

Curriculum Vitae Pasquini Lorenzo, PhD

Memory and Aging Center
University of California, San Francisco
675 Nelson Rising Lane, NS-293
San Francisco, CA 94158
Phone: +1-415-933-1541 | **Email:** lorenzo.pasquini@ucsf.edu
Website: <https://www.lorenzopasquini.com/home>

Education

Ph.D Medical Life Science and Technology September 2016

- Thesis: “*Graded degeneration of cortical networks and medial temporal lobe dysconnectivity: Brain network dysfunctions in Alzheimer’s disease*” – summa cum laude
- Technical University of Munich, Neuroimaging Center at the Klinikum rechts der Isar, Neuroradiology Department

Master’s Degree in Public Health September 2015

- Thesis: “*Construct and predictive validity of neurological symptoms among older adults living in low and middle income countries*”
- Ludwig Maximilian University of Munich

Biology Diploma (Master’s degree equivalent) September 2011

- Thesis: “*Decreased long-range but increased short-range BOLD synchrony of the hippocampus in Alzheimer’s disease*” – grade: 1.0; highest grade
- Ludwig Maximilian University of Munich

Research and Professional Experience

Assistant Professor, in Residence May 2022-ongoing

- Neuroscape, University of California San Francisco
- In collaboration with Drs. Gazzaley and Carhart-Harris, I explore the neural basis of emotions in older adults and how these neural systems are impacted by psychedelic-based interventions
- Funded by a R00 grant from the NIA-NIH

Visiting Scholar IV February 2022-May 2022

- Universitat Pompeu Fabra, Barcelona, Spain
- Collaboration with Prof. Gustavo Deco, leader of the Computational Neuroscience Group. I applied novel dynamic methods to assess autonomic physiology across emotions and to model long-change functional brain changes following a psychedelic-based intervention
- One first-author in preparation from this collaboration

Postdoctoral Researcher November 2016-May 2022

- Memory and Aging Center, University of California San Francisco

- At the Selective Vulnerability Lab of Prof. Dr. William W. Seeley, I am using neuroimaging techniques to investigate neuropathophysiology of the insula in frontotemporal lobar degeneration and its involvement in socioemotional deficits.
- My activity resulted in two first-author, one second-author, and multiple co-author papers. My scientific output helped me secure a K99/R00 grant from the NIH

Visiting Scholar III December 2015-March 2016

- Brain Institute UFRN Natal, Brazil
- Neuroimaging study exploring the subacute effects of the psychedelic Ayahuasca on large-scale brain network functional organization
- One first-author paper resulted from this collaboration

Visiting Scholar II April 2015-June 2015

- Institute of Psychiatry, Psychology and Neuroscience at King's College London
- Epidemiological study exploring the neurological determinants of dementia and mortality among older adults living in Latin American countries (Master Thesis in Public Health)
- One first-author paper resulted from this collaboration

Graduate student/Research Assistant February 2012-October 2016

- Neuroradiology Department at the Klinikum rechts der Isar, Technical University of Munich
- Neuroimaging studies exploring the medial temporal lobe dysfunction in patients with Alzheimer's disease and mild cognitive impairment
- My activity resulted in four first-author, one senior author, two second-author, and multiple co-author papers. Through my scientific output I secured a PhD fellowship from the German Academic Foundation

Visiting Scholar I September 2008-September 2009

- Erasmus studies at Paris-Sud University (Paris-XI)
- Behavioral and genetic laboratory internship exploring the role of mushroom bodies in memory formation in *Drosophila melanogaster*

Fellowships

- Feodor Lynen Postdoctoral Fellowship Humboldt Foundation Feb 2022-May 2022
€101,064 for two years
- German Academic Exchange Service Alnet Fellow Dec 2021
Travel/networking fellowship
- K99/R00 Pathway to Independence Award from NIH-NIA Aug 2020-May 2025
\$997,020 for five years
- Ph.D fellowship from the German Academic Foundation Jul 2014-Sep 2016
\$41,090 for two years

Honors, Awards, and Selected Talks

- Organizer, chair, and speaker at the symposium "*Clinical applications of time-varying neuroimaging*", Organization for Human Brain Mapping, Rome 2019 Jun 2019

- Minisymposium at the annual meeting of the Society for Neuroscience, Washington DC 2017 Nov 2017
- Travel award to present at the Big Data Neuroscience Workshop 2017 at the Indiana University in Bloomington Sep 2017
- Travel award to present at the Alzheimer's Association International Conference (AAIC), Toronto 2016 Jul 2016

