

**PEARL H. CHIU, PhD**

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**EDUCATION AND EMPLOYMENT**

Associate Professor 07/2016 - present **Virginia Tech Department of Psychology (with tenure), Blacksburg VA; Fralin Biomedical Research Institute at VT Carilion and VTC School of Medicine**

Assistant Professor 2011 - 06/2016 **Virginia Tech Carilion Research Institute & School of Medicine, Roanoke VA; Virginia Tech Department of Psychology, Blacksburg VA**

Research Scientist 2011 - present **Salem Veterans Affairs Medical Center, Salem VA**

Assistant Professor 2007 - 2010 **Baylor College of Medicine, Department of Neuroscience and Menninger Department of Psychiatry and Behavioral Sciences (Adjunct 2011 - 2013); Michael E. Debakey Veterans Affairs Medical Center (Research Scientist)**

Post-doc Fellow 2006 - 2007 **Baylor College of Medicine, Department of Neuroscience**  
Human Neuroimaging Lab (PI: Read Montague, PhD)

PhD 2006 **Harvard University, Cambridge, MA**  
Field: Psychology (Clinical Science)

Clinical Intern 2005 - 2006 **Baylor College of Medicine, Menninger Department of Psychiatry & Behavioral Sciences, Houston, TX (Adult Neuroscience Track; APA Accredited Internship)**

AM 2004 **Harvard University, Cambridge, MA**  
Field: Psychology

Lab Coordinator 1998 - 2000 **Harvard University, Cambridge, MA**  
Interpersonal Perception and Communication Lab (PI: Nalini Ambady, PhD)

AB 1998 **Harvard University, Cambridge, MA**  
Field: Psychology and Biology, Track in Cognitive Neuroscience

**AWARDS AND HONORS**

2022 **Virginia Tech Graduate School, College of Science Outstanding Mentor Award**

2015 **National Public Radio, Source of the Week**

2012 **Virginia Tech Scholar of the Week, April 9**

2010 **Biobehavioral Research Award for Innovative New Scientists (BRAINS), National Institute of Mental Health**

2006 - 2007 **American Psychological Association Diversity in Neuroscience Postdoctoral Fellowship**

2004 - 2005 **Dissertation Completion Merit Fellowship, Harvard University**

2003 - 2004 **Harvard University Graduate Society Dissertation Merit Fellowship**

2001 - 2002 **Fellowship in Psychobiology. Distinction for interdisciplinary research**

2001 **Bok Certificate of Distinction in Teaching, Harvard University. 4.9/5.0 teaching rating**

2001 **Vincent Prize. For Innovative Ideas for the Awareness & Treatment of Depression**

2000 - 2001 **Stimson Prize for Research, Harvard University**

1998 **John Harvard Certificate of Merit. University recognition of academic merit**

1998 **Certificate in Mind, Brain, Behavior. University recognition of interdisciplinary research**

**PEER-REVIEWED PAPERS**

\* senior/co-senior or corresponding author; # trainee co-author

- Williams, W, King-Casas, B, Chiu, PH, Sciarrino, N, Estey, M, Hunt, C, McCurry, K, Graham, D (2022) Do early responders and treatment non-responders offer guidance to make cognitive processing therapy (CPT) group a more effective treatment? *Journal of Clinical Psychology*, 78, 1376-1387. <https://doi.org/10.1002/jclp.23307>
- Brown VM<sup>#</sup>, Zhu L<sup>#</sup>, Solway A<sup>#</sup>, Wang, JM<sup>#</sup>, McCurry, KL<sup>#</sup>, King-Casas, B\*, Chiu, PH\* (2021) Reinforcement learning disruptions in individuals with depression and sensitivity to symptom change following cognitive behavioral therapy. *JAMA Psychiatry*, 78, 1113-1122. <https://doi.org/10.1001/jamapsychiatry.2021.1844>
- Chung, D<sup>#</sup>, Orloff, M<sup>#</sup>, Lauharatanahirun, N<sup>#</sup>, Chiu, PH\*, King-Casas, B\* (2020) Valuation of peers' safe choices is associated with substance-naïveté in adolescents. *Proceedings of the National Academy of Sciences*, USA, 117, 31729-31737. <https://doi.org/10.1073/pnas.1919111117>
- Williams, MW, Graham, D, Sciarrino, NA, Estey, M, McCurry, K<sup>#</sup>, Chiu, PH\*, King-Casas, B\* (2020) Does validity measure response affect group cognitive processing therapy (CPT) outcomes in veterans with PTSD? *Military Medicine*, 185, e370-e376. <https://doi.org/10.1093/milmed/usz385>
- McCurry, KM<sup>#</sup>, Frueh, BC, Chiu, PH\*, King-Casas, B\* (2020) Opponent effects of hyperarousal and reexperiencing on affective habituation in posttraumatic stress disorder. *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging*, 5, 203-212. <https://doi.org/10.1016/j.bpsc.2019.09.006>  
Commentary in: Averill CL, Averill LA, Fan S, Abdallah CG (2020) Of forests and trees: Bridging the gap between neurobiology and behavior in posttraumatic stress disorder. *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging*, 5, 135-137.
- Wang, JM<sup>#</sup>, Zhu, L<sup>#</sup>, Brown, VM<sup>#</sup>, De La Garza II, R, Newton, T, King-Casas, B, Chiu, PH\* (2019) In cocaine dependence, neural prediction errors during loss avoidance are increased with cocaine deprivation and predict drug use. *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging*, 4, 291-299. <https://doi.org/10.1016/j.bpsc.2018.07.009>  
Commentary in: Stewart, JL (2019). A computational modeling approach supports negative reinforcement theories of addiction. *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging*, 4, 218-219.
- Brown, V<sup>#</sup>, Zhu, L<sup>#</sup>, Wang, J<sup>#</sup>, Frueh, BC, King-Casas, B, Chiu, PH\* (2018). Associability-modulated loss learning is increased in posttraumatic stress disorder. *eLife*. eLife 2018;7:e30150. <https://doi.org/10.7554/eLife.30150>  
Commentary in: <https://doi.org/10.7554/eLife.30150.002>
- Kahn RE, Chiu PH, Deater-Deckard K, Hochgraf AK, King-Casas B, Kim-Spoon J (2018). The interaction between punishment sensitivity and effortful control for emerging adults' substance use behaviors. *Substance Use and Misuse*, 53, 1299-1310. <https://doi.org/10.1080/10826084.2017.1407790>
- Chung, D<sup>#</sup>, Kadlec, K<sup>#</sup>, Aimone, J, McCurry, K<sup>#</sup>, King-Casas, B, Chiu, PH\* (2017). Valuation in major depression is intact and stable in a non-learning environment. *Scientific Reports*, 7, 44374. <https://doi.org/10.1038/srep44374>
- Kim-Spoon, J, Kahn, RE, Lauharatanahirun, N, Deater-Deckard, K, Bickel, WK, Chiu, PH, King-Casas, B (2017). Executive functioning and substance use in adolescence: Neurobiological and behavioral perspectives. *Neuropsychologia*, 100, 79-92. <https://doi.org/10.1016/j.neuropsychologia.2017.04.020>
- Kim-Spoon, J, Deater-Deckard, K, Holmes, C, Lee, J, Chiu, P, King-Casas, B (2016). Behavioral and neural inhibitory control moderates the effects of reward sensitivity on adolescent substance use. *Neuropsychologia*. 91, 318-326. <https://doi.org/10.1016/j.neuropsychologia.2016.08.028>

