# **Amrita Kaimal**

Biomedical and Translational Sciences Institute University of Georgia, Athens, GA amrita.kaimal25@uga.edu 770.375.8575

## **EDUCATION**

**Ph.D.**, Neuroscience Biomedical and Translational Sciences Institute University of Georgia

**Bachelor of Science,** Psychology with a minor in Biology Department of Psychology Georgia Institute of Technology

#### **HONORS & AWARDS**

August 2016 - Present Athens, GA

August 2010 - May 2014 Atlanta, GA Major GPA: 3.64

Summer Research Grant (\$1,447), UGA Graduate School	2021
Graduate Student Travel Award (\$600), UGA Biomedical & Health Sciences Institute	2018
Experimental Biology Meeting Travel Award (\$250), American Association of Anatomists	
Graduate Student Travel Award (\$450), UGA Biomedical & Health Sciences Institute	2018
President's Undergraduate Research Award (\$1,500), Georgia Tech	Spring 2013
Dean's List, Georgia Tech College of Sciences 2	010, 2012-2014

#### **RESEARCH EXPERIENCE**

University of Georgia	Athens, GA	
Neuroendocrine Research Laboratory	College of Veterinary Medicine	
Graduate Student Researcher	January 2017 - Present	
Principal Investigators: Dr. Sheba MohanKumar and Dr. P.S. MohanKumar		
Examining sex differences in the effects of prenatal exposure to plasticizers (Bisphenol A, S, and		
F and Diethylhexyl Phthalate) on stress-related behaviors, brain monoamines, and hormones in		
rats. Primary techniques used include behavioral paradigms (open field, elevated plus maze,		
shock probe defensive burying, novel object recognition), brain sectioning and microdissection,		
HPLC, and radioimmunoassay.		

Emory University / Grady Memorial Hospital
Grady Trauma Project
Research Interviewer
Supervisor: Dr. Negar Fani

Investigated cognitive and emotional dysfunctions in an inner city, low income population affected by PTSD and trauma. Main duties involved patient recruitment, administration of neuropsychological tests and MRI scans, management of data (neuropsychological, DTI, and MRI), and training research assistants on lab procedures.

**Georgia Institute of Technology Cognitive Neuroscience of Aging Laboratory** Research Assistant Lab Director: Dr. Scott Moffat Atlanta, GA Center for Advanced Brain Imaging February – August 2015

Atlanta, GA

Emory School of Medicine August 2015 – June 2016

Center for Advanced Brain Imaging

Atlanta, GA

Assisted with research investigating the effects of age and hormones on the neural systems supporting human spatial memory. Duties involved recruiting participants and training undergraduate research assistants on lab procedures.

Research Assistant	2013-2014		
Lab Director: Dr. Eric Schumacher			
Conducted senior thesis project examining the rel flexibility, and attention. Assisted with a multi-si a large subject pool (100+ participants) and traine techniques including tDCS and fMRI.	te/multi-phase IARPA "brain-training" study of		
Emory University	Atlanta, GA		
The Rainnie Neurophysiology Lab	Yerkes National Primate Research Center		
Volunteer Research Assistant	May – August 2013		
Lab Director: Dr. Donald Rainnie; Supervisor: Dr. Andre	a Crowell		
Assisted with research investigating deep brain stimulation in patients with depression.			
Techniques used included T-maze behavioral tests and shock stress experiments in rats.			
Georgia Institute of Technology	Atlanta, GA		
Center for Integrative Genomics	School of Biology		
Undergraduate Research Assistant	2011-2013		
Lab Director: Dr. Gregory Gibson			
Examined the morphology and heritability of faci	al expressions and features. Main duties		

Examined the morphology and heritability of facial expressions and features. Main duties involved profiling facial expressions using 3D Imaging technology and analyzing data using JMP Genomics statistical software to quantify variability in facial expression.

### **TEACHING EXPERIENCE**

Teaching Assistant for PSYC 3980 Research Design, UGA Teaching Assistant for PSYC 3990 Research Analysis, UGA Teaching Assistant for PSYC 5850 Psychopharmacology, UGA Laboratory Instructor for CBIO 2210 Anatomy and Physiology II, UGA Aug. 2020-May 2021 Jan.-May 2020 Aug.-Dec. 2019 Aug. 2017-Dec. 2018

## **PUBLICATIONS**

Kaimal, A., Al Mansi, M.H., Bou Dagher, J., Pope, C., Varghese, M.G., Rudi, T.B., Almond, A.E., Cagle, L.A., Beyene, H.K., Bradford, W.T., Whisnant, B.B., Bougouma, B.D.K., Rifai, K.J., Chuang, Y.J., Campbell, E.J., Mandal A., MohanKumar, P.S., MohanKumar, S.M.J. (2021). "Prenatal exposure to bisphenols affects pregnancy outcomes and offspring development in rats." Chemosphere 276: 130118.

Bou Dagher, J., Hahn-Townsend, C.K., Kaimal, A., Al Mansi, M.H., Enriquez, J.E., Tran, D.G., Laurent, C.R., Bacak, C.J., Buechter, H.E., Cambric, C., Spivey, J., Chuang, Y.J., Campbell, E.J., Mandal A., MohanKumar, P.S., MohanKumar, S.M.J. (2021). "Independent and combined effects of Bisphenol A and Diethylhexyl Phthalate on gestational outcomes and offspring development in Sprague-Dawley rats." Chemosphere 263: 128307.

**Cognitive Neuroscience at Tech Research Laboratory** 

**Georgia Institute of Technology** 

## PUBLISHED RESEARCH ABSTRACTS

Bou Dagher, J., Campbell, E.J., **Kaimal, A.**, Hahn, C., Enriquez, J., Almansi, M.H., Tran, D., Laurent, C., Bacak, C., Cambric, C., Spivey, J.H., Buechter, H.E., Chuang, Y.J., MohanKumar, S.M., MohanKumar, P.S. *Independent and combined effects of bisphenol A and diethylhexyl phthalate on gestational outcomes and offspring development in Sprague-Dawley rats.* The FASEB Journal, 2020. **34**(1).

**Kaimal, A.,** Hooversmith, J.M., Almansi, M.H., Holmes, P.V., MohanKumar, S.M., MohanKumar, P.S. *Region-specific effects of the exposome on brain monoamine levels in female rats*. Journal of the Endocrine Society, 2020. **4**(1).

**Kaimal, A.,** Hooversmith, J.M., Almansi, M.H., Holmes, P.V., MohanKumar, S.M., MohanKumar, