Daniel A. Handwerker

CONTACT INFORMATION

Section on Functional Imaging Methods National Institute of Mental Health Building 10, Room 1D80 10 Center Dr. MSC 1148 Bethesda, MD 20892-1148 https://fim.nimh.nih.gov

https://github.com/handwerkerd Lab Phone: 301-402-1359

Email: handwerkerd@mail.nih.gov

EDUCATION AND EXPERIENCE

Staff Scientist08/14 - PresentResearch Fellow12/09 - 07/14Postdoctoral Fellow10/07 - 11/09

Section on Functional Imaging Methods, National Institute of Mental Health

Supervisor: *Peter Bandettini*, Ph.D.

Improving fMRI and other measures to better understand activity and connections across brain regions. Supporting research of others in SFIM through hiring and mentoring early career trainees, guiding experiment and analysis designs, and teaching.

Postdoctoral Fellow, Department of Radiology University of California, San Francisco

1/06 - 8/07

Primary Mentor: *Roland G. Henry*, Ph.D. Co-Mentor: *Robert T. Knight*, M.D.

Used fMRI and DTI to study neural changes in multiple clinical conditions.

Ph.D., Joint Graduate Group in Bioengineering

8/00 - 12/05

University of California, Berkeley and San Francisco

Assessing Variability of the fMRI BOLD Response to Neural Activity

Mark D'Esposito, M.D. (chair), Richard Ivry, Ph.D., Sarah Nelson, Ph.D.

Advanced methodology and applications of fMRI to cognitive neuroscience, especially measuring and accounting for fMRI signal variability across brain regions and individuals.

B.S. (Biomedical Engineering), B.A. (Computer Science), Minor (Psychology) 9/96 - 5/00 Johns Hopkins University

Research Mentors:

Steven Yantis, Ph.D.

9/98 - 5/99, 9/99 - 6/00

Studied human attention using psychophysical methods.

Assisted with the design and implementation of the lab's first fMRI study.

Karen Berman, M.D. (NIH Summer Fellowship)

6/99 - 8/99

Examined brain structure of schizophrenic patients using MRI.

Michael Steinmetz, Ph.D.

6/97 - 8/98

Examined the relationships between attention and short-term visual spatial memory in *Macaca mulatta* using electrophysiology and fMRI.

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PEER-REVIEWED PUBLICATIONS

Teves, J.B., Gonzalez-Castillo, J., Holness, M., Spurney, M., Bandettini, P., **Handwerker, D.A.** (2023) "The art and science of using quality control to understand and improve fMRI data" *Front Neurosci* 17

Gonzalez-Castillo, J., Fernandez, I.S., Lam, K.C., **Handwerker, D.A.**, Pereira, F., Bandettini, P.A. (2023) "Manifold learning for fMRI time-varying functional connectivity" *Front Hum Neurosci* 17

Taylor, P.A., Reynolds, R.C., Calhoun, V., Gonzalez-Castillo, J., **Handwerker**, **D.A.**, Bandettini, P.A., Mejia, A.F., Chen, G. (2023) "Highlight results, don't hide them: enhance interpretation, reduce biases and improve reproducibility" *NeuroImage* 274

Shahsavarani, S., Thibodeaux, D.N., et. al. (2023) "Cortex-wide neural dynamics predict behavioral states and provide a neural basis for resting-state dynamic functional connectivity" *Cell Reports* 42

Gonzalez-Castillo, J., Fernandez, I., **Handwerker**, **D.A.**, Bandettini, P.A. (2022) "Ultra-slow fMRI fluctuations in the fourth ventricle as a marker of drowsiness" *NeuroImage* 259

Yu, Y., Huber, L, et al (2022) "Layer-specific activation in human primary somatosensory cortex during tactile temporal prediction error processing" *NeuroImage* 248

DuPre E, Salo T, ... **Handwerker, D.A.** (2021) "TE-dependent analysis of multi-echo fMRI with tedana" *J Open Source Software*

Chai, Y., Liu, T., et. al. (2021) "Topographical and laminar distribution of audiovisual processing within human planum temporal" *Progress in Neurobiology*

Levitis, E., Gould van Praag, C.D., et. al. (2021) "Centering inclusivity in the design of online conferences – An OHBM – Open Science perspective" *GigaScience* 10(8)

Yang, J., Molfese, P.J., Yu, Y., **Handwerker, D.A.**, Chen, G., Taylor, P., Ejima, Y., Wu, J., Bandettini, P.A. (2021) "Different activation signatures in the primary sensorimotor and higher-level regions for haptic three-dimensional curved surface exploration" *NeuroImage*

Handwerker, D.A., Ianni, G., Gutierrez, B., Roopchansingh, V., Gonzalez-Castillo, J., Chen, G., Bandettini, P.A., Ungerleider, L.G., Pitcher, D., (2020) "Thetaburst TMS to the posterior superior temporal sulcus decreases resting-state fMRI connectivity across the face processing network" *Network Neuroscience* 4(3)

Finn, E.S., Glerean, E., Khojandi, A.Y., Nielson, D., Molfese, P.J., **Handwerker, D.A.**, Bandettini, P.A., (2020) "Idiosynchrony: From shared responses to individual differences during naturalistic neuroimaging" *NeuroImage* 215

Jo, H.J., Reynolds, R.C., Gotts, S.J., **Handwerker, D.A.**, Balzekas, I., Martin, A., Cox, R.W., Bandettini, P.A. (2020) "Fast detection and reduction of local transient artifacts in resting-state fMRI" *Computers in Biology and Medicine* 120

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Huber, L., Finn, E.S., **Handwerker, D.A.**, Bönstrup, M., Glen, D., Kashyap, S., Ivanov, D., Petridou, N., Marrett, S., Goense, J. Poser, B.A., Bandettini, P.A., (2020) "Sub-millimeter fMRI reveals multiple topographical digit representations that form action maps in human motor cortex" *NeuroImage* 208

- Chai, Y., **Handwerker, D.A.**, Marrett, S., Gonzalez-Castillo, J., Merriam, E.P., Hall, A., Molfese, P.J., Bandettini, P.A., (2019) "Visual temporal frequency preference shows a distinct cortical architecture using fMRI" *NeuroImage* 197, 13-23
- Yu, Y., Huber, L., Yang, J., Jangraw, D.C., **Handwerker, D.A.**, Molfese, P., Chen, G., Ejia, Y., Wu, J., Bandettini, P.A., (2019) "Layer-specific activation of predictive coding in the human primary somatosensory cortex" *Science Advances* 5(5)
- Gonzalez-Castillo, J., Topolski, N., Caballero-Gaudes, C., **Handwerker, D.A.**, Pereira, F., Bandettini, P.A., (2019) "Imaging the spontaneous flow of thought: Distinct periods of cognition contribute to observable time-varying functional connectivity during rest" NeuroImage 202,
- Xie, H., Zheng, C.Y., **Handwerker, D.A.**, Bandettini, P.A., Calhoun, V., Sunanda, M., Gonzalez-Castillo, J., (2019) "Efficacy of different dynamic functional connectivity methods to capture cognitively relevant information" NeuroImage 188, 502-514
- Xie, H., Gonzalez-Castillo, J., **Handwerker, D.A.**, Bandettini, P.A., Calhoun, V.D., Damaraju, E., Mitra, S. (2019) "Time-varying whole-brain functional network connectivity coupled to task engagement" *Network Neuroscience*
- Jangraw, D.C., Gonzalez-Castillo, J., **Handwerker, D.A.**, Ghane, M., Rosenberg, M.D., Panwar, P., Bandettini, P.A. (2018) "A functional connectivity-based neuromarker of sustained attention generalizes to predict recall in a reading task." *NeuroImage* 166, 99-109
- Huber, L., Ivanov, D., **Handwerker, D.A.**, Marrett, S., Guidi, M., Uludağ, K., Bandettini, P.A., Poser, B.A., (2018) "Techniques for blood volume fMRI with VASO: From low-resolution mapping towards sub-millimeter layer-dependent applications." *NeuroImage* 164, 131-143
- Huber, L., **Handwerker, D.A.**, Jangraw, D.C., Chen, G., Hall, A., Stüber, C., Gonzalez-Castillo, J., Ivanov, D., Marrett, S, Guidi, M., Goense, J., Poster, B.A., Bandettini, P.A., (2017) "High-Resolution CBV-fMRI Allows Mapping of Laminar Activity and Connectivity of Cortical Input and Output in Human M1." *Neuron* 96, 1253-1263
- Gonzalez-Castillo, J., Panwar, P., Buchanan, L.C., Caballero_Gaudes, C., **Handwerker, D.A.**, Jangraw, D.C., Zachariou, V., Inati, S., Roopchansingh, V., Derbyshire, J.A., Bandettini, P.A., (2016) "Evaluation of multi-echo ICA denoising for task based fMRI studies: Block designs, Rapid event-related designs, and Cardiac-gated fMRI." *NeuroImage* 141, 452-468
- Poldrack, R.A., Laumann, T.O., Koyejo, O., Gregory, B., Hover, A., Chen, M.-Y., Gorgolewski, K.J., Luci, J., Joo, S.J., Boyd, R.L., Hunicke-Smith, S., Simpson, Z.B., Caven, T., Sochat, V., Shine, J.M., Gordon, E., Snyder, A.Z., Adeyemo, B., Petersen, S.E., Glahn, D.C., Reese Mckay, D., Curran, J.E., Göring, H.H.H., Carless, M.A., Blangero, J., Dougherty, R., Leemans, A., **Handwerker, D.A.,** Frick, L., Marcotte, E.M., Mumford, J.A., (2015). "Long-term neural and physiological phenotyping of a single human." *Nat Commun* 6, 8885.

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Gorgolewski, K.J., Auer, T., Calhoun, V.D., Craddock, R.C., Das, S., Duff, E.P., Flandin, G., Ghosh, S.S., Glatard, T., Halchenko, Y.O., **Handwerker, D.A.,** Hanke, M., Keator, D., Li, X., Michael, Z., Maumet, C., Nichols, B.N., Nichols, T.E., Pellman, J., Poline, J.-B., Rokem, A., Schaefer, G., Sochat, V., Triplett, W., Turner, J.A., Varoquaux, G., Poldrack, R.A., (2016). "The brain imaging data structure, a format for organizing and describing outputs of neuroimaging experiments." *Scientific Data*, doi:10.1038/sdata.2016.44

- Wu, P., Bandettini, P.A., Harper, R.M., **Handwerker, D.A.**, (2015). "Effects of thoracic pressure changes on MRI signals in the brain." *Journal of Cerebral Blood Flow & Metabolism* 35 (6), 1024-1032.
- Gonzalez-Castillo, J., Hoy, C.W., **Handwerker, D.A.**, Robinson, M.E., Buchanan, L.C., Saad, Z.S., Bandettini, P.A., (2015). "Tracking ongoing cognition in individuals using brief, whole-brain functional connectivity patterns." *Proceedings of the National Academy of Sciences* 112, 8762–8767.
- Gonzalez-Castillo, J., Hoy, C.W., **Handwerker**, **D.A.**, Roopchansingh, V., Inati, S., Saad, Z.S., Cox, R.W., Bandettini, P.A., (2015). "Task Dependence, Tissue Specificity, and Spatial Distribution of Widespread Activations in Large Single-Subject Functional MRI Datasets at 7T," *Cerebral Cortex* 25 (12), 4667-4677.
- Yang, Z., Xu, Y., Xu, T., Hoy, C.W., **Handwerker, D.A.**, Chen, G., Northoff, G., Zuo, XN, Bandettini, P.A. (2014) "Brain Network informed subject community detection in early-onset schizophrenia" *Scientific Reports*
- Yang, Z., Chang, C., Xu, T., Jiang, L., **Handwerker, D.A.**, Castellanos, F.X., Milham, M.P., Bandettini, P.A., Zuo, X.N., (2014) "Connectivity trajectory, across lifespan differentiates the precuneus from the default network" *NeuroImage* 89, 45-56.
- Gonzalez-Castillo, J., **Handwerker**, **D.A.**, Robinson, M.E., Hoy, C.W., Buchanan, L.C., Saad, Z.S., Bandettini, P.A. (2014) "The spatial structure of resting state connectivity stability on the scale of minutes" *Front Neurosci* 8:138
- Hutchinson, R.M., et. al. (2013) "Dynamic functional connectivity: Promise, issues, and interpretations" *Neuroimage* 80, 360-378
- **Handwerker, D.A.**, Roopchansingh, V., Gonzalez-Castillo, J., Bandettini, P.A. (2012) "Periodic changes in fMRI connectivity" *Neuroimage* 63, 1712-1719
- **Handwerker, D.A.**, Gonzalez-Castillo, J., D'Esposito, M., Bandettini, P.A. (2012) "The continuing challenge of understanding and modeling hemodynamic variation in fMRI" *NeuroImage* 62, 1017-23.
- Gonzalez-Castillo, J., Saad, Z.S., **Handwerker, D.A.**, Inati, S.J., Brenowitz, N., Bandettini, P.A., (2012) "Whole-brain, time-locked activation with simple tasks revealed using massive averaging and model-free analysis" *Proceedings of the National Academy of Sciences* 109, 5487–5492.
- Chu, C., **Handwerker, D.A.**, Bandettini, P.A. (2011) "Measuring consistency of global functional connectivity using kernel regression methods" *Proc. IEEE 2011 International Workshop on Pattern Recognition in NeuroImaging*, art. no. 5961316, 41-44.
- **Handwerker**, **D.A.**, Bandettini, P.A. (2011) "Simple explanations before complex theories: Alternative explanations of Siroton and Das' observations" *Neuroimage* 55(4) 1419-22.

