), 752-763 (2004)
8. **Gazzaley, A.\***, Rissman, J.\*. and D'Esposito, M. Functional Connectivity during working memory maintenance. Cognitive, Affective and Behavioral Neuroscience 4(4), 580-599 (2004)
9. **Gazzaley, A.**, Cooney, J.W., McEvoy, K., Knight, R. and D'Esposito, M. Top-down enhancement and suppression of the magnitude and speed of neural activity. Journal of Cognitive Neuroscience. 17(3), 507-517 (2005)
10. **Gazzaley, A.**, Cooney, J.W., Rissman, J. and D'Esposito, M. Top-down suppression deficit underlies working memory impairment in normal aging. Nature Neuroscience 8(10), 1298-1300b (2005)
11. D'Esposito, M., Cooney, J.W., Postle, B.R., **Gazzaley, A.** and Gibbs, S.E. The role of the prefrontal cortex on component processes of working memory: Evidence from lesion and fMRI data. Journal of the International Neuropsychological Society 12(2), 248-260 (2006)
12. Huh, T., Kramer, J., **Gazzaley, A.** and Delis, D. Response bias and aging on a recognition memory task. Journal of the International Neuropsychological Society 12(1), 1-7 (2006)
13. Handwerker, D.A., **Gazzaley, A.**, Inglis, B. and D'Esposito, M. Reducing Vascular Variability of fMRI Data across Aging Populations Using a Breathholding Task. Human Brain Mapping. Human Brain Mapping.28(9): 846-59 (2006)
14. Krawczyk, D.C., **Gazzaley, A.** and D'Esposito, M. Reward modulation of visual association cortex during an incentive working memory task. Brain Research 1141:168-177 (2007)
15. **Gazzaley, A.**, Sheridan, M.A., Cooney, J. and D'Esposito, M. Age-related deficits in component processes of working memory. Neuropsychology 21(5): 532-539 (2007)
16. **Gazzaley, A.**, Rissman, J., Cooney, J.W., Rutman, A., Seibert, T., Clapp, W. and D'Esposito, M. Functional interactions between prefrontal and visual association cortex contribute to top-down modulation of visual processing. Cerebral Cortex 17:i125-i135 (2007)
17. Rissman, J., **Gazzaley, A.** and D'Esposito, M. Dynamic adjustments in frontal, hippocampal, and inferior temporal interactions with increasing visual working memory load. Cerebral Cortex 18(7): 1618-29 (2007)
18. **Gazzaley, A.**, Clapp, W., Kelley, J., McEvoy, K., Knight, R. and D'Esposito, M. Age-related top-down suppression deficit in the early stages of cortical visual memory processing. Proceedings of the National Academy of Science USA 105(35): 13122-13126 (2008)
19. Zanto, T. and **Gazzaley, A.** Neural suppression of irrelevant information underlies optimal working memory performance. Journal of Neuroscience 29 (10): 3059-3066 (2009)
20. Rissman, J., **Gazzaley, A.** and D'Esposito, M. The effect of non-visual working memory load on top-down modulation of visual processing. Neuropsychologia 47 (7): 1637-1646 (2009)
21. Pa, J., Boxer, A.L., Freeman, B.S., **Gazzaley, A.**, Kramer, J., Miller, B.L., Chao, L.L., Weiner, M.D., Neuhaus, J. and Johnson, J.K., Clinical and neuroimaging characteristics of dysexecutive mild cognitive impairment. Annals of Neurology 65: 414-423 (2009)
22. Morsella, E., & Lanska, M., Berger, C. C. and **Gazzaley, A.** Indirect cognitive control through top-down activation of perceptual symbols. European Journal of Social Psychology 39, 1173-1177 (2009).
