

# Alexander V. Maier, Ph.D.



**VANDERBILT**  
College of Arts and Science

Assistant Professor  
Department of Psychology  
College of Arts and Science  
Vanderbilt University  
008 Wilson Hall  
111 21st Avenue South  
Nashville, TN 37240  
Phone: 615-322-7466  
Email: [alex.maier@vanderbilt.edu](mailto:alex.maier@vanderbilt.edu)  
Website: <http://maierlab.com>

## EDUCATION

- 2005: **Ph.D.** (“*summa cum laude*”) in Neural and Behavioral Sciences  
Max-Planck-Institute for Biological Cybernetics, Tübingen, Germany &  
Graduate School for Behavioral and Neurosciences, Tübingen, Germany
- 2002: **M.Sc.** in Neurobiology, Ludwig-Maximilians-University, Munich, Germany
- 1999: **B.Sc.** in Biology, Ludwig-Maximilians-University, Munich, Germany

## PROFESSIONAL EXPERIENCE:

- 2017-present: **Assistant Professor**, Department of Ophthalmology and Visual Sciences, Vanderbilt University
- 2011-present: **Assistant Professor**, Department of Psychology, Vanderbilt University, Nashville, TN, USA
- 2009-2011: **Research Fellow**, National Institutes of Health (NIH), Bethesda, MD, USA
- 2004-2008: **Visiting Fellow**, Unit of Cognitive Neurophysiology and Imaging,  
National Institutes of Mental Health (NIMH), Bethesda, MD, USA

## HONORS AND AWARDS:

- 2018: Vanderbilt Award for Excellence in Graduate Teaching** (*Vanderbilt College of Arts and Sciences*)
- 2015: Kavli Fellow** (*National Academy of Sciences*)
- 2015: Outstanding Teacher of the Year** (*Vanderbilt Brain Institute*)
- 2014: Janett Rosenberg Trubatch Career Development Award** (*Society for Neuroscience*)
- 2013: Alfred P. Sloan Research Fellowship Award** (*Sloan Foundation*)
- 2009: Fellows Award of Research Excellence** (*National Institutes of Health*)
- 2006: Klaus Tschira Award** (*German National Merit Foundation*)
- 2006: Julius Axelrod Memorial Fellowship Award** (*National Institutes of Health*)

## RESEARCH SUPPORT:

- 2018: R01EY029278-01 (PI: Frank Tong) – Role: Collaborator
- 2018: NVIDIA GPU Grant
- 2017-2022: NEI R01 (EY027402-01) – Role: PI
- 2016: Competitive Renewal, Career Starter Grant, Knights Templar Eye Foundation

2015: Career Starter Grant, Knights Templar Eye Foundation  
2013: Tom Slick Research Award, Mind Science Foundation  
2013-2015: Fellowship, Alfred P. Sloan Foundation  
2013-2016: Research Grant, Whitehall Foundation  
2012-13: Vanderbilt Discovery Grant  
2012-: Start-Up Grant, College of Arts and Science, Vanderbilt University  
Center for Integrative & Cognitive Neuroscience, Vanderbilt University  
Vanderbilt Vision Research Center  
2009-11: NIMH Research Fellowship  
2004-09: NIH Visiting Fellowship  
2001-04: Max Planck Society Graduate Student Fellowship

**PUBLICATIONS (44 total; H-index = 20; citations >2300):**

Cox, M.A., Dougherty, DK., Westerberg, J.A., Schall, M.S., & **Maier, A.** (2019) Binocular integration manifests as a transient spiking increase followed by selective suppression in primary visual cortex.  
*Journal of Vision* [in press]

Dougherty, K., Cox, M.A., Westerberg, J.A. & **Maier, A.** (2019)  
Binocular modulation of monocular V1 neurons.  
*Curr. Biol.* [in press]

Dougherty, K., Schmid, M. & **Maier, A.** (2019)  
Binocular response modulation in the lateral geniculate nucleus  
*J. Comp. Neurol.* *J Comp Neurol.* 527(3):522-534. PMID:29473163

Noel, J.P., David Simon, D., Thelen, A., **Maier, A.**, Blake, R. & Wallace, M.T. (2018)  
Probing Electrophysiological Indices of Perceptual Awareness Across Unisensory and Multisensory Modalities  
*J. Cogn. Neurosci.* 30(6):814-828. PMID:29488853