- Kim-Spoon, J, Kahn, R<sup>#</sup>, Deater-Deckard, K, Chiu, PH, Steinberg, L, King-Casas, B (2016). Risky decision making in a laboratory driving task is associated with health risk behaviors during late adolescence but not adulthood. *International Journal of Behavioral Development*. 40, 58 - 63.  
<https://doi.org/10.1177/0165025415577825>
- Chung, D<sup>#</sup>, Christopoulos, G<sup>#</sup>, King-Casas, B, Ball, S, Chiu, PH\* (2015). Social signals of safety and risk confer utility and have asymmetric effects on observers' choices. *Nature Neuroscience*, 18, 912 - 916.  
<https://doi.org/10.1038/nn.4022>  
Commentary in: Smith, DV & Delgado, MR (2015) Social nudges: utility conferred from others. *Nature Neuroscience*, 18, 791 - 792.
- Marsden, KE<sup>#</sup>, Ma, WJ, Deci, EL, Ryan, RM, Chiu, PH\* (2015). Diminished neural responses predict enhanced intrinsic motivation and sensitivity to external incentive. *Cognitive, Affective, & Behavioral Neuroscience*, 15, 276 - 286. <https://doi.org/10.3758/s13415-014-0324-5>
- Williams, W, Graham, D, McCurry, K<sup>#</sup>, Sanders, A, Eiseman, J, Chiu, PH\*, King-Casas\*, B (2014). Group psychotherapy's impact on trust in veterans with PTSD: A pilot study. *Bulletin of the Menninger Clinic*, 78, 335 - 348. <https://doi.org/10.1521/bumc.2014.78.4.335>
- Zhu, L<sup>#</sup>, Jenkins, AC, Set, E, Scabini, D, Knight, RT, Chiu, PH, King-Casas\*, B, Hsu\*, M (2014). Damage to dorsolateral prefrontal cortex affects tradeoffs between honesty and self-interest. *Nature Neuroscience*, 17, 1319 - 1321. <https://doi.org/10.1038/nn.3798>
- White, SW, Mazefsky, CA, Dichter, GS, Chiu, PH, Richey, JA, Ollendick, TH (2014). Social-cognitive, physiological, and neural mechanisms underlying emotion regulation impairments: Understanding anxiety in autism spectrum disorder. *International Journal of Developmental Neuroscience*, 39, 22 - 36.  
<https://doi.org/10.1016/j.ijdevneu.2014.05.012>
- King-Casas\*, B & Chiu\*, PH (2012). Understanding social function in psychiatric illness through multi-player economic games. *Biological Psychiatry*, 72, 119-125. <https://doi.org/10.1016/j.biopsych.2012.03.033>
- D'Andrea, W<sup>#</sup>, Chiu, PH, Casas, BR, & Deldin, P (2012). Linguistic predictors of post-traumatic stress disorder symptoms following 11 September 2001. *Applied Cognitive Psychology*, 26, 316-323.  
<https://doi.org/10.1002/acp.1830>
- Tso, IF<sup>#</sup>, Chiu, PH, King-Casas, BR, Deldin P (2011). Alterations in affective processing of attack images following September 11, 2001. *Journal of Traumatic Stress*, 24, 538-545.  
<https://doi.org/10.1002/jts.20678>
- Herman, S, Archambeau, OG<sup>#</sup>, Deliramich, AN<sup>#</sup>, Kim, BSK, Chiu, PH, Frueh, BC (2011). Depressive symptoms and mental health treatment in an ethnographically diverse college student sample. *Journal of American College Health*, 59, 715-720. <https://doi.org/10.1080/07448481.2010.529625>
- Lindsey, L<sup>#</sup>, King-Casas, B, Brovko, J, Chiu, PH\* (2009). Toward functional neurobehavioral assessment of mood and anxiety. *Conference Proceedings of the IEEE Engineering in Medicine and Biology Society*, 2009, 5393-5396 <https://doi.org/10.1109/IEMBS.2009.5332809>
- Chiu, PH\*, Holmes, AJ, Pizzagalli, DA (2008). Dissociable recruitment of rostral anterior cingulate and inferior frontal cortex in emotional response inhibition. *NeuroImage*, 42, 988-997.  
<https://doi.org/10.1016/j.neuroimage.2008.04.248>
- Chiu, PH, Lohrenz, TM, Montague, PR (2008). Smokers' brains compute but ignore a fictive error signal in a sequential investment task. *Nature Neuroscience*, 11, 514-520. <https://doi.org/10.1038/nn2067>
- Chiu, PH, Kayali, MA, Kishida, KT, Tomlin, D, Klinger, LG, Klinger, MR, Montague, PR (2008). Self responses along cingulate cortex reveal quantitative neural phenotype for high functioning autism. *Neuron*, 57, 463-473. [cover article] <https://doi.org/10.1016/j.neuron.2007.12.020>  
Commentary in: Frith, CD & Frith U (2008). The self and its reputation in autism. *Neuron*, 57, 331-332.