23. Rutman, A.M., Clapp, W.C., Chadick, J.Z. and **Gazzaley, A.** Early top-down control of visual processing predicts working memory performance. Journal of Cognitive Neuroscience 22(6); 1224-1234 (2009)

24. Morsella, E., Wilson, L.E., Berger, C.C., Honhongva, M., **Gazzaley, A.** and Bargh, J.A. Subjective aspects of cognitive control at different stages of processing: Conscious conflict and double-blindness. Attention, Perception, & Psychophysics 71: 1807-1824 (2009)
25. Berry, A.S., Zanto, T.P., Rutman, A.M., Clapp, W.C. and **Gazzaley, A.** Practice-related improvement in working memory is modulated by changes in processing external interference. Journal of Neurophysiology 102(3): 1779-1789 (2009)
26. Clapp, W., Rubens, M.T. and **Gazzaley, A.** Mechanisms of working memory disruption by external interference. Cerebral Cortex 20(4): 859-72 (2010)
27. Zanto, T., Toy, B. and **Gazzaley, A.** Delays in neural processing during working memory encoding in normal aging. Neuropsychologia 48(1): 13-25 (2010)
28. Zanto, T., Hennigan, K., Ostberg, M., Clapp, W. and **Gazzaley, A.** Predictive knowledge of stimulus relevance does not influence top-down suppression of irrelevant information in older adults. Cortex 46 (4): 564-574 (2010)
29. Clapp, W. and **Gazzaley, A.** Distinct mechanisms for the impact of distraction and interruption on working memory in aging. Neurobiology of Aging 33: 134-148 (2010)
30. Wais, P., Rubens, M., Boccanfuso, J. and **Gazzaley, A.** Neural Mechanisms Underlying the Impact of Visual Distraction on Long-Term Memory Retrieval. Journal of Neuroscience 30(25): 8541-8550 (2010)
31. Berry, A., Zanto, P. Clapp, W., Hardy, J., Delahunt, P., Mahncke, H. and **Gazzaley, A.** The Influence of Perceptual Training on Working Memory in Older Adults PLoS ONE 5(7): e11537. doi:10.1371/journal.pone.0011537 (2010)
32. Zanto, T. Rubens, M. and **Gazzaley, A.** The inferior frontal junction and top-down modulation of visual feature processing. Neuroimage 53: 736-745 (2010)
33. Bollinger, J., Rubens, M., Zanto, T.P. and **Gazzaley, A.** Expectation-driven changes in cortical functional connectivity influence working-memory and long-term memory performance. Journal of Neuroscience 30: 14399-14410 (2010)
34. Wendelken, C., Baym, C.L., **Gazzaley, A.** and Bunge, S.A. Neural evidence of weaker attentional modulation in children relative to young adults. Developmental Cognitive Neuroscience 1: 175-186 (2011)
35. Bollinger, J., Rubens, M., Masangkay, E., Kalkstein, J. and **Gazzaley, A.** An expectation-based memory deficit in aging. Neuropsychologia 49: 1466-1475 (2011)
36. Zanto, T., Rubens, M., Thangavel, A. and **Gazzaley, A.** Causal role of the prefrontal cortex in top-down modulation of visual processing and working memory. Nature Neuroscience 14: 656-661 (2011)
37. Clapp, W., Rubens, M. and **Gazzaley, A.** Deficit in switching between functional brain networks underlies the impact of multitasking on working memory in older adults. Proceedings of the National Academy of Science USA 108: 7212–7217(2011)
38. Chadick, J.Z. and **Gazzaley, A.** Differential coupling of visual cortical areas with the default network or frontal-parietal network based on task goals. Nature Neuroscience 14: 830-2 (2011)
39. Hubbard, J., **Gazzaley, A.** and Morsella, E. Traditional response interference from anticipated action outcomes: A response-effect compatibility paradigm. Acta Psychologica 138: 106-110 (2011)
40. Zanto, T.P., Pan, P., Liu, H., Bollinger, J., Nobre, K. and **Gazzaley, A.** Age-related changes in orienting attention in time. Journal of Neuroscience 31:12461–12470 (2011)
41. Anguera, J. and **Gazzaley, A.** Dissociation of motor and sensory inhibition processes in normal aging. Clinical Neurophysiology (2011)

42. Wais, P. and **Gazzaley, A.** The impact of auditory distraction on retrieving visual memories. Psychonomic Bulletin and Review 18: 1090-1097 (2011)