Peer-Reviewed Publications

Link to Google Scholar

<https://scholar.google.com/citations?user=o-FStWsAAAAJ&hl=en>

1. **L Pasquini**, et al., Salience network atrophy links neuron type-specific degeneration to loss of empathy in frontotemporal dementia. **Cerebral Cortex 2020**
2. **L Pasquini**, F Palhano-Fontes, DB Araujo. Subacute effects of the psychedelic Ayahuasca on the salience and default mode networks. **Journal of Psychopharmacology 2020**
3. AL Ruiz-Rizzo, F Beissner, K Finke, HJ Müller, C Zimmer, **L Pasquini**¹, C Sorg². Human subsystems of medial temporal lobes extend locally to amygdala nuclei and globally to an allostatic-interoceptive system. **Neuroimage 2020**
4. D Lurie, D Kessler, D Bassett, RF Betzel, M Breakspear, S Keilholz, ... , **L Pasquini**, et al., Questions and controversies in the study of time-varying functional connectivity in resting fMRI. **Network Neuroscience 2020**
5. **L Pasquini**, et al., State and trait characteristics of anterior insula time-varying functional connectivity. **Neuroimage 2019**
6. RK Olsen, VA Carr, AM Daugherty, R La Joie, RSC Amaral, K Amunts, ... , **L Pasquini**, et al., Progress update from the hippocampal subfields group. **Alzheimer's & Dementia: Diagnosis, Assessment & Disease Monitoring 2019**
7. M Scherr, L Utz, M Tahmasian, **L Pasquini**, MJ Grothe, JP Rauschecker, et al., Effective connectivity in the default mode network is distinctively disrupted in Alzheimer's disease—A simultaneous resting-state FDG-PET/fMRI study. **Human Brain Mapping 2019**
8. AL Nana, M Sidhu, SE Gaus, JHL Hwang, L Li, Y Park, EJ Kim, **L Pasquini**, et al., Neurons selectively targeted in frontotemporal dementia reveal early stage TDP-43 pathobiology. **Acta Neuropathologica 2019**
9. **L Pasquini**, et al., Medial Temporal Lobe Disconnection and Hyperexcitability Across Alzheimer's Disease Stages. **Journal of Alzheimer's Disease Reports 2019**
10. PM Butler, W Chiong, DC Perry, ZA Miller, ED Gennatas, JA Brown, **L Pasquini**, et al., Dopamine receptor D4 (DRD4) polymorphisms with reduced functional potency intensify atrophy in syndrome-specific sites of frontotemporal dementia. **NeuroImage: Clinical 2019**
11. **L Pasquini**, et al., Neurological signs as early determinants of dementia and predictors of mortality among older adults in Latin America: a 10/66 study using the NEUROEX assessment. **BMC Neurology 2018**
12. J Göttler, C Preibisch, I Riederer, **L Pasquini**, et al., Reduced blood oxygenation level dependent connectivity is related to hypoperfusion in Alzheimer's Disease. **Journal of Cerebral Blood Flow & Metabolism 2018**

¹ Shared senior authorship

13. M Scherr, **L Pasquini**, et al., Decoupling of Local Metabolic Activity and Functional Connectivity Links to Amyloid in Alzheimer's Disease. **Journal of Alzheimer's Disease 2018**
14. **L Pasquini**¹, G Benson², et al., Individual correspondence of amyloid- β and intrinsic connectivity in the posterior default mode network across stages of Alzheimer's disease. **Journal of Alzheimer's Disease 2017**
15. M Ortner, **L Pasquini**, et al., Progressively disrupted intrinsic functional connectivity of basolateral amygdala in very early Alzheimer's disease. *Frontiers in neurology* 2016
16. R Nuttall, **L Pasquini**, et al., Degradation in intrinsic connectivity networks across the Alzheimer's disease spectrum. **Alzheimer's & Dementia: Diagnosis, Assessment & Disease Monitoring 2016**
17. **L Pasquini**, et al., Increased intrinsic activity of medial-temporal lobe subregions is associated with decreased cortical thickness of medial-parietal areas in patients with Alzheimer's disease. **Journal of Alzheimer's Disease 2016**
18. M Tahmasian, **L Pasquini**, et al., The lower hippocampus global connectivity, the higher its local metabolism in Alzheimer disease. **Neurology 2015**
19. **L Pasquini**, et al., Link between hippocampus' raised local and eased global intrinsic connectivity in AD. **Alzheimer's & Dementia 2015**
20. K Koch, NE Myers, J Göttler, **L Pasquini**, et al., Disrupted intrinsic networks link amyloid- β pathology and impaired cognition in prodromal Alzheimer's disease. **Cerebral Cortex 2014**
21. **L Pasquini**, et al., Intrinsic brain activity of cognitively normal older persons resembles more that of patients both with and at risk for Alzheimer's disease than that of healthy younger persons. **Brain Connectivity 2014**
22. N Myers, **L Pasquini**, et al., Within-patient correspondence of amyloid- β and intrinsic network connectivity in Alzheimer's disease. **Brain 2014**

Preprints Currently Under Peer-Review

1. J Brown, A Lee, **L Pasquini**, WW Seeley. Intrinsic brain activity gradients dynamically coordinate functional connectivity states. **BioRxiv 2020**
2. **L Pasquini**, et al., Dynamic autonomic nervous system patterns differentiate human emotions and manifest in resting physiology. **BioRxiv 2021**