Chiu\*, PH & Deldin, P (2007). Neural evidence for enhanced error detection in major depressive disorder. *American Journal of Psychiatry*, 164, 608-616. <https://doi.org/10.1176/ajp.2007.164.4.608>

Commentary in: Oquendo, MA & Parsey, RV (2007). What have we learned about the neurobiology of major depression? *American Journal of Psychiatry*, 164, 540-542.

Deldin, P & Chiu, P (2005). Cognitive restructuring and EEG in major depression. *Biological Psychology*, 70, 141-151. <https://doi.org/10.1016/j.biopsycho.2005.01.003>

Chiu, P, Ambady, N, & Deldin, P (2004). CNV to emotional in- and out-group stimuli differentiates high- and low- prejudiced individuals. *Journal of Cognitive Neuroscience*, 16, 1030-1039. <https://doi.org/10.1162/0898929042947946>

## **CHAPTERS, COMMENTARY, AND SCIENTIFIC OUTREACH PUBLICATIONS**

Li, F<sup>#\*</sup>, Chiu, PH\*, King-Casas, B\* (2021). Trust vs Reciprocity: The role of outcome-based and belief-based motivations. In Krueger, F (Ed.), *The Neurobiology of Trust* (pp. 236-268). Cambridge, UK: Cambridge University Press. <https://doi.org/10.1017/9781108770880.014>

Chiu, PH & King-Casas, B (2021) Can peer pressure help teens make safer decisions? *Science Journal for Kids*. <https://www.sciencejournalforkids.org/articles/can-peer-pressure-help-teens-make-safer-decisions/>

Montague, PR & Chiu, PH (2009). Brain reward and fMRI. In Charney, D. and Nestler, E. (Eds.), *Neurobiology of Mental Illness* (pp. 846-866). New York NY: Oxford University Press.

Montague, PR & Chiu, PH (2007). For goodness' sake. [News and Views] *Nature Neuroscience*, 10, 137-138. <https://doi.org/10.1038/nn0207-137>

Ambady, N, Chiao, J, Chiu, P, & Deldin, P (2005). Race and emotion: insights from a social neuroscience perspective. In JT Cacioppo, PS Visser, CL Pickett (Eds.), *Social Neuroscience: People Thinking About People*. (pp. 209-228). Cambridge MA: MIT Press.

Deldin, P, Shestyuk, A, & Chiu, P (2003). ERP indices of memory biases in depression. In M. Lenzenweger and J. Hooley (Eds.), *Principles of Experimental Psychopathology* (pp. 195-210). Washington, D.C.: APA. <https://doi.org/10.1037/10477-012>

## **RESEARCH FUNDING**

### **Current support**

#### PI or MPI

R01MH122512      Chiu, Montague (MPIs)      07/2022 - 03/2027

NIH/NIMH

Title: Sub-second neurochemistry of error signals and affective processing in depression

Goal: Test dopamine and serotonin correlates of depression symptoms

R01AA029222      Chiu (PI)      09/2021 - 05/2026

NIH/NIAAA

Title: Making connections among social ties, neural sensitivity to social signals, and outcomes

Goal: Test whether sensitivity to social signals influences how social ties yield variability in alcohol use and mood/anxiety outcomes

R01MH127773      Chiu (PI)      07/2021 - 06/2026

NIH/NIMH

Title: Evaluating neurocomputational loss and reward elements of the RDoC matrix

Goal: Assess structural relationships and stability among valuation processes and psychopathology symptoms

R01DA051573            Chiu, King-Casas (MPIs)            04/2021 - 03/2026  
NIH/NIDA  
Title: Social influences on choices in adolescent substance use  
Goal: Examine neurobehavioral substrates of how social peers impact choices in adolescents