43. Kalkstein, J., Checkersfield, K., Bollinger, J. and **Gazzaley, A.** Diminished top-down control underlies a visual imagery deficit in normal aging. Journal of Neuroscience 31: 15768-15774 (2011)
44. Wais, P., Kim, O. and **Gazzaley, A.** Distractibility during Episodic Retrieval Is Exacerbated by Perturbation of Left Ventrolateral Prefrontal Cortex Cerebral Cortex 22:717-724 (2012)
45. Wais, P., Martin, G. and **Gazzaley, A.** The impact of visual distraction on long-term memory retrieval in cognitive aging. Brain Research 1430 pp. 78-85 (2012)
46. Mishra, J, Gazzaley, A. Attention distributed across sensory modalities enhances perceptual performance. Journal of Neuroscience 32(35):12294 –12302 (2012)
47. Cashdollar, N., Fukuda, K., Bocklage, A., Aurtenetxe, S.K., Vogel, E. and **Gazzaley, A.** Prolonged disengagement from attentional capture in normal aging. Psychology and Aging 28(1): 77-86 (2013)
48. Hubbard, J., Rigby, T., Godwin, C. A., **Gazzaley, A.**, & Morsella, E. Representations in working memory yield interference effects found with externally-triggered representations. Acta Psychologica 142(1):127-35 (2013)
49. Pa, J., Berry, A., Compagnone, Boccanfuso, J., Greenhouse, I., Rubens, M., Johnson, J., & **Gazzaley, A.** Cholinergic modulation of functional network connectivity associated with attention and memory in older adults with mild memory deficits. Annals of Neurology 73(6): 762-773 (2013)
50. Mishra, J., Zanto, T., Nilakantan A. and Gazzaley, A. Comparable mechanisms of working memory interference by auditory and visual motion in youth and aging. Neuropsychologia 51 (2013)
51. Zanto, T., Sekuler, R., Dube, C., **Gazzaley, A.** Age-related changes in expectation based modulation of motion detectability. PLoS One (2013)
52. Anguera, J., Boccanfuso, J., Rintoul, J., Al-Hashimi, O., Faraji, F., Janowich, J., Kong, E., Larraburo, Rolle, C., Johnston, E., **Gazzaley, A.** Video game training enhances cognitive control in older adults. Nature 501: 97-101 (2013)
53. Allen, A. K., Wilkins, K., Gazzaley, A., & Morsella, E. Conscious thoughts from reflex-like processes: A new experimental paradigm from consciousness research. Consciousness and Cognition 22, 1318-1331 (2013)
54. Zanto, T., Chadick, J.Z., **Gazzaley, A.** Anticipatory alpha phase influences visual working memory performance. Neuroimage, 85: 794-802 (2013)
55. Anguera, J., Lymna, K., Zanto, T., Bollinger, J., **Gazzaley, A.** Reconciling the influence of task-set switching and motor inhibition processes on stop signal after-effects Frontiers of Psychology 4: 649 (2013)
56. Zanto, T., Chadick, Z., Satris, and **Gazzaley, A.** Rapid functional reorganization in human cortex in response to neural perturbation. Journal of Neuroscience 33(41): 16268-16274 (2013)
57. Reches A, Laufer I, Ziv K, Cukierman G, McEvoy K, Ettinger M, Knight RT, **Gazzaley A**, Geva AB. Network dynamics predict improvement in working memory performance following donepezil administration in healthy young adults. Neuroimage (2013)
58. Mishra, J. and **Gazzaley, A.** Preserved Discrimination Performance and Neural Processing during Crossmodal Attention in Aging. PLoS One 8(11): e81894, doi:10.1371/journal.pone.0081894 (2013)
59. Zanto, T., Pa, J., **Gazzaley, A.** Reliability measures of functional magnetic resonance imaging in a longitudinal evaluation of mild cognitive impairment NeuroImage 84: 443-452 (2014)

60. Jantz, T. K., Tomory, J. J., **Gazzaley, A.**, & Morsella, E. Subjective aspects of action control for delayed actions: Action-related imagery. Journal of Mental Imagery 37, 21-48 (2014)
61. Jantz, T. K., Tomory, J. J., Merrick, C., Cooper, S., **Gazzaley, A.**, & Morsella, E. Subjective aspects of working memory performance: Memoranda-related imagery. Consciousness and Cognition. 25: 88-100 (2014).