Cox, M.A., Dougherty, K., Westerberg, J.A., Moore, B.S., Adams, G.K., Reavis, E.A., Leopold, D.A. & **Maier, A.** (2017)  
Spiking suppression precedes cued attentional enhancement of neural responses in primary visual cortex.  
*Cerebral Cortex.* doi: 10.1093/cercor/bhx305. [Epub ahead of print] PMID:29186348

Dougherty, K., Cox, M.A., Ninomiya, T., Leopold, D.A. & **Maier, A.** (2017)  
Ongoing alpha activity in V1 regulates visually driven spiking responses.  
*Cereb. Cortex* 27(2):1113-1124 PMID:26656725

Shapcott, K.A., Schmiedt, J.T., Saunders, R.C., **Maier, A.**, Leopold, D.A. & Schmid, M.C. (2016)  
Correlated activity of cortical neurons survives extensive removal of feedforward sensory input.  
*Nature Sci. Rep.* 6: 34886.

Foster, B.L., He, B.J., Honey, C.J., Jerbi, K., **Maier, A.**, Saalmann, Y.B., (2016)  
Spontaneous neural dynamics and multi-scale network organization.  
*Front. Syst. Neurosci.* doi:10.3389/fnsys.2016.00007

Cox, M.A. & **Maier, A.** (2015)  
Filling-in the details of spatial interpolation: New evidence for parallel processing in mid-level vision.  
*Neuroscience of Consciousness.* 1-7

Ninomiya, T., Dougherty, K., Godlove, D.C., Schall, J.D. & **Maier, A.** (2015)  
Microcircuitry of agranular frontal cortex: contrasting connectivity between occipital and frontal areas.

*J. Neurophysiol.* 112:3242-3252  
PMCID: PMC4440241

Schmid, M.C. & **Maier, A.** (2015)  
To see or not to see - thalamo-cortical networks during blindsight and perceptual suppression.  
*Prog. Neurobiol.* 126:36-48

**Maier, A.**, Cox, M.A., Dougherty, K., Moore, B & Leopold, D.A. (2014)  
Anisotropy of ongoing neural activity in primate visual cortex.  
*Eye and Brain* 6(1):113-120

Schmiedt, J.T., **Maier, A.**, Fries, P., Saunders, R.C., Leopold, D.A. & Schmid, M.C. (2014)  
Beta oscillations dynamics in extrastriate cortex after removal of primary visual cortex.  
*J. Neurosci.* 34(35):11857-11864  
PMCID: PMC4145181

Godlove, D.C., **Maier, A.**, Woodman, G.F. & Schall, J.D. (2014)  
Microcircuitry of agranular frontal cortex: Testing the generality of the canonical cortical microcircuit.  
*J. Neurosci.* 34(15):5355-5369  
PMCID: PMC3983808

Cox, M.A., Lowe, K.A., Blake, R. & **Maier, A.** (2014)  
Sustained perceptual invisibility of solid shapes following contour adaptation to partial outlines.  
*Consciousness and Cognition* 26:37-50

Ghose, D., **Maier A.**, Nidiffer, A.R. & Wallace, M.T. (2014)  
Multisensory response modulation in the superficial layers of the superior colliculus.  
*J. Neurosci.* 34(12):4332-4344  
PMCID: PMC3960472

Schmid, M.C., Schmiedt, J.T., Peters, A.J., Saunders, R.C., **Maier, A.** & Leopold, D.A. (2013)  
Motion-sensitive responses in visual area V4 in the absence of primary visual cortex.  
*J. Neurosci.* 33(48):18740-18745  
PMCID: PMC3841445

**Maier, A.** (2013)  
Neuroscience: The cortical layering of visual processing.  
*Curr. Biol.* 23(21):R959-961

Cox, M.A., Schmid, M.C., Peters, A.J., Saunders, R.C., Leopold, D.A. & **Maier, A.** (2013)  
Receptive field focus of visual area V4 neurons determines responses to illusory surfaces.  
*Proc Natl Acad Sci U S A* 110(42):17095-17100  
PMCID: PMC3801031

Spaak, E., Bonnefond, M., **Maier, A.**, Leopold, D.A. & Jensen, O. (2012)  
Layer-specific entrainment of gamma-band neural activity by the alpha rhythm in monkey visual cortex  
*Curr. Biol.* 22(24):2312-2318  
PMCID: PMC3528834

**Maier, A.**, Panagiotaropoulos, T., Tsuchiya, N. & Keliris, G.A. (2012)  
Binocular rivalry: a gateway to studying consciousness.  
*Front. Hum. Neurosci.* 6:263  
PMCID: PMC3457016

Leopold, D.A. & **Maier, A.** (2011)  
Ongoing physiological processes in the cerebral cortex.  
*Neuroimage* 62(4):2190-200  
PMCID: PMC3288739

**Maier, A.**, Aura, C. & Leopold, D.A. (2011)

Infragranular origin of induced LFP responses in macaque primary visual cortex.

*J. Neurosci.* 31(6):1971-1980.

PMCID: PMC3075009

**Maier, A.**, Adams, G.K., Aura, C. & Leopold, D.A. (2010)

Distinct superficial and deep laminar domains of activity in the visual cortex during rest and stimulation.

*Front. Syst. Neurosci.* 4:31

PMCID: PMC2928665

Schölvinck, M.L., **Maier, A.**, Ye, F.Q., Duyn, J.H. & Leopold, D.A. (2010)

Neural basis of global resting state fMRI activity.

*Proc Natl Acad Sci U S A* 107(22):10238-43

PMCID: PMC2890438

[see also: COMMENT: Hyder, F. & Rothman, DL. (2010). *Proc. Natl. Acad. Sci. USA.* 107(24):10773]

Wang, Z., **Maier, A.**, Logothetis, N.K., Liang, H. (2009)

Extraction of bistable-percept-related features from local field potential by integration of local regression and common spatial patterns.

*IEEE Trans. Biomed. Eng.* 56(8):2095-2103

Wang, Z., **Maier, A.**, Logothetis, N.K., Liang, H. (2009)

Relaxation based feature selection for single-trial decoding of bistable perception.

*IEEE Trans. Biomed. Eng.* 56(1):101-110

**Maier, A.**, Wilke, M., Aura, C., Zhu, C., Ye, F.Q. & Leopold, D.A. (2008)

Divergence of fMRI and neural signals in V1 during perceptual suppression in the awake monkey.

*Nat. Neurosci.* 11(10):1193-1200

PMCID: PMC2754054

[see also: DISPATCH: Blake, R. & Braun, J. (2009). *Curr. Biol*, 19(10):R30-32]

Wang, Z., **Maier, A.**, Logothetis, N.K. & Liang, H. (2008)

Single-trial classification of bistable perception by integrating empirical mode decomposition, clustering and support vector machine.

*EURASIP Journal on Advances in Signal Processing* 2008:592742

Wang, Z., **Maier, A.**, Logothetis, N.K. & Liang, H. (2008)

Single-trial decoding of bistable perception based on sparse nonnegative tensor decomposition.

*Journal of Computational Intelligence and Neuroscience* 2008:642387

**Maier A.**, Logothetis, N.K. & Leopold, D.A. (2007)

Context-dependent perceptual modulation of single neurons in primate visual cortex.

*Proc Natl Acad Sci U S A* 104(13):5620-5625

Wang, Z., **Maier, A.**, Logothetis, N.K., Leopold, D.A., Liang, H., (2007)

Single-trial evoked potential estimation using wavelets.

*Computers in Biology and Medicine.* 37(4):463-473

Leopold, D.A. & **Maier, A.** (2006)

Neuroimaging: Perception at the brain's core.

*Curr. Biol.* 16(3):R95-8

Wang, Z., **Maier, A.**, Leopold, D.A., Liang, H. (2006)

Relaxation based multichannel signal combination (RELAX-MUSIC) for perceptual decisions using the area under the ROC Curve.

