

Stanford



Rodrigo Martin Braga

Instructor, Neurology & Neurological Sciences

Bio

BIO

Rodrigo trained with Robert Leech and Richard Wise at Imperial College London, where he obtained his Ph.D. investigating the neural systems involved in top-down attention to auditory and visual modalities. Rodrigo was awarded a Sir Henry Wellcome Postdoctoral Fellowship to travel to Harvard University to work with Randy Buckner. There he developed methods to characterize functional networks within individuals and using high-resolution mapping techniques at high-magnetic-strength 7T MRI. Rodrigo holds a K99 Pathway to Independence Award from the National Institute of Health, and currently works with Josef Parvizi and Russ Poldrack.

Rodrigo's research aims to understand the function and physiology of the distributed networks that occupy association cortex. A long-standing hypothesis is that these large-scale networks are specialized and interact to enable different cognitive processes. Revealing the nature of these specializations requires functional imaging to be conducted with enough precision to resolve functional zones that are finely juxtaposed and interdigitated along the complex geometry of the cortical surface. Rodrigo uses dense-sampling fMRI techniques that can delineate functional anatomy with precision within individuals. At Stanford, Rodrigo is combining fMRI network mapping with intracranial methods that can reveal the electrophysiological basis of the distributed networks, including how network regions interact to form networks, and how different networks interact to perform cognitive functions.

ACADEMIC APPOINTMENTS

- Instructor, Neurology & Neurological Sciences

HONORS AND AWARDS

- Pathway to Independence Award (K99/R00), NIH (08/2018 - 07/2020)
- Sir Henry Wellcome Postdoctoral Fellowship, Wellcome Trust (10/2014 - 07/2018)
- 3.5-yr PhD Scholarship, UK Medical Research Council (10/2010 - 04/2014)
- Master of Research Scholarship, UK Medical Research Council (10/2009 - 10/2010)

LINKS

- www.rodbraga.com: www.rodbraga.com

Publications

PUBLICATIONS

- **Parallel distributed networks resolved at high resolution reveal close juxtaposition of distinct regions** *JOURNAL OF NEUROPHYSIOLOGY*
Braga, R. M., Van Dijk, K. A., Polimeni, J. R., Eldaief, M. C., Buckner, R. L.
2019; 121 (4): 1513–34

- **Parallel Interdigitated Distributed Networks within the Individual Estimated by Intrinsic Functional Connectivity** *NEURON*
Braga, R. M., Buckner, R. L.
2017; 95 (2): 457-+
- **Echoes of the Brain within Default Mode, Association, and Heteromodal Cortices** *JOURNAL OF NEUROSCIENCE*
Braga, R. M., Sharp, D. J., Leeson, C., Wise, R. S., Leech, R.
2013; 33 (35): 14031–39
- **Echoes of the Brain within the Posterior Cingulate Cortex** *JOURNAL OF NEUROSCIENCE*
Leech, R., Braga, R., Sharp, D. J.
2012; 32 (1): 215–22