62. Pa, J., Dutt, S., Mirsky, K., Heuer, W., Keselman, P., Kong, A., Trujillo, A., **Gazzaley, A.**, Kramer, J., Seeley, W., Miller, B., Boxer, A. The functional oculomotor network and saccadic cognitive control in healthy elders Neuroimage 95:61-68,(2014)
63. Chadick, Z., Zanto, T., **Gazzaley, A.**, Structural and functional differences in medial prefrontal cortex underlie distractibility and suppression deficits in ageing. Nature Communications 5(4223): 1-12 (2014)
64. Wais, P. & **Gazzaley, A.** Distraction impairs perceptual discrimination in older adults. Psychology and Aging 29. 666-671.
65. Guerreiro, M., Anguera, J., Mishra, J., Van Gerven, **Gazzaley, A.** Age-equivalent top-down modulation during cross-modal selective attention. Journal of Cognitive Neuroscience 26(12): 2827-2839 (2014)
66. Mishra, J., Rolle, C., **Gazzaley, A.** Neuroplasticity Underlying Visual Perceptual Learning in Aging. Brain Research (In press)
67. Mishra, J., de Villers-Sidani, E., Merzenich, M., **Gazzaley, A.** Adaptive Training Diminishes Distractibility in Aging across Species. Neuron 84(5): 1091-1103 (2014)
68. Rolle, C., Voytek, B., **Gazzaley, A.** Exploring the Potential of the iPad and Xbox Kinect for Cognitive Science Research. Games for Health Journal 4(3): 221-224 (2015)
69. Merrick, C., Farnia, M., Jantz, T. K., **Gazzaley, A.**, & Morsella, E. External control of the stream of consciousness: Stimulus-based effects on involuntary thought sequences. Consciousness and Cognition 33: 217-225 (2015)
70. Hsu W-Y, Anguera, J., Zanto, T., **Gazzaley, A.** Delayed enhancement of multitasking performance: Effects of anodal transcranial direct current stimulation on the prefrontal cortex. Cortex 69: 175-185 (2015)
71. Al-Hashimi, O., Zanto, T., **Gazzaley, A.** Neural Sources of Performance Decline During Continuous Multitasking. Cortex 71: 49-57 (2015)
72. Voytek, B., Kramer, M., Case, J, Lepage, K., Tempesta, Z., Knight, R., **Gazzaley, A.** Age-related Changes in 1/f Neural Electrophysiological Noise. Journal of Neuroscience 35(38): 13257-13265 (2015)
73. Cho, H., Zarolia, P., **Gazzaley, A.**, & Morsella, E. Involuntary symbol manipulation (Pig Latin) from external control: Implications for thought suppression. Acta Psychologica, 166, 37-41 (2016).
74. Anguera, J., Jordan, J.T, Castaneda, D., **Gazzaley, A.**, Areán, P.A. Conducting a fully mobile and randomised clinical trial for depression: access, engagement and expense. BMJ Innovations Vol 2 (1): 14-21 (2016).
75. Mishra, J., Sagar, R., Joseph, A., **Gazzaley, A.** and Merzenich. M.M. Training sensory signal-to-noise resolution in children with ADHD in a global mental health setting. Nature Translational Psychiatry 6, e781 (2016)
76. Areán P.A., Hallgren K.A., Jordan J.T., **Gazzaley A.**, Atkins D.C., Heagerty P.J., Anguera J.A. The use and effectiveness of mobile apps for depression: results from a fully remote clinical trial Journal of medical internet research 18(12): e330 (2016)

77. Gray, D.T., Smith, A.C., Burke, S.N., **Gazzaley, A.**, Barnes, C.A. Attentional updating and monitoring and affective shifting are impacted independently by aging in macaque monkeys. *Behav Brain Res.* Jun 28. pii: S0166-4328 (2016)
78. Padgaonkar, N., Sagar, R., Bollinger, J., Zanto, T. and **Gazzaley, A.** Predictive cues and age-related declines in working memory performance. *Neurobiology of Aging* 49, 31–39 (2017)
79. Wais, P.E., Jahanikia, S., Steiner, D., Stark, C.E.L., **Gazzaley, A.** Retrieval of high-fidelity memory arises from distributed cortical networks. *Neuroimage* 149, 178–189 (2017)
80. van Schouwenburg MR, Zanto TP, **Gazzaley, A.** Spatial Attention and the Effects of Frontoparietal Alpha Band Stimulation. *Front Hum Neurosci.* Jan 24;10: 658. (2017)