*IEEE Transaction on Biomedical Engineering* 5(12):2615-2618

**Maier, A.**, Logothetis, N.K. & Leopold, D.A. (2005)

Global competition dictates local suppression in pattern rivalry.  
*JOV* 5(9):668-677

**Maier, A.**, Wilke, M., Logothetis, N.K. & Leopold, D.A. (2003)  
Perception of temporally interleaved ambiguous patterns.  
*Curr. Biol.* 13:1076-1085  
[see also: HIGHLIGHT: Jones, R. (2003). *Nat. Rev. Neurosci.* 4, 612]

Leopold, D.A., **Maier, A.** & Logothetis, N.K. (2003)  
Measuring subjective visual perception in the nonhuman primate.  
*J. Consc. Stud.* 10(9-10): 115-130

Leopold, D.A., Wilke, M., **Maier, A.** & Logothetis, N.K. (2002)  
Stable perception of visually ambiguous patterns.  
*Nat. Neurosci.* 5(6): 605-609

Nikol, S., **Maier, A.**, Krausz, E., Hoefling, B., Huehns, T.Y. (1998)  
Current biotechnological approaches to the prevention of restenosis.  
*BioDrugs* 9(5): 376-388

#### **BOOK CHAPTERS:**

**Maier, A.**, Schall, J., Woodman, G. (2018)  
Neural Recordings at Multiple Scales (Chapter 17)  
In: Wagenmakers, E.J. (ed.)  
Stevens Handbook of Psychology and Cognitive Neuroscience: Methodology  
Wiley [*in press*]

Shmuel A. & **Maier A.** (2015)  
Locally Measured Neuronal Correlates of Functional MRI Signals  
In: Uludag, K., Ugurbil, K. & Berliner, L.J. (eds.)  
fMRI: From Nuclear Spins to Brain Function  
Biological Magnetic Resonance, Vol. 30.  
Springer Science and Business Media, New York, New York, USA. ISBN: 978-1-4899-7590-4

**Maier, A.** (2012)  
Introduction to Neuropricing  
In: Mueller, K.-M.  
Neuropricing  
Haufe. ISBN: 978-3-648-03025-7

**Maier, A.**, Panagiotaropoulos, T., Tsuchiya, N. & Keliris, G.A. (eds.) (2012)  
Binocular rivalry: a gateway to studying consciousness.  
Frontiers Research Topic Ebook. ISBN: 978-2-88919-069-0

**Maier, A.** & Leopold, D.A. (2009)  
Binocular Rivalry.  
In: Wilken, P., Bayne, T., Cleeremans, A. (eds.)  
Oxford Companion to Consciousness. Oxford, UK,  
Oxford University Press. ISBN: 978-0-19-856951-0

**Maier, A.** & Leopold, D.A. (2009)  
Binocular Rivalry  
In: Binder, M.D., Hirokawa, N., Windhorst, U., Hirsch, M.C. (eds.)  
Encyclopedia of Neuroscience.  
Springer. ISBN: 978-3-540-29678-2

**Maier, A.** (2006)

Schlechte Nachrichten für Gedankenleser.  
*Bild der Wissenschaft* 11/2006

Leopold, D.A., **Maier, A.**, Wilke, M. & Logothetis, N.K. (2004)

Binocular rivalry and the illusion of monocular vision.

In: D. Alais & R. Blake (eds.), *Binocular rivalry and perceptual ambiguity*, Cambridge, MA:  
MIT Press. ISBN: 978-0-262-01212-6

### **PROFESSIONAL AFFILIATIONS:**

2002-present: Society for Neuroscience

2004- present: Vision Science Society

2013- present: Scientific Advisory Board, The Neuromarketing Labs Inc.

2016-present: Faculty for Undergraduate Neuroscience

2016-present: National Center for Faculty Development & Diversity

### **INVITED TALKS, SEMINARS AND SYMPOSIA:**

06/18/2018 **International Society for Magnetic Resonance in Medicine, *Symposium Speaker***, Paris, France

02/17/2018 **Gordon Research Seminar, *Workshop Leader***, Lucca, Italy

10.02/2017 **Southeastern Vision Conference**, Nashville, TN

05/19/2017 **Workshop, 8th International Multisensory Research Forum (IMRF)**, Nashville, TN

11/14/2016 **SfN (46<sup>th</sup> Annual Meeting), *Symposium Speaker***, San Diego, CA, USA

11/5/2016 **4<sup>th</sup> Arab-American Frontiers of Science symposium**, Abu Dhabi (*declined*)

10/14/2016 **17<sup>th</sup> Chinese-American Kavli Frontiers of Science Symposium**, Irvine, CA, USA

07/29/2016 **Gordon Research Conference, *Symposium Speaker***, Newry, ME

23/02/2015 **2<sup>nd</sup> Israeli-American Kavli Frontiers of Science Symposium**, Jerusalem, Israel