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Handwerker, D.A., Bandettini, P.A. (2011) "Hemodynamic signals not predicted? Not so: A comment on Sirotin and Das (2009)" *Neuroimage* 55(4) 1409-12.

Birn, R.M., Murphy, K., **Handwerker, D.A.**, Bandetttini, P.A. (2009) "fMRI in the presence of task-correlated breathing variations" *Neuroimage* 47(3) 1092-1104.

Murphy, K. Birn, R.M., **Handwerker, D.A.**, Jones, T.B., Bandettini, P.A. (2009) "The impact of global signal regression on resting state correlations: Are anti-correlated networks introduced?" *Neuroimage* 44(3) 893-905.

Wilson, S.M., Brambati, S.M., Henry, R.G., **Handwerker, D.A.**, Miller, B.L., Wilkins, D.P., Ogar, J.M., Gorno-Tempini, M.L. (2009) "The neural basis of surface dyslexia in semantic dementia" *Brain* 132(1) 71-86.

Handwerker, D.A., Gazzaley, A., Inglis, B., D'Esposito, M. (2007) "Reducing vascular variability of fMRI data across aging populations using a breath holding task" *Hum Brain Mapp* 28 (9) 846-59.

Fuhrmann Alpert, G., Sun, F.T, **Handwerker**, **D.A.**, D'Esposito, M., Knight, R.T., (2007) "Spatiotemporal information analysis of event-related BOLD responses." *Neuroimage* 34 (4) 1545-1561.

Handwerker, D.A., Ollinger, J.M., D'Esposito, M., (2004) "Variation of BOLD hemodynamic responses across brain regions and subjects and their effects on statistical analyses." *Neuroimage* 21 (4), 1639-1651.

PREPRINT

Faskowitz, J., Moyer, D., **Handwerker, D.A.**, Gonzalez-Castillo, J., Bandettini, P.A., Jbabdi, S., Betzel, R. "Commentary on Pang et al (2023) Nature" *bioRxiv* https://doi.org/10.1101/2023.07.20.549785

Kronemer, S., Holness, M., Morgan, A.T., Teves, J.B., Gonzalez-Castillo, J., **Handwerker, D.A.**, Bandettini, P.A. (2023) "Visual Imagery vividness correlates with afterimage brightness and sharpness" *bioRxiv* https://www.biorxiv.org/content/10.1101/2023.12.07.570716

Poldrack, R.A., et. al. (2023) "The past, present, and future of the brain imaging data structure (BIDS)" *arXiv* https://arxiv.org/abs/2309.05768

Pritschet, L., et. al. (2023) "Neuroanatomical changes observed over the course of human pregnancy" bioRxiv https://www.biorxiv.org/content/10.1101/2023.12.14.571688

RECENT CONFERENCE ABSTRACTS

Gephart, I., Morgan, T., Gonzalez-Castillo, J., **Handwerker**, **D.A.**, Bandettini, P.A., "Behavioral and neural factors underlying the perception of the audiovisual bounce effect" Society for Neuroscience Annual Meeting 2023

Gonzalez-Castillo, J., Spurney, M., **Handwerker, D.A.**, Bandettini, P.A. "Contribution of in-scanner thoughts to resting-state functional connectivity: How participants rest matters" Society for Neuroscience Annual Meeting 2023

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Kronemer, S., Holness, M., Morgan, T., Teves, J., Akin, B., Huber, L., Gobo, T., **Handwerker, D.A.**, Bandettini, P.A. "Perceptually-matched images and afterimages share whole brain fMRI dynamics" Society for Neuroscience Annual Meeting 2023

Morgan, T., Gephart, I., **Handwerker, D.A.**, Gonzalez-Castillo, J., Bandettini, P.A. "A functionally time-resoluted reconstruction technique for high-resultion fMRI (fTR-MRI) Society for Neuroscience Annual Meeting 2023