Co-I

Merit D2354R            King-Casas (PI)            07/2018 - 06/2023  
VA/RR&D  
Title: Efficacy and neural mediators of response to TMT for PTSD  
Goal: Investigate neural mechanisms of treatment in PTSD using functional magnetic resonance imaging  
Role: Co-I

R01MH115221            King-Casas (PI)            02/2018 - 12/2022  
NIH/NIMH  
Title: Neurobehavioral mechanisms of social dysfunction in Borderline Personality Disorder  
Goal: Use computational models of social behavior and neuroimaging to evaluate interpersonal dysfunction in borderline personality disorder  
Role: Co-I

Program faculty

R25 NS105141            Fox (PI)            01/2018 - 12/2022  
NIH/NINDS  
Title: Virginia Tech Translational Neurobiology Summer Undergraduate Research Fellowship  
Goal: Provide research experiences to undergraduate and high school students in translational neurobiology and expose students to independent research early in their careers  
Role: Program Faculty

R25 GM072767            Smith (PI)            01/2007 - 04/2023  
NIH/NIGMS  
Title: Virginia Tech – Initiative for Maximizing Student Development (VT-IMSD)  
Goal: Develop and train underrepresented minorities in acquiring skills needed to succeed in Ph.D. programs and biomedical and behavioral research.  
Role: Program Faculty

R25 GM066534            Smith (PI)            08/2003 - 06/2023  
NIH/NIGMS  
Title: The Virginia Tech Postbaccalaureate Research and Education Program  
Goal: Recruit and prepare postbaccalaureate scholars for admission into competitive and highly selective biomedical and behavioral sciences doctoral programs at research-intensive universities.  
Role: Program Faculty

Continuously funded by the NIH since 2008. A full list of external support is available upon request.

**SCIENTIFIC REVIEW AND SERVICE**

National service

07/2022 - present    Member, Neural Basis of Psychopathology, Addictions and Sleep Disorders Study Section, National Institutes of Health Center for Scientific Review

2011 - present        Multiple national scientific review panels each year, including scientific review for: NIMH, NIDA, NIGMS, Department of Veterans Affairs.

### **International service**

2020 Reviewer, Netherlands Organisation for Health Research and Development  
2020 Reviewer, Health Research Council of New Zealand  
2019 Reviewer, Wellcome Trust, UK  
2014 Reviewer, Swiss National Science Foundation

### **Editorial service**

Editorial Board Member, Scientific Reports (2018 - present)  
Review Editor in Computational Psychiatry, Frontiers in Psychiatry (2018 - present)  
Editorial Board Member, Computational Psychiatry, MIT Press (2015 - 2020)

### **Ad Hoc Reviewer**

Archives of General Psychiatry; Autism Research; Biological Psychiatry; Biological Psychiatry: Cognitive Neuroscience and Neuroimaging; Biological Psychology; Computational Psychiatry; Cognitive, Affective, and Behavioral Neuroscience; Emotion; Experimental Biology & Medicine; Health Psychology; Human Brain Mapping; Journal of Cognitive Neuroscience; Journal of Psychiatric Research; Nature Neuroscience; Neural Computation; NeuroImage; Neuron; Neuropsychologia; Neuroscience; Psychiatry Research: Neuroimaging; PLOS Computational Biology; PNAS; Psychophysiology; Science; Scientific Reports; Conference Proceedings for Organization for Human Brain Mapping; Conference Proceedings for the Multi-disciplinary Conference on Reinforcement Learning and Decision Making.

### **University service**

#### **Virginia Tech**

#### **University service**

Search Committee, Director of Human Research Protection Program (2018)  
Adaptive Brain and Behavior Steering Committee (2016 - 2019)  
Center for Autism Research Steering Committee Member (2012 - 2017)

#### **College of Science service**

Steering Committee, COS Faculty Association, Psychology Representative (2021 - present)  
Promotion & Tenure Committee, elected COS member-at-large (2020 - 2022)  
Adaptive Brain and Behavior Destination Area, Neuroscience Faculty Search Committee (2012 - 2013, 2015 - 2016)  
Undergraduate Scholarship Reviewer (2015)

#### **Department of Psychology service**

Executive Committee (2021 - present)  
Faculty Search Committee, Clinical Science area (2021; three positions)  
Awards Committee, Clinical Science area (2021 - present)  
Personnel (Promotion & Tenure) Committee (2019 - 2020)  
Faculty Search Committee, Developmental Science area (2017 - 2018)  
Diversity Committee (2016 - 2019)  
Scholarly Productivity Committee, Clinical Science area (2012 - 2018; 2020 - 2021)  
Member, Clinical Science graduate training area faculty (2011 - present)  
Member, Biological Psychology graduate training area faculty (2011 - present)

Fralin Biomedical Research Institute at Virginia Tech Carilion

International Precision Neuroscience Conference, Organizing Committee (2020 - 2022)  
Postdoctoral Advancement Committee (2021 - present)  
Computational Neuroscience Faculty Search Committee (2017, 2018, 2020, 2021)  
Distinguished Visiting Scholar Seminar Series Committee (2011, 2012, 2017, 2018)  
Health Behaviors Faculty Search Committee (2017 - 2018)  
VTC School of Medicine, Neurology Department Chair Search Committee (2017)  
Carilion Clinic Research Committee (2012 - 2013)  
Cardio/Cerebrovascular Faculty Search Committee (2011)