11/15/2014 **SfN (44<sup>th</sup> Annual Meeting), *Minisymposium Speaker***, Washington. D.C., USA

10/10/2014 **University of Goettingen**, Goettingen, Germany

05/14/2014 **Society for Neuroscience (SfN), Local Chapter**, Middle Tennessee, USA

03/24/2014 **German Primate Center (DPZ)**, Goettingen, Germany

03/10/2014 **Belmont University**, Nashville, TN, USA

11/12/2013 **SfN (43<sup>rd</sup> Annual Meeting), *Nanosymposium Chair***, San Diego, CA, USA

10/13/2012 **SfN (42<sup>nd</sup> Annual Meeting), *Minisymposium Co-Chair***, New Orleans, LA, USA

03/14/2012 **University of Memphis**, Memphis, TN, USA

06/20/2011 **Johns Hopkins University**, Baltimore, MD, USA

04/05/2011 **Harvard University**, Boston, MA, USA

04/04/2011 **Mind/Brain/Behavior Interfaculty Initiative (MBB)**, Harvard University, Boston, MA

03/03/2011 **University of Washington**, Seattle, WA, USA

02/28/2011 **Cosyne (11<sup>th</sup> Annual Meeting), *Workshop Speaker***, Salt Lake City, UT

01/31/2011 **Vanderbilt University**, Nashville, TN, USA

12/08/2010 **Oxford University**, Oxford, UK

07/16/2010 **Harvard University**, Boston, MA, USA

01/08/2010 **Medical Research Council, Cognition and Brain Sciences Unit**, Cambridge, UK

06/24/2010 **ASSC (14<sup>th</sup> Annual Meeting), *Symposium Co-chair***, Toronto, Canada

05/07/2010 **VSS (10<sup>th</sup> Annual Meeting), *Symposium Speaker***, Naples, FL, USA

08/13/2009 **Tamagawa University**, Tokyo, Japan

08/08/2009 **ECVP (32<sup>nd</sup> Annual Meeting), *Symposium Speaker***, Regensburg, Germany

08/03/2009 **Okinawa Institute of Science and Technology**, Okinawa, Japan

07/01/2009 **Donders Institute for Brain, Cognition and Behaviour**, Nijmegen, The Netherlands

02/27/2009 **Newcastle University**, Newcastle upon Tyne, UK

09/11/2008 **Japan Neuroscience Society (31st Meeting), *Symposium Speaker***, Tokyo, Japan

04/09/2007 **Princeton University**, USA

02/23/2007 **Yale University**, CT, USA

04/11/2006 **University of Texas**, Houston, TX, USA

06/24/2005 **ASSC (9<sup>th</sup> Annual meeting), *Workshop Speaker***, Pasadena, CA

### **ACADEMIC SERVICE:**

2018: Vanderbilt Goldwater Scholarship Nominating Committee  
2018-21: Society for Neuroscience Trainee Professional Development Awards Selection Committee  
2014: Randolph Blake award selection committee  
2014: Vanderbilt Department of Psychology Strategic Plan Committee  
2014: Vanderbilt College of Arts and Science Curriculum Committee  
2012-: Vanderbilt Neuroscience Steering Committee  
2011-: Vanderbilt Psychology Day Speaker Selection Committee  
2011-: Vanderbilt Department of Psychology Colloquium Committee

### **TEACHING EXPERIENCE:**

Recurring: Undergraduate Course: *Perception*  
(since 2011) Guest Lectures: *Higher-order visual processes*  
*Neuronal Correlates of Consciousness*  
*V1 receptive fields*  
*Extra-striate areas: MT*  
*Extra-striate areas: V4*  
Graduate Seminar: *The Neuroscience of Consciousness/The Resting Brain*

### **DOCTORAL STUDENTS:**

Michele A. Cox: 2011-2017 (now postdoc in Michele Rucci's lab at University of Rochester)  
Kacie Dougherty: 2012 – 2018  
Jacob A. Westerberg: 2016-present

