

OMAR H BUTT
138 Faith Rd
Sugarloaf, PA 18249
(314) 450 - 0148
omarhbutt@wustl.edu

EDUCATION

- 2016 – Present University of Washington, St Louis MO
Internship, 2016 – 2017
Neurology Residency, 2017 –
- 2007 – 2016 University of Pennsylvania, Philadelphia, PA
M.D., Anticipated May 2016
Ph.D., Neuroscience (May 2014)
Thesis: Form in Darkness: Linking Visual Cortex Structure
with Spontaneous Neural Function
Advisor: Geoffrey K. Aguirre M.D. Ph.D.
- 2002 – 2007 Johns Hopkins University, Baltimore, MD
M.S., Cellular and Molecular Biology
B.S., Double Major in Cellular and Molecular Biology & Near
Eastern Studies

RESEARCH EXPERIENCE

- 2010 – 2014 Graduate Research, University of Pennsylvania
Characterizing changes to the organization of spontaneous neural
signals within visual cortex following perturbations in visual
experience. Advisor: Geoffrey K. Aguirre M.D. Ph.D
- 2005 – 2007 Undergraduate+Master's Research, Johns Hopkins University
Characterizing the efficacy of hypoxia optimized variants of the
(potential) chemotherapeutic M4N using mouse xenograft
experiments and cell culture assays. Advisor: Ru Chih Huang,
Ph.D.

PUBLISHED WORK (*Peer-Reviewed, Basic Science*)

Benson NC*, **Butt OH***, Datta R, Radoeva PD, Brainard DH, Aguirre GK (2012) The
retinotopic organization of striate cortex is well predicted by surface topology. *Curr Biol.*

22(21):2081-5. PMID: 23041195

* These authors contributed equally to this work.

Butt OH*, Benson NC*, Datta R, Aguirre GK (2013) The fine-scale functional correlation of striate cortex in sighted and blind people. *J Neurosci.* 33(41):16209-19. PMID: 24107953

* These authors contributed equally to this work.

Benson NC, **Butt OH**, Brainard DH, Aguirre GK (2014) Correction of distortion in flattened representations of the cortical surface allows prediction of V1-V3 functional organization from anatomy. *PLoS Comput Biol.* 10(3):e1003538. PMID: 24676149

Persichetti AS, Thompson-Schill SL, **Butt OH**, Brainard DH, Aguirre GK (2015) Functional magnetic resonance imaging adaptation reveals a noncategorical representation of hue in the early visual cortex. *JoV.* 15(6):0, 1–19.

Cideciyan AV, Aguirre GK, Jacobson SG, **Butt OH**, Schwartz SB, Swider M, Roman AJ, Sadigh S, Hauswirth WW (2015) Pseudo-fovea formation after gene therapy for *RPE65*-LCA. *Invest Ophthalmol Vis Sci.* 56(1):526-37. PMID: 25537204

Butt OH, Benson NC, Datta R, Aguirre GK (2015) Hierarchical and homotopic correlations of spontaneous neural activity within the visual cortex of the sighted and blind. *Front Hum Neurosci.* 9:25. PMID: 25713519

Aguirre GK, Datta R, Benson NC, Prasad S, Jacobson SG, Cideciyan AV, Bridge H, Watkins KE, **Butt OH**, Daina AB, Brandes L, Gennatas ED. (2016) Patterns of individual variation in visual pathway structure and function in the sighted and blind. *PLoS One.* *Submitted*

PRESENTATIONS & POSTERS (*National & International Conferences*)

Butt OH, Benson NC, Datta R, Brainard DH, Aguirre GK (2011) Multi-focal and phase-encoded retinotopy compared. Vision Sciences Society, Naples, FL.

Butt OH, Benson NC, Datta R, Aguirre GK (2012) The Blind Exchange Hemispheric Synchrony for long-range Functional Connectivity in V1. Organization for Human Brain Mapping, Beijing, China.

Butt OH, Benson NC, Datta R, Aguirre GK (2012) The Blind Exchange Hemispheric Synchrony for long-range Functional Connectivity in V1. Vision Sciences Society, Naples, FL.

Butt OH, Benson NC, Datta R, Aguirre GK (2013) Blindness alters functional connectivity between dorsal and ventral quadrants of extrastriate cortex. Organization for Human Brain Mapping, Seattle, WA.

Butt OH, Benson NC, Datta R, Aguirre GK (2013) Blindness subtly alters the distant functional connectivity of dorsal and ventral extrastriate cortex. Vision Sciences Society, Naples, FL.

ACHIEVEMENTS/AWARDS

- 2013 Received Vision Sciences Society (VSS) Abstract Travel Award
- 2012 Received Organization for Human Brain Mapping (OHBM) Abstract Travel Award
- 2007 Graduated *magna cum laude* with 3.93 GPA
- 2005 Inducted to Phi Beta Kappa Junior year of college

TEACHING EXPERIENCE

- 2011 – 2012 Teaching Assistant, Introduction to Brain and Behavior (Spring semesters)
- 2006 – 2007 Teaching Assistant, Introduction to Biology Lab

SERVICE EXPERIENCE

- 2005 – 2006 Organized a Vaccination Project with HGF providing HepB Vaccines to school children in remote villages in Pakistan