**Baylor College of Medicine**

Member, Translational Biology & Molecular Medicine Graduate Program (2010)  
Executive Committee, Neuroscience Graduate Program (2010)  
Committee on Graduate Admissions (2009)  
Seminar Series Committee (2008)  
Group to define student competencies in quantitative skills (2007 - 2008)  
Department of Neuroscience, Computational/Cognitive Faculty Search Committee (2006 - 2008)

**TEACHING AND MENTORING**

**Graduate student training**

**Doctoral students as primary or co-primary mentor, Virginia Tech**

- (1) Shuhan Wang (incoming, Psychology; Biological Psychology Program, PhD expected 2027)
- (2) Kelsey Winkeler (current, Psychology; Clinical Science Program, PhD expected 2027)
- (3) Shivani Goyal (current, Psychology; Clinical Science Program, PhD expected 2027)
- (4) Vansh Bansal (current, Psychology; Clinical Science Program, PhD expected 2026)
- (5) Gates Palissery (current, Translational Biology, Medicine, and Health; PhD expected 2026)
- (6) Natalie Melville (current, Translational Biology, Medicine, and Health; PhD expected 2025)
- (7) Mark Orloff, PhD (2021, Translational Biology, Medicine, and Health); now postdoctoral fellow at UC Davis)
- (8) Zhuoya Cui, PhD (2021, Translational Biology, Medicine, and Health); now industry analyst, Shanghai, China
- (9) Shengchuang Feng, PhD (2020, Psychology; Biological Psychology program); now postdoctoral research fellow at Nanyang Technological University, Singapore)
- (10) Katie McCurry, PhD (2020, Psychology; Clinical Science Program); now T32 postdoctoral fellow at University of Michigan)
- (11) John Wang, PhD (2020, Psychology; Biological Psychology program); now research faculty at Virginia Tech)
- (12) Vanessa Brown, PhD (2018, Psychology; Clinical Science Program); now tenure track assistant professor at University of Pittsburgh
- (13) Nina Lauharatanahirun, PhD (2017, Psychology; Biological Psychology program); now tenure track assistant professor at Penn State

**Medical students, primary research mentor. Virginia Tech Carilion School of Medicine**

- (1) Mercedes Robinson, MD (2020; letter of distinction for research); now resident, UCSF Department of Neurology
- (2) Sohan Nagrani, MD (2015); now interventional pain physician

**Membership on Masters'/Prelim/Doctoral Committees (not including primary mentees listed above)**

Baylor College of Medicine, Dept of Neuroscience (2008 - 2010): (1) Erika Perez; (2) Danny Jenson; (3) Joseph De Asis Cruz; (4) Alycia Yarnall; (5) Yong Cui. Virginia Tech (2011 - present), Dept of Psychology: (6) Merage Ghane; (7) Marika Coffman; (8) Andrew Valdespino; (9) Fang Wang; (10) Benjamin DeVore; (11) Michael Lewis; (12) Marlene Strege; (13) Corinne Carlton; (14) Ligia Antezana; (15) Hayoung Ko; (16) Katelyn Garcia; Translational Biology, Medicine, & Health: (17) Holly Toole; (18) Masha Tsyglakova; (19) Amber Kelly; (20) Jeremy Myslowski; (21) Caiti-Erin Talty; Computer Science: (22) Tanmoy Sarkar Pias; (23) Rachel Jones (Wake Forest University).

**Postdoctoral trainees**

- (1) Leonardo Barbosa, PhD (postdoc 2022 - current; PhD, 2016, Paris Sciences et Lettres - École Normale Supérieure)
- (2) Dong-Youl Kim, PhD (postdoc 2021 - current; PhD, 2021, Korea University)
- (3) John Wang, PhD (postdoc, research scientist 2020 - current; PhD, 2020, Virginia Tech)
- (4) Flora Li, PhD (PhD, 2019, Virginia Tech); postdoc 2019 - 2021; now tenure track Assistant Professor at Nanjing Audit University, China.
- (5) Lusha Zhu, PhD (PhD, 2011, University of Illinois at Urbana-Champaign); postdoc 2012 - 2016; now tenure track Assistant Professor of Psychology and McGovern Institute, Peking University, China
- (6) Dongil Chung, PhD (PhD, 2011, Korea Advanced Institute for Science and Technology); postdoc and Research Scientist 2011 - 2016; now tenure track Assistant Professor, Ulsan National Institute of Science and Technology, South Korea
- (7) Cameron Craddock, PhD (PhD, 2009, Georgia Institute of Technology); post-doctoral mentor on NARSAD Young Investigator Award 2010 - 2013; co-founder The NeuroBureau; Director of the Computational Neuroimaging Lab, The University of Texas at Austin Dell Medical School
- (8) Jeff Engelmann, PhD (PhD, 2010, University of Minnesota); postdoc 2010 - 2013; now Research Psychologist, Rogers Behavioral Health
- (9) George Christopoulos, PhD (PhD, 2008, Cambridge University); postdoc 2008 - 2011; now Associate Professor with tenure at Nanyang Business School, Nanyang Technical University, Singapore
- (10) Dharol Tankersley, PhD (PhD, 2008, Duke University); postdoc 2009 - 2011; now Engineer at P2 Energy Solutions