81. Voytek, B., Samaha, J., Rolle, Greenberg, Z., Gill. N., Porat, S., Kader, T., Rahman, S. Malzyner, R., and **Gazzaley, A.** Preparatory encoding of the fine scale of human spatial attention. *Journal of Cognitive Neuroscience* Jul;29(7):1302-1310. (2017)
82. Hsu WY, Zanto TP, van Schouwenburg MR, **Gazzaley A.** Enhancement of multitasking performance and neural oscillations by transcranial alternating current stimulation. *PLoS One* May 31;12(5):e0178579 (2017)
83. Rolle, C.E., Anguera, J.A, Skinner, S.N., Voytek, B., **Gazzaley, A.** Enhancing spatial attention and working memory in younger and older adults. *Journal of Cognitive Neuroscience* Sept; 29(9): 1483-1497 (2017)
84. Cushing, D., **Gazzaley, A.**, & Morsella, E. Externally controlled involuntary cognitions and their relations with other representations in consciousness. *Consciousness and Cognition* 55: 1-10 (2017)
85. Ziegler D.A., Janowich J.R., **Gazzaley A.**, Differential impact of interference on internally- and externally-directed attention. *Scientific Reports.* Feb 6; Article number: 2498 (2018)
86. Brandes-Aitken A, Anguera JA, **Gazzaley A**, Marco EJ. Characterizing Cognitive and Visuomotor Control in Children with Sensory Processing Dysfunction and Autism Spectrum Disorders. *Neuropsychology.* (2018).
87. Pratap, A., Renn, B.N., Volponi, J., Mooney, S.D., **Gazzaley, A.**, Areán, P.A., Anguera, J.A. Using mobile apps to assess and treat depression in Hispanics and Latinos: Results from a fully remote and randomized clinical trial. *Journal of Medical Internet Research*, 20(8): e10130. (2018).
88. Wais PE, Montgomery O, Stark CEL, **Gazzaley A.** Evidence of a Causal Role for mid-Ventrolateral Prefrontal Cortex Based Functional Networks in Retrieving High-Fidelity Memory. *Sci Rep.* Oct 5;8(1):14877 (2018)
89. Hsu WY, Zanto TP, Gazzaley A. Parametric Effects of Transcranial Alternating Current Stimulation on Multitasking Performance. *Brain Stimulation* 2019 Jan - Feb;12(1):73-83 (2018)
90. Brandes-Aitken A, Anguera JA, Chang YS, Demopoulos C, Owen JP, **Gazzaley A**, Mukherjee P, Marco EJ. White Matter Microstructure Associations of Cognitive and Visuomotor Control in Children: A Sensory Processing Perspective. *Front Integr Neurosci.* Jan 14;12:65. (2018)
91. Bove RM, Rush G, Zhao C, Rowles W, Garcha P, Morrissey J, Schembri A, Alailima T, Langdon D5, Possin K, **Gazzaley A**, Feinstein A, Anguera J. A Videogame-Based Digital Therapeutic to Improve Processing Speed in People with Multiple Sclerosis: A Feasibility Study. *Neurol Ther.* 8(1) 135-145(2019)
92. Ziegler Z, Simon A, Gallen C, Skinner S, Janowich J, Volponi J, Rolle C, Mishra J, Kornfield J, Anguera J, and **Gazzaley A.**, Closed-loop Digital Meditation Improves Sustained Attention in Young Adults. *Nature Human Behavior* 3:746-757 (2019)

93. Cushing, D., **Gazzaley, A.**, & Morsella, E. Involuntary mental rotation and visuospatial imagery from external control. *Consciousness and Cognition* 75(2019)
94. Zanto, T., Padgaonkar, N., Nourishad, A., **Gazzaley, A.** A tablet-based assessment of rhythmic ability. *Frontiers in Psychology* (2019)

**Reviews, Book Chapters & Commentaries:**

95. Morrison, J.H. and **Gazzaley, A.** Age-related alterations of the N-methyl-D-aspartate receptor in the dentate gyrus. *Molecular Psychiatry* 1(5): 356-8. (1996)
96. Morrison, J.H., Siegel, S.J., **Gazzaley, A.** and Huntley, G.W. Glutamate receptors: Emerging links between subunit proteins and specific excitatory circuits in primate hippocampus and neocortex. *Neuroscientist* 2:272-283. (1996)
97. **Gazzaley, A.**, Kay, S. and Benson, D.L. Dendritic spine plasticity in hippocampus. *Neuroscience* 111(4): 853-62. (2002)