### **UNDERGRADUATE INTERNS, MINORITY RESEARCH SCHOLARS AND HONORS STUDENTS:**

2011: Anna Das  
2012: Davis Nguyen  
2012: Clayton Patrick  
2012: Kaleb Lowe (Honors with Distinction)  
2012: Rachel Chandler (Belmont)  
2013: Christopher Kooker  
2013: Christopher Xin  
2013: Matthew Cherches  
2013: Taylor Peabody  
2013: Hameda Khandekar (NIH BP-Endure Program)  
2014: Powell Newbern (Summer Intern)  
2015: Liniya Tauhidul (Summer Intern)  
2018: Nikolay Valov (Summer Intern)  
2019: Cortez Johnson  
2019: Jacob Rogatinsky

### **REVIEWER FOR RESEARCH JOURNALS:**

*Science, Nature Neuroscience, Neuron, PNAS, Journal of Neuroscience, Current Biology, PLOS Biology, Trends in Cognitive Sciences, Annals of the New York Academy of Sciences, Neuroimage, Neuropsychologia, Human Brain Mapping, Cerebral Cortex, Journal of Cognitive Neuroscience, Journal of Vision, Perception, Journal of Neurophysiology, Biological Cybernetics, Psychophysiology, Attention, Perception & Psychophysics, Journal of Comparative Neurology, Journal of Cerebral Blood Flow & Metabolism, Neuroscience Letters, Current Eye Research, Brain Structure and Function*

### **REVIEWER FOR FUNDING AGENCIES/STUDY SECTIONS:**

*National Institutes of Health (NIH) SPC Study Section & Brain Project Study Section, National Science Foundation (NSF), The Human Brain Project (HBP), The John D. and Catherine T. MacArthur Foundation, The Wellcome Trust, The Royal Society, Netherlands Organization for Scientific Research (NWO), L'Agence Nationale de la Recherche (ANR), Economic & Social Research Council (ESRC), Biotechnology and Biological Sciences Research Council (BBSRC), Deutsche Forschungsgemeinschaft (DFG)*

### **EDITORIAL BOARDS:**

2017-present: *Consciousness and Cognition*  
2015-present: *Frontiers in Integrative Neuroscience*  
2011-current: *Frontiers in Human Neuroscience* (Associate)  
2010-current: *Frontiers in Perception Science*  
2010-current: *Frontiers in Consciousness Research*

### **SELECT MEDIA COVERAGE:**

NPR "Academic Minute": Mind's Eye Blink – 01/22/18  
NPR "Science Friday": Trapping a proton, the speed of a muscle, and switching attention – 12/01/17  
Gehirn & Geist (German edition of *Scientific American: Mind*): Mit den Augen eines Vogels – 04/2016

### **CONFERENCE CONTRIBUTIONS (IN CHRONOLOGICAL ORDER):**

Carlson, B., Cox, M.A., Dougherty, K. & Maier, A. (2019) V1 Laminar Activation during Binocular Rivalry Flash Suppression. VSS

Dougherty, K., Cox, M.A., Westerberg, J.A. & Maier, A. (2019) Binocular Modulation of Monocular Neurons in the Primary Visual Pathway. VSS

Westerberg, J.A., Woodman, G.F., Maier, A. & Schall, J.D. (2019) Performance Monitoring Signals During Visual Priming. VSS

Dougherty, K., Cox, M.A., Westerberg, J.A. & Maier, A. (2018) Monocular V1 neurons are sensitive to both eyes. SfN

Westerberg, J.A., Maier, A. & Schall, J.D. (2018) Visual Search Strategies: Priming of Pop-Out. SfN

Tovar, D.A., Westerberg, J.A., Cox, M.A., Dougherty, K., Carlson, T., Wallace, M.T. & Maier, A. (2018) Multivariate analysis of V1 spiking dynamics for ocularity, orientation, and repetition. SfN

Westerberg J.A., Cox, M.A., Dougherty, K. & Maier, A. (2018) Repetitive visual stimulation suppresses spiking responses across V1 laminae. VSS

Dougherty, K., Cox, M.A., Westerberg, J.A. & Maier, A. (2018) Laminar profile of V1 ocular dominance in the awake behaving primate. GRC

Dougherty, K., Cox, M.A., Westerberg J.A. & Maier, A. (2017) Interocular interactions in macaque LGN. VSS