**Undergraduate and postbaccalaureate training**

**Virginia Tech** (2011 - present)

*Post-baccalaureate research assistants*

(1) Grace Collins, 2021 - present; (2) Isaac Levy, 2021 - present; (3) Alex Pettus, 2021 - present; (4) Julia Julien, 2019-2021; supported by NIH Postbaccalaureate Research Education Award #GM066435 & NIH Research Supplement to Promote Diversity in Health Related Research to R01MH115221; (5) Rebecca Faubion-Trejo, 2020 - ; (6) Katherine Senn, 2020 - ; (7) Whitney Allen, 2018 - 2020; (8) Douglas Chan, 2017 - 2019; (9) Brennan Delattre, 2016 - 2018; (10) Chris Anzalone, 2016 - 2018; (11) Lauren Reckling, 2015 - 2016; (12) Rachel Wallace, 2014 - 2015; (13) Jennifer Nguyen, 2014; (14) Riley Palmer, 2014 - 2016; (15) Allison McKinnon, 2013 - 2016; (16) Andre Plate, 2012 - 2014; (17) Cari Rosoff, 2012 - 2015; (18) Kathleen McLachlan, 2011 - 2013; (19) Brittany Hamilton, 2011 - 2013; (20) Jennifer Lent, 2011 - 2012; (21) Katie McCurry, 2010 - 2012;

*Undergraduate research assistants*

(22) Kelly Kadlec, 2015 - 2019; (23) Jennifer Nguyen, 2013; (24) Lydia Nguyen, 2013; (25) Kathleen McLachlan, 2011; (26) Winston Kennedy, 2011, McNair Scholars Program, US Dept of Education TRIO program; (27) Diandra Gordon, 2011, McNair Scholars Program, US Dept of Education TRIO program; (28) Phillip Kotlaba, 2011.



## **Baylor College of Medicine (2007 - 2010)**

### Post-baccalaureate research assistants

(1) Katherine Gardner, 2010 - 2012; (2) Luz Martinez, 2010 - 2011, supported by NIH PREP (GM069234); (3) Cristina Tortarolo, Fall 2010; (4) Nina Lauharatanahirun, 2010 - 2011, supported by NIH Research Supplement to Promote Diversity in Health Related Research to R01MH091872; (5) Alex Acevedo-Rodriguez, 2009 - 2010, secondary mentor, (PREP); (6) Jessica Eiseman, 2009 - 2011; (7) James Sharp, 2009 - 2010; (8) April Sanders, 2008 - 2009; (9) Julie Brovko, 2007 - 2009; (10) LaRaun Lindsey, 2007 - 2013, supported by NIH Postbaccalaureate Research Education Program (PREP) GM069234;

### Undergraduate research assistants

(11) Grace Chang, Summer 2010, Rice University; (12) Stephanie Regan, Summer 2010, Harvard University; (13) Spencer Boucher, Fall 2009 - 2011, Rice University; (14) Jamie Sammis, 2009 - 2010, Rice University; (15) Chanel Matney, Summer 2009, UT Dallas, Summer Medical and Research Training (SMART) Program; (16) Allen Liao, Summer 2009, Rice University; (17) Karen Mardsen, Spring 2009 - present; (18) Noemie Levy, Spring 2009, Rice University; (19) Betsy Ohrn, Spring 2009, Rice University; (20) Andrew Thompson, 2008 - 2009, Rice University; (21) Christina Brovko, Summer 2008, UC Riverside; (22) Sam Soundar, 2008 - 2010, Rice University; (23) Magdalena Wistuba, 2007 - 2010, Rice University.

- 2000 - 2005            **Senior Common Room Member** (non-resident advisor), Cabot House, Harvard University.
- 2000 - 2005            **Academic Advisor**, Department of Psychology, Harvard University.
- 2000 - 2003            **Research Supervisor**, Department of Psychology, Harvard University. Supervised undergraduate research assistants and students conducting honors thesis research.

### Courses

- 2019 - 2020            **Block Director**, Brain and Cognitive Science; Translational Biology, Medicine, and Health Gateway Course (TBMH 5004), Virginia Tech. Mean teaching rating: 4.38/5
- 2019 - 2020            **Course Director**, Fundamentals in Brain and Cognitive Science (TBMH 5074), Virginia Tech. Mean teaching rating: 5.6/6
- 2016 - 2019            **Section Lecturer**, Fundamentals of Neuroscience (TBMH 5014), Virginia Tech. Mean teaching rating: 4.6/5.0
- 2013                    **Course Director**, Advanced Topics in Decision Neuroscience (PSYC 6954), Virginia Tech. Overall rating: 5.2/6.0
- 2003 - 2004            **Co-Head Teaching Fellow**, Abnormal Psychology (Psy 18), Harvard University. Overall rating: 4.3/5.0
- 2001                    **Teaching Fellow**, Laboratory in Psychophysiology (Psy 1856r), Harvard University. Overall rating: 4.9/5.0

### Guest Lectures

- 2022                    **Carilion Clinic Department of Psychiatry Journal Club**. "Peer information in risky decision-making"
- 2022                    **Virginia Tech**. Topic: Circuits of Human Cognition: Social Behavior and Reward. (Course number TBMH 5014, "Fundamentals of Molecular Neuroscience"; Course Director Anthony LaMantia).
- 2020                    **Virginia Tech Carilion School of Medicine**. Lecture "Introduction to Psychiatry" (Course: Block IV Medical Neuroscience; Director: Kristofer Rau).