98. D'Esposito, M., Deouell, L. and **Gazzaley, A.** Alterations in the BOLD fMRI signal with ageing and disease: A challenge for neuroimaging. *Nature Reviews Neuroscience* 4: 863-872. (2003)
99. **Gazzaley, A.** and D'Esposito, M. The contribution of functional brain imaging to our understanding of cognitive aging. *Science: SAGE KE* (29 January 2003)
100. **Gazzaley, A.** and D'Esposito, M. BOLD Functional MRI and Cognitive Aging. In: R. Cabeza, D. Park, L. Nyberg. (Eds.) *Cognitive Neuroscience of Aging*. Oxford University Press, New York. (2004)
101. D'Esposito, M. and **Gazzaley, A.** Neurorehabilitation of executive function. In: Selzer, M., Clarke, S., Cohen, L., Duncan and Gage, R. (Eds) *Textbook of Neural Repair and Rehabilitation*. Cambridge University Press (2005)
102. **Gazzaley, A.** and D'Esposito, M. Considerations for the application of BOLD fMRI to neurologically impaired populations. In: Hillary, F.G., DeLuca, J (Eds) *Functional Neuroimaging in Clinical Populations*. Guilford Press (2005)
103. **Gazzaley, A.** and D'Esposito, M. Neural Networks: An empirical neuroscience approach toward understanding cognition. *Cortex* 1037-1040 (2006)
104. **Gazzaley, A.** and Small, S. Functional MRI and Alzheimer's Disease. In: D'Esposito, M., (Ed) *Functional MRI: Applications in Clinical Neurology and Psychiatry*. Taylor and Francis Medical Publishing (2006)
105. **Gazzaley, A.** and D'Esposito, M. Top-down Modulation in Visual Working Memory. In: Osaka, N, Logie, R and D'Esposito, M. (Eds) *Working Memory: Behavioral and Neural Correlates*. Oxford University Press (2007)
106. **Gazzaley, A.** and D'Esposito, M. Unifying prefrontal cortex function: Executive control, neural networks and top-down modulation. In: Miller, B. and Cummings, J. (Eds) *The Human Frontal Lobes*. Guildford Publications (2007)
107. **Gazzaley, A.** and D'Esposito, M. Top-down Modulation and Normal Aging. *Annals of the New York Academy of Science*. 1097, 67-83 (2007).
108. D'Esposito, M. Jagust, W. and **Gazzaley, A.** Methodological and conceptual issues in the study of the aging brain. In, D'Esposito, M. and Jagust, W (Eds) *Imaging the Aging Brain*. Oxford University Press (2009)

109. Morsella, E., Zarolia, P. and **Gazzaley, A.** Cognitive Conflict and Consciousness. (p19-46). In Gawronski B. and Strack F. (Eds), Cognitive Consistency: A Unifying Concept in Social Psychology. New York: Guilford. pp. 19-46 (2010)
110. **Gazzaley, A.** Top-down modulation: The crossroads of perception, attention and memory. Proc. SPIE, Vol. 7527, 75270A (2010)
111. **Gazzaley, A.** Influence of early attentional modulation on working memory Neuropsychologia 49: 1410-1423 (2011)
112. **Gazzaley A.** Cell Phone Exposure and Brain Glucose Metabolism. Journal Watch – Neurology 5:40 (2011)
113. D’Esposito, M. and **Gazzaley, A.** Can Age-Associated Memory Decline be Treated? New England Journal of Medicine 1346-7 (2011)
114. **Gazzaley, A.** and Nobre, A.C. Top-down modulation: Bridging Selective Attention and Working Memory. Trends in Cognitive Science 16: 129-135 (2011)
115. **Gazzaley, A.** and Small, S. Alzheimer's disease. Network. 22 (1-4) 173-85 (2011)
116. Mishra, J., Bavelier, D. & **Gazzaley, A.** How to Assess Gaming-induced Benefits on Attention and Working Memory Games for Health Journal. 2012, 1(3): 192-19
117. Godwin, C. A., **Gazzaley, A.**, & Morsella, E., Homing in on the brain mechanisms linked to consciousness: Buffer of the perception-and-action interface. In A. Pereira and D. Lehmann’s (Eds.), The unity of mind, brain and world: Current perspectives on a science of consciousness. (pp. 43-76) Cambridge, UK: Cambridge University Press (2013)