Peer-Review Activity

Journal/Organization	Impact factor	Contribution	Time
Wellcome Trust	NA	Grant reviewer	Since 2020
Frontiers in Human Neuroscience	3.21	Review editor	Since 2020
NeuroImage	5.81	Reviewer	Since 2019
Alzheimer's and Dementia	14.42	Reviewer	Since 2019
JAMA Neurology	12.32	Reviewer	Since 2018
Cerebral Cortex	8.28	Reviewer	Since 2018
NeuroImage Clinical	4.34	Reviewer	Since 2018
Human Brain Mapping	5.97	Reviewer	Since 2017
Scientific Reports	4.53	Reviewer	Since 2015
Neurobiology of Aging	5.13	Reviewer	Since 2014

² Shared first authorship

Mentoring and Teaching

- Mentoring of clinical fellows and research assistants at the UCSF Memory and Aging Center Feb 2020-ongoing
- Lecturer at UCSF Educational Curriculum "Fundamental Topics in Aging Research" 2018
- Coordinator and organizer of Brainhack San Francisco 2018, a community event gathering data scientist and neuroscientist in the Bay Area (<https://sfbrainhack.github.io/>) 2018
- Coordinator and moderator of the journal club Methods in Neuroimaging, UCSF Memory and Aging Center 2016-2018
- Gloria Benson, Master Thesis supervision Master of Science in Neurocognitive Psychology, Ludwig Maximilian University of Munich Thesis: "A path to Alzheimer's Disease: Amyloid- β and Intrinsic Network Connectivity Correspondence" 2015
- Coordinating and teaching at yearly one-week neuroimaging classes within the Medical Life Science and Technology graduate program of the Technical University of Munich 2011-2015

Professional Membership

- Society for Affective Science 2021
- Organization for Human Brain Mapping (OHBM) 2019
- Association for Frontotemporal Dementia 2018
- Member at Society for Neuroscience (SfN) 2017

Public Outreach

- Coverage of my research on PsyPost, a popular neuroscience blog 2020
- Presentation of my research at the Exploratorium Museum in San Francisco 2019
- Scientific outreach at The Bay Area Science Festival 2018
- Scientific outreach at "NightLife: Feel the Force" California Academy of Sciences, San Francisco 2017

Entrepreneurship

- UCSF Entrepreneurship for Life Science/Healthcare Startups 10 Weeks Master Class Direct from Silicon Valley Spring 2021
- Startup-101 course at UCSF April 2018

Two months entrepreneurship course
My team received the first price at the pitch night competition

Languages

English: Very good speaking, reading and writing skills | **Italian:** Native speaker | **German:** Native speaker | **French:** Very good speaking, reading and writing skills | **Spanish:** Very good speaking, reading and writing skills | **Portuguese:** Good speaking and reading, basic writing skills | **Tunisian Arabic:** basic speaking skills

I hold the dual Italian and German citizenship, grew up in Chile where I learned Spanish, and speak French on a daily basis with my wife who I met as an Erasmus student in Paris.

Humanitarian

- Volunteering activities with unaccompanied minor refugees through the Munich-based NGO Condrops (<https://www.condrops.de/>) Jan 2016-Sep 2016
- Teaching French, mathematics, and Rugby at *Village Pilote* (<https://www.villagepilote.org>), a French/Senegalese NGO based in Dakar providing shelter to homeless minors Dec 2011-Feb 2012
- Teaching activities school students from underprivileged backgrounds through the Catholic organization *Caritas* (<https://www.caritas-nah-am-naechsten.de/>) Jun 2011-Dec 2011
- Teaching activities with minor refugees through the Munich-based NGO *SaveMe Muenchen* (<http://www.save-me-muenchen.de/en/>) 2010
- Volunteering activities with disabled persons through the Munich-based NGO *Gemeinsam Leben Lernen* (<https://www.gll-muenchen.de/>) 2006-2010

References

- William, W. Seeley MD
Zander Family Endowed Professor in Neurology
UCSF Memory and Aging Center
Weill Institute for Neurosciences
675 Nelson Rising Lane, Suite 190 | San Francisco, CA 94143
Tel: 415-476-2793 | Fax: 415-476-7963
Email: bill.seeley@ucsf.edu
- Virginia Sturm, PhD
John Douglas French Alzheimer's Foundation Endowed Professor
UCSF Memory and Aging Center
Weill Institute for Neurosciences
675 Nelson Rising Lane, Suite 190 | San Francisco, CA 94143
Tel: 415.476.8618 | Fax: 415.476.0213
Email: virginia.sturm@ucsf.edu
- Manish Saggat, PhD
Director, Brain Dynamics Lab

Assistant Professor, Psychiatry & Behavioral Sciences
Stanford University,
401 Quarry Rd., St 1356, Stanford CA
Tel: 650-723-3656
Email: saggar@stanford.edu

- Christian Sorg, MD
Principal Investigator, Neuroimaging Center at the Technical University of Munich
Neuroradiology Department Klinikum rechts der Isar
Ismaninger Str. 22, 81675 München, Germany
Email: christian.sorg@tum.de
- Draulio de Araujo, PhD
Principal Investigator, Brain Institute
Federal University of Rio Grande do Norte
Av. Nascimento de Castro, 2155 - 59056-450
Natal (RN), Brazil
Email: draulio@neuro.ufrn.br