- 2019 **Virginia Tech.** Guest Lecture “The social, emotional brain” (Course number HFNE 2774, “Meraki LLC”; Course Director Matt Hulver).
- 2018 **Virginia Tech.** “Computational psychiatry (parts 1 & 2).” (Course number TBMH 5074, “Fundamentals of Cognitive Brain Science”; Course Director Brooks King-Casas).
- 2017 **Virginia Tech.** Career discussion panelist (Course number PSYC 5374, “Health Psychology”; Course Director Richard Winett).
- 2017 **Virginia Tech.** “Computational approaches to psychiatric illness (parts 1 & 2).” (Course number TBMH 5014, “Fundamentals of Neuroscience”; Course Directors Michael Fox and Brooks King-Casas).
- 2016 **Virginia Tech.** “Cognitive neuroscience of healthy and debilitating emotion (parts 1 & 2).” (Course number TBMH 5014, “Fundamentals of Neuroscience”; Course Directors Michael Fox and Brooks King-Casas).
- 2015 **Virginia Tech.** Career discussion panelist (Course number PSYC 5374, “Health Psychology”; Course Director Richard Winett).
- 2015 **Virginia Tech.** “Neurobehavioral substrates of decision-making in depression.” (Course number TBMH 5014, “Fundamentals of Neuroscience”; Course Directors Michael Fox and Brooks King-Casas).
- 2014 **Virginia Tech.** “Depression: An introductory overview.” (Course number TBMH 5004, “Translational Biology, Medicine and Health: Gateway Course”; Course Director Michael Friedlander).
- 2014 **Virginia Tech.** “Neural substrates of reinforcement learning: Toward understanding & treating substance dependence.” (Course number NEUR 4984, “Neuroeconomics”; Course Director Sheryl Ball).
- 2013 **Virginia Tech.** “Translational neuroimaging: Perspectives from a clinical scientist.” (Course number PSYC 4364, “Introduction to Clinical Psychology”; Course Director Lee Cooper).
- 2010 **Baylor College of Medicine.** “Neuroimaging endophenotypes for major depressive disorder.” (Course number 350-422, “Neurobiology of Disease”; Course Coordinator Michael Friedlander).
- 2010 **Baylor College of Medicine.** “Neurobehavioral metrics for assessing individual differences and understanding the influence of others.” (Course number 350-434, “Higher Brain Function”; Course Coordinator Mariella De Biasi).
- 2009 **Baylor College of Medicine.** “Neuroimaging healthy and debilitating emotion.” (Course number 350-444, “Brain Imaging from Cell to System”; Course Coordinator Peter Saggau).
- 2009 **Baylor College of Medicine.** “Neuroimaging endophenotypes for major depressive disorder.” (Course number 350-422, “Neurobiology of Disease”; Course Coordinator Michael Friedlander).
- 2008 **University of Texas Graduate School of Biomedical Sciences.** “Neural signals of decision-making in economic games: Applications to autism and addiction.” (Course number GS02 0043, “Introduction to fMRI”; Course Coordinator Michael Beauchamp).

## INVITED TALKS

- 2021 **Virginia Tech, Computational Tissue Engineering training group.** “Computational psychiatry: A possible way forward for depression.”
- 2020 **University of Hawaii at Hilo.** “Associability modulated loss learning in PTSD” (via Zoom due to COVID-19)

- 2018 **Computational Psychiatry 2018, Society for Neuroscience Pre-conference, San Diego CA.** “Computational psychiatry of depression and anxiety: a didactic introduction.”
- 2017 **Computational Psychiatry 2017.** “Computational Psychiatry of depression and PTSD.”
- 2016 **Women’s Health Virginia, Annual Conference on Women’s Health.** “Depression and its neuroscience.”
- 2016 **Society of Biological Psychiatry, Atlanta, GA.** “Reinforcement learning parameters of behavioral treatment response in depression.”
- 2015 **Society for Research in Psychopathology, New Orleans, LA.** “Understanding social functioning across psychopathologies through valuation and decision-making.”
- 2015 **Brain School, Brain Awareness Week, Virginia Tech Carilion Research Institute.** "Building blocks of the social brain"
- 2015 **National Advisory Mental Health Council, National Institute of Mental Health.** “Toward a computational psychiatry,” Invited panel member, Biobehavioral Research Awards for Innovative New Scientists (BRAINS) Awardee Panel.
- 2014 **St. Albans Psychiatric Conference, Roanoke VA.** "Translational neuroimaging in psychiatry: An overview and examples from depression."
- 2014 **Virginia Tech Presidential Installation** of Timothy Sands, 16th President of Virginia Tech. Panel discussion: Harnessing Brain Power.
- 2014 **International Conference on Neuroeconomics and Neuromanagement, Hangzhou, China.** Keynote address: “Neural substrates of decision-making and its change: Examples from psychiatric illness.”
- 2013 **Brain School, Brain Awareness Week, Virginia Tech Carilion Research Institute.** "When brains do (or feel!) things we'd rather they didn't"
- 2013 **Virginia Conversations, Virginia Public Radio (WVTF)**
- 2013 **Virginia Tech Carilion Research Institute European–U.S. Workshop on the Neuroscience of Cognition, Computation, and Decisions, Lugano, Switzerland.** "Neural markers of decision-making in psychiatric illness"
- 2013 **Computational Psychiatry 2013, Miami FL.** "Neurobehavioral metrics of decision-making under risk in health and substance dependence."
- 2012 **University of Pennsylvania, Center for Cognitive Science Colloquium.** “Decision neuroscience from scan to practice: preliminary data from substance dependence”
- 2012 **University of Hawaii at Hilo.** "Translational decision neuroscience from function to practice: A brief overview"
- 2012 **Virginia Tech Center for Autism Research Conference.** "Toward neurobehavioral metrics of social function: Examples from autism"
- 2012 **Virginia Tech, Dept of Psychology, Clinical Research Forum.** "Translational neuroimaging: preliminary data & perspectives"
- 2012 **Blue Ridge Association of Clinical Psychologists.** "Neurobehavioral metrics for the assessment & treatment of depression"
- 2011 **Virginia Tech Research Center-Arlington “Meet the Scientists”**
- 2011 **Salem VA Medical Center**
- 2011 **Nanyang Technological University, Culture Science Institute, Singapore**
- 2010 **University of Southern California, Psychology Colloquium.**
- 2010 **Annual meeting of the Association for Behavioral & Cognitive Therapies, Symposium, Neuroeconomics and Psychopathology: Implications for treatment.** “Measuring and modulating control signals in smokers”
- 2009 **Baylor College of Medicine, Imaging in Psychiatry, Residents’ Seminar Series.**
- 2009 **Rush and Helen Record Forum.** “Translational fMRI: Applications for depression and addiction”