118. Voytek, B. and **Gazzaley, A.** Stimulating the Aging Brain. Annals of Neurology 73(1): 1-3 (2013)
119. **Gazzaley, A.** Top-down modulation and Cognitive Aging. In Stuss, D.T and. Knight, R.T. (Eds), Principles of Frontal Lobe Function, 2<sup>nd</sup> Edition (2013)
120. Zanto, T. and **Gazzaley, A.** Fronto-parietal network: flexible hub of cognitive control, Trends in Cognitive Sciences 17(12): 602-603 (2013)
121. Mishra, J., Anguera, J.A., Ziegler, D. & **Gazzaley, A.** A Cognitive Framework for Understanding and Improving Interference Resolution in the Brain. Progress in Brain Research 207: 351-377 (2013)
122. Mishra, J., & **Gazzaley, A.** (2014). Attentional Control of Multisensory Integration is Preserved in Aging. In G. R. Mangun (Ed.), Cognitive Electrophysiology of Attention: Signals of the Mind (pp. 190–204). Elsevier (2014)
123. Zanto, T. and **Gazzaley, A.** Aging and Attention. In Nobre, A.C. and Kastner, S. (Eds), Handbook of Attention Oxford University Press (pp. 927-971). Oxford, UK: Oxford University Press (2014)
124. Mishra, J., and **Gazzaley, A.**, Harnessing the Neuroplastic Potential of the Human Brain; the Future of Cognitive Rehabilitation. Frontiers in Human Neuroscience (2014)
125. Wais, P. & **Gazzaley, A.** Distractibility during retrieval of long-term memory: domain-general interference, neural networks and increased susceptibility in normal aging. Frontiers in Psychology 5(280): 1-12 (2014)
126. Pa, J. & **Gazzaley, A.** Flavanol-rich food for thought. Nature Neuroscience 17: 1724-25 (2014)
127. Ziegler, D., Mishra, J., **Gazzaley, A.** The Acute and Chronic Impact of Technology on our Brain. In L. Rosen (ed.), Psychology, Technology and Society. Wiley-Blackwell (In Press)
128. Mishra J, **Gazzaley A.** Closed Loop Rehabilitation of Age-related Cognitive Disorders. Seminars in Neurology 34: 584-590. (2014)



129. Mishra J, Bavelier D, **Gazzaley A.** Probing the plasticity of Attention and Working Memory. In: Hoffman RR, Hancock PA, Scerbo MW, Parasuraman R, Szalma JL, eds. The Cambridge Handbook of Applied Perception Research. Cambridge, MA, US: Cambridge University Press; 2015:148-174
130. Mishra J., **Gazzaley A.**, Closed-loop cognition: the next frontier arrives Trends in Cognitive Sciences. 19(5): 242-243 (2015)
131. Janowich, J., Mishra, J., **Gazzaley, A.** A Cognitive Paradigm to Investigate Interference in Working Memory by Distractions and Interruptions. J. Vis. Exp. 101: e52226 (2015)
132. Hsu W-Y., Ku Y., Zanto T., **Gazzaley A.** Effects of non-invasive brain stimulation on cognitive function in healthy aging and Alzheimer's disease: a systematic review and meta-analysis. Neurobiology of Aging. 36(8): 2348-59 (2015)
133. Morsella, E., Godwin, C. A., Jantz, T. J., Krieger, S. C., & Gazzaley, A. Homing in on consciousness in the nervous system: An action-based synthesis. Behavioral and Brain Sciences 1-106 (2015)
134. Anguera, J., **Gazzaley, A.** Video games, cognitive exercises, and the enhancement of cognitive abilities. Current Opinion in Behavioral Sciences 4: 160-165 (2015)
135. Mishra J, **Gazzaley A.**, Cross-species Approaches to Cognitive Neuroplasticity Research. NeuroImage 1;131:4-12 (2016)
136. Mishra J, Anguera, J., **Gazzaley A.**, Video Games for Neuro-Cognitive Optimization Neuron 90(2), 214–218 (2016)
137. Morsella, E., Godwin, C. A., Jantz, T. J., Krieger, S. C., Gazzaley, A. Passive Frame Theory: A New Synthesis. Behavioral and Brain Sciences 39. e100 (2016)
138. Zanto, T., **Gazzaley, A.** Cognitive Control and the Ageing Brain. The Wiley Handbook of Cognitive Control Edited by Tobias Egner. John Wiley & Sons (Chichester, West Sussex, UK): 467-490 (2016)