Spurney, M., Faskowitz, J., Gonzalez-Castillo, J., **Handwerker, D.A.**, Bandettini, P.A. "Evaluating the predictive power of dynamic fMRI connectivity summary statistics" Society for Neuroscience Annual Meeting 2023

Handwerker, D.A., et al "Tedana: A Growing Multi-Echo fMRI Ecosystem" Organization for Human Brain Mapping Annual Meeting 2023

Faskowitz, J., Morgan, T., **Handwerker, D.A.**, Gonzalez-Castillo, J., Bandettini, P.A., "On the static and dynamic features of edge times series" Organization for Human Brain Mapping Annual Meeting 2023

Holness, M., Teves, J.B., Morgan, T., Chen, G., Gonzalez-Castillo, J., Bandettini, P.A., **Handwerker, D.A.**, "Multi-echo fMRI removes physiological noise during naturalistic viewing" Organization for Human Brain Mapping Annual Meeting 2023

Gephart, I., Morgan, T., Gonzalez-Castillo, J., **Handwerker, D.A.**, Bandettini, P.A., "Multiple factors influence perception in the audiovisual bounce effect" Organization for Human Brain Mapping Annual Meeting 2023

Klein, R., Morgan, T., Huber, L., **Handwerker, D.A.**, Gonzalez-Castillo, J., Bandettini, P.A. "Cluster-based connectivity tool: capturing laminar and columnar topography during naturalistic tasks" Organization for Human Brain Mapping Annual Meeting 2023

Kronember, S., Holness, M., Morgan, T., Gonzalez-Castillo, J., Teves, J., Handwerker, D.A., Bandettini, P.A. "The neural mechanisms of interoceptive conscious perception: A 7T fMRI study of afterimages" Organization for Human Brain Mapping Annual Meeting 2023

Kumar, S., Gonzalez-Castillo, J., **Handwerker, D.A.**, Kronemer, S., Arzl, A., Bekinschtein, T., Bandettini, P.A., "Decreased alertness changes brain network dynamics in passive movie-viewing" Organization for Human Brain Mapping Annual Meeting 2023

Spurney, M., Faskowitz, J., Gonzalez-Castillo, J., **Handwerker, D.A.**, Bandettini, P.A. "Edge-time series summary metrics: predictive value for demographics and cognitive traits" Organization for Human Brain Mapping Annual Meeting 2023

Taylor, P., et. al. "Highlight results, don't hide them: Improving reproducibility, with applications to NARPS" Organization for Human Brain Mapping Annual Meeting 2023

Gonzalez-Castillo, J., Fernandez, I., **Handwerker**, **D.A.**, Lam, K.C., Pereira, F., Bandettini, P.A. "Manifold learning and dimensionality estimation for the human functional connectome" International Society for Magnetic Resonance in Medicine Annual Meeting 2023

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Holness, M., Morgan, A.T., Teves, J., **Handwerker, D.A.**, Bandettini, P.A., Kronemer, S.I., "The neural mechanisms of afterimages: A model of illusory conscious perception" Society for Neuroscience Annual Meeting 2022

Spurney, M.A., Gonzalez-Castillo, J., Lam, K.C., **Handwerker, D.A.**, Teves, J., Pereira, F., Bandettini, P.A. "How conscious in-scanner thoughts modulate functional connectivity during resting-state fMRI" Society for Neuroscience Annual Meeting 2022

Gonzalez-Castillo, J., Spurney, M., Lam, K.C., **Handwerker, D.A.**, Teves, J., Pereira, F., Bandettini, P.A. "How conscious thoughts during "resting-state" affect functional connectivity estimates" Organization for Human Brain Mapping Annual Meeting 2022

Handwerker, D.A., et. al. "Tedana+: Multi-echo fMRI and related open tools" Organization for Human Brain Mapping Annual Meeting 2022

Holness, M.N., **Handwerker**, **D.A.**, et. al. "Multi-echo fMRI denoising with physiological and motion information" Organization for Human Brain Mapping Annual Meeting 2022

Markiewicz, et. al., "Standardizing support for multi-echo fMRI data across the NIPreps ecosystem" Organization for Human Brain Mapping Annual Meeting 2022

Mansoor, R. et. al. "Topographical and Laminar Distribution of Audiovisual Processing in the Superior Temporal Sulcus" Organization for Human Brain Mapping Annual Meeting 2022