- 2009 **31st Annual International IEEE Engineering in Medicine and Biology Society Conference.** “Toward functional neurobehavioral assessment of mood and anxiety”
- 2008 **Baylor College of Medicine, Imaging in Psychiatry, Residents’ Seminar Series.**
- 2008 **Rice University, Cognitive Research Seminar.**
- 2008 **US Department of Defense and Humana Military Healthcare Services.**  
Washington, DC.
- 2008 **US Department of Defense and TriCare South Sub-Regional Meeting.** Nashville, TN.
- 2007 **Baylor College of Medicine, Department of Neuroscience,** invited colloquium.
- 2005 - present **Symposia and peer-reviewed poster presentations (> 100) available upon request.**

## CLINICAL TRAINING

- 07/2005 - 06/2006 **Baylor College of Medicine, Menninger Department of Psychiatry, Human Neuroimaging Laboratory, Houston, TX. Adult Clinical Neuroscience Track.**  
Clinical Psychology Internship (APA Accredited)  
Acquired training in fMRI study design, data analysis, and interpretation. Provided individual therapy and specialized cognitive, diagnostic, and personality assessment (including SCID-I; SCID-II; Diagnostic Interview for Personality Disorders-IV; Kauffman Brief Intelligence Test-II; battery of self-report cognitive, personality, symptom measures) to individuals participating in research or seeking treatment at the BCM Psychiatry Clinic and Student Counseling Center.  
Supervisors: Read Montague, PhD; Lois Friedman, PhD; Laura Lomax, PhD
- 09/2004 - 06/2005 **Behavioral Health Partial Program, McLean Hospital, Belmont, MA.**  
Practicum  
Provided individual short-term therapy, group therapy, and specialized assessment to individuals with a range of severe psychiatric disorders transitioning from in-patient to out-patient facilities. Led and co-led a variety of treatment groups including: Self-Assessment, Medication Education, Depression & Anxiety Management, and Cognitive-Behavioral Therapy for Bipolar Disorder.  
Supervisors: Edmund Neuhaus, PhD; Mary Ellen Crowley, PhD; Nora Ilniczky, PhD
- 10/2003 - 08/2004 **Obsessive Compulsive Disorder Institute, McLean Hospital, Belmont, MA.**  
Practicum  
Provided one-on-one exposure and response prevention coaching to individuals with treatment-resistant obsessive-compulsive disorder. Co-led Contract Setting treatment groups, Cognitive-Behavioral Therapy, Body Dysmorphic Disorder groups.  
Supervisor: Deborah Osgood-Hynes, PsyD
- 09/2003 - 02/2004 **Psychological Assessment, Harvard University, Cambridge, MA.** Acquired skills in administering, interpreting, and report-writing of standardized tests in the areas of intellectual and personality assessment (e.g., Wechsler Adult Intelligence Scale, Wechsler Memory Scale, Minnesota Multiphasic Personality Inventory).  
Practicum  
Supervisor: Ellsworth Fersch, PhD
- 11/2001 - 05/2002 **The Cambridge Hospital, Cambridge, MA.** Co-led out-patient anxiety reduction and psychopharmacology education groups. Participated in treatment formulation.  
Practicum  
Supervisors: Kate Dare-Winters, LicSW; Simon LeJeune, MD
- 09/2000 - 06/2005 **Diagnostic Assessment, Department of Psychology, Harvard University, Cambridge, MA.** 350+ hours conducting evidence-based assessment of individuals with and without psychopathology for eligibility for participation in research (e.g., Structured Clinical Interview for DSM-IV; Positive and Negative Syndrome Scale; McArthur Maudsley Delusion Assessment Scale; Calgary Depression Scale for Schizophrenia; battery of self-report measures).  
Practicum  
Supervisor: Patricia Deldin, PhD

**MEMBERSHIPS**

Association for Behavioral and Cognitive Therapies (2018 - present)  
Society for Research in Psychopathology (2017 - present; Chair, Membership  
Committee, 2017 - present)  
Society of Biological Psychiatry (2015 - present)  
Human Brain Mapping (2007 - present)  
Society for Neuroscience (2006 - present)  
Society for Neuroeconomics (2006 - 2009)  
Association for Psychological Science (2005 - present)  
Cognitive Neuroscience Society (2002 - present)  
Society for Psychophysiological Research (2001 - 2008)