139. Zanto, T., **Gazzaley, A.** Selective Attention and Inhibitory Control in the Aging Brain. Cognitive Neuroscience of Aging: Linking Cognitive and Cerebral Aging, Edited by Roberto Cabeza, Lars Nyberg, and Denise C. Park. OUP (2016)
140. Manera V, Ben-Sadoun G, Aalbers T, Agopyan H, Askenazy F, Benoit M, Bensamoun D, Bourgeois J, Bredin J, Bremond F, Crispim-Junior C, David R, De Schutter B, Ettore E, Fairchild J, Foulon P, **Gazzaley A**, Gros A, Hun S, Knoefel F, Olde Rikkert M, Phan Tran MK, Politis A, Rigaud AS, Sacco G, Serret S, Thümmel S, Welter ML, Robert P. *Recommendations for the Use of Serious Games in Neurodegenerative Disorders: 2016 Delphi Panel* Front Psychol. Jul 25;8:1243 (2017)
141. White, LR., , Patricia A., Foster TC, **Gazzaley, A.**, Disterhoft, J. *How do we validate approaches that aim to harness reserve to improve the aging brain?* Neurobiology of Aging 83: 145-9 (2019)
142. Zanto TP, **Gazzaley A.** *Aging of the frontal lobe.* Handbook Clinical Neurol. 163:369-389 (2019).

## Biography

Dr. Adam Gazzaley obtained an M.D. and Ph.D. in Neuroscience at the Mount Sinai School of Medicine in New York, completed Neurology residency at the University of Pennsylvania, and postdoctoral training in cognitive neuroscience at University of California, Berkeley. He is currently the David Dolby Distinguished Professor of Neurology, Physiology and Psychiatry at University of California, San Francisco and the Founder & Executive Director of Neuroscape, a translational neuroscience center at UCSF engaged in technology creation and scientific research.

At Neuroscape, he leads the design and development of novel brain assessment and cognitive optimization technologies to advance education, wellness, and medicine practices. Neuroscape's novel approach involves the development of custom-designed, closed-loop video games integrated with the latest advancements in software and hardware (virtual/augmented reality, motion capture, mobile physiological recording devices, transcranial electrical brain stimulation). These technologies are then advanced to rigorous, placebo-controlled research studies that evaluate their impact on cognition, as well as the neural mechanisms of these effects using a combination of functional magnetic resonance imaging (fMRI), electroencephalography (EEG) and transcranial magnetic stimulation (TMS).

Dr. Gazzaley is co-founder and Chief Science Advisor of *Akili Interactive*, a company developing therapeutic video games, *Sensync*, a company creating the first Sensory Immersion Vessel, and *JAZZ Venture Partners*, a venture capital firm investing in experiential technology to improve human performance. He has been a scientific advisor for over a dozen companies including Apple, GE, Nielsen, Deloitte, Magic Leap, and the VOID. He was a Science Board member of the President's Council on Fitness, Sports & Nutrition, and is currently a Board of Trustee and Science Council member of the California Academy of Sciences.

Dr. Gazzaley has filed multiple patents for his inventions, authored over 140 scientific articles, and delivered over 675 invited presentations around the world. His research and perspectives have been consistently profiled in high-impact media, such as *The New York Times*, *New York Times Magazine*, *New Yorker*, *Wall Street Journal*, *TIME*, *Discover*, *Wired*, *PBS*, *NPR*, *CNN* and *NBC Nightly News*. He wrote and hosted the nationally-televised *PBS* special "The Distracted Mind with Dr. Adam Gazzaley", and co-authored the 2016 MIT Press book "The Distracted Mind: Ancient Brains in a High-Tech World", winner of the 2017 PROSE Award in the category of Biomedicine and Neuroscience. Dr. Gazzaley has received many awards and honors, including the 2015 Society for Neuroscience – Science Educator Award.