- Westerberg J.A., Cox, M.A., Dougherty, K. & Maier, A. (2017) Pre- versus Post-Stimulus Comparison of Correlated Spiking Variability across V1 Laminae. VSS
- Westerberg J.A., Cox, M.A., Dougherty, K. & Maier, A. (2017) Layer-specific differences between spontaneous and visually evoked spiking correlations in V1. Cosyne
- Maier, A. (2016) Parallel processing of surfaces and borders in early visual cortex. SfN (*symposium talk*)
- Dougherty, K., Cox, M.A. & Maier, A. (2016) Interocular gain control in primate LGN. SfN
- Cox, M.A., Dougherty, K., Maier, A. (2016) Interocular suppression across the layers of V1. SfN
- Dougherty, K., Cox, M.A. & Maier, A. (2016) Binocular modulation of LGN responses in the primate. GRC
- Cox, M.A., Dougherty, K., Maier, A. (2016) Interocular suppression in the input layers of V1. GRC
- Dougherty, K., Cox, M.A., Leopold, D.A. Maier, A. (2015) Visual spiking responses in V1 couple to alpha fluctuations in deep layers. VSS [2015 VSS Student Travel Award]
- Maier, A. (2014) Cross-frequency coupling in the cortical columnar microcircuit. [Symposium: Multimodal Investigation of Large-Scale Brain Dynamics: Combining fMRI and Intracranial EEG.] SfN
- Ninomiya, T., Dougherty, K., Godlove, D.C., Schall, J.D. & Maier, A. (2014) Microcircuitry of agranular frontal and granular occipital cortex: Testing the generality of the canonical cortical microcircuit with cross-frequency phase-amplitude coupling during resting-state. SfN
- Moore, B., Cox, M.A., Dougherty, K., Young, M.S. & Maier, A. (2014) Resting state correlations in visual cortex reflect fluctuations of cortical arousal. SfN
- Dougherty, K., Cox, M.A., Leopold, D.A. & Maier, A. (2014) Spiking responses in primary visual cortex are coupled to the alpha phase of infragranular LFP. SfN [2014 FST Student Travel Award]
- Cox, M.A., Leopold, D.A. & Maier, A. (2014) Sensory stimulation and attentional allocation evoke opposing patterns of columnar activation in primary visual cortex. SfN
- Schmiedt, J.T., Maier, A., Saunders, R.C., Leopold, D.A. & Schmid, M.C. (2014) Low-frequency oscillations in extrastriate cortex: contributions of V1 and pulvinar. SfN
- Kienitz, R., Cox, M.A., Schmiedt, J.T., Saunders, R.C., Leopold, D.A., Maier, A., Schmid, M.C. (2014) Neural rhythms during perceptual grouping in visual area V4 and their dependence on area V1 input. SfN
- Shapcott, K., Schmiedt, J.T., Maier, A., Saunders, R.C., Leopold, D.A. & Schmid, M.C. (2014) Noise correlations in visual area V4 of the rhesus macaque after V1 lesion. SfN
- Stanley, J., Maier, A., & Carter, O. (2014) The Role of Monocular Dominance in Rivalry Onset Bias. ASSC 18
- Cox, M.A., Schmid, M.C., Peters, A., Saunders, R., Leopold, D.A. & Maier, A. (2014) Unexpected spatial sensitivity of neuronal response to illusory figures in area V4. VSS
- Stanley, J., Forte, J., Maier, A. & Carter, O. (2014) The role of monocular dominance in rivalry onset bias. VSS
- Maier, A. (2014) Anisotropy of neural coherence in primate visual cortex. German Primate Neurobiology Conference.
- Shapcott, K.A., Schmiedt, J.T., Maier, A., Leopold, D.A. & Schmid, M. (2014) Neuronal Correlations in V1 after V4 injury. German Primate Neurobiology Conference.

Kienitz, R., Cox, M.A., Schmiedt, J.T., Saunders, R.C., Leopold, D.A., Maier, A. & Schmid, M. (2014) Perceptual grouping and theta oscillations in visual area V4. German Primate Neurobiology Conference.

Cox, M.A., Moore, B. Dougherty, K., Young, M.S. & Maier, A. (2013) LFP coherence as a function of laminar depth and lateral distance in macaque visual cortex. SfN

Dougherty, K., Cox, M.A., Leopold, D.A. & Maier, A. (2013) Visually evoked cross-frequency coupling between deep and superficial layers of macaque V1. SfN

Moore, B., Cox, M.A., Dougherty, K. Young, M.S. & Maier, A. (2013) Laminar profile of state-dependent visually evoked responses in primate visual cortex. SfN

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