SELECTED TEACHING AND TALKS

National Institutes of Health

Signal vs noise in fMRI & paths forward	1/28/22
More data Less noise: Multi-echo fMRI status report	1/19/21
The least bad ways to remove noise	6/27/19
Why is noise removal so hard to solve?	6/25/19
Advantages of multi-echo fMRI	5/5/19
Functional connectivity using wide-field optical mapping in mice	1/15/19
Minimizing Noise During fMRI Acquisition	6/16/17,6/25/18
Software Carpentry "Automating tasks with the Unix shell"	9/28/17
How do we know what signal is neural and what is not?	7/18/14,7/13/15
	6/17/16,6/19/17
fMRI Data Sharing	8/5/15
fMRI and Big Data	8/4/14
Basics of Resting State fMRI	7/12, 7/13
Panel on "What is a good or bad fMRI study and clinical uses"	8/26/11
Connectivity of fMRI fluctuations	7/12,15/11
•	8/17,19/10
Altering chest pressure to measure cerebrovascular reactivity	1/28/11
Global signal changes with chest pressure	8/9/10
Diffusion-based tractography: Methodology and Applications	7/15/10
Properties of resting state fMRI	8/5/09
Introduction to Diffusion Tensor Imaging	2/11/09
Quantifying and managing fMRI BOLD response variability	4/20/07

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University of Groningen, Cognitive Neuroscience Center Journal Club 3/30/22

Multi-echo fMRI: Why & how to use (online presentation)

Organization for Human Brain Mapping Annual Meeting 7/3/20

Symposium Co-chair: Two is Better than One (and Many are Better):

Multi-echo fMRI methods and applications

Symposium Speaker: How to Decide if Multi-echo fMRI can Improve your Study?

Organization for Human Brain Mapping Annual Meeting Educational Courses

The art & science of using quality control to understand & improve fMRI data

7/22/23

How to minimize noise at the acquisition stage

6/25/17

American Society of Neuroradiologists Annual Meeting

Test-retest reliability for a massively repeated block design task 5/24/16

Applied Physical Society Annual Meeting

Noninvasive, dynamic human brain imaging with fMRI 3/2/14

Foundation for Advanced Education in the Sciences

Introduction to fMRI (lectures in an MRI course) 11/21,28/11 11/29/10

Johns Hopkins University

Biomed Engineering 580.202 "BME in the real world: Getting and using a Ph.D." 4/1/08

PROFESSIONAL SERVICE

National Institutes of Health

NIMH Intramural Research Program Outstanding Mentor Award 2019

Supporting many members in the Section on Functional Imaging Methods 10/08 – Present Includes day-to-day management and mentorship responsibilities for postdoctoral, predoctoral, post baccalaureate, and undergraduate trainees

NIMH Creating Opportunities for DEIA Dialogue Planning and 2022 – Present Implementation Groups

NIMH Special Act Award (2023) for "Diligently developing new and innovative approaches to create opportunities for NIMH staff dialogue and opportunities." Group awarded 2023 NIMH Senica A. Lee Making a Difference Award

NIMH 75th Anniversary Working Group 2021 – Present

NIMH Antiracism Task Force Member 2020 – 2022

NIMH Special Act Awards (2022) for "Exceptional volunteer engagement 'Above and Beyond' in service of the charge and mission of the NIMH

Anti-racism Task Force (ARTF)" and "providing peer-to-peer communications to share accurate information about and encourage inclusive participation in expert contractor-led listening sessions in support of DEIA at NIMH."

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Regular Judge or Lead Judge for Intramural Summer student, postbaccalaureate, and graduate student poster presentations 2015 – Present

University of California, Berkeley

Graduate Assembly Mental Health Task Force

9/03 - 5/05

University Health Services Advisory Committee on Graduate Mental Health

10/03 - 5/05

Helped organize, conduct and publicize one of the first surveys of graduate student mental health in the nation and draft the preliminary documents for the UC Berkeley Chancellor's Mental Health Task Force.

UC Berkeley / UC San Francisco Joint Graduate Group in Bioengineering

Qualifying Exam Advisor

9/03-9/04

Advised students on how to prepare for their research qualifying exams.

Attended many practice exams and gave comments.

Updated much of the department advice literature on qualifying exams.

Lead Peer Mentor 9/01 - 9/02

Coordinated all student-based guidance of incoming graduate students.

GRANT

2017-2022: Co-Investigator on NIMH BRAIN Initiative Grant R01-MH114276

(Lead PI: Elizabeth Hillman)

JOURNALS REFEREED

Imaging Neuroscience Nature Human Behavior Nature Neuroscience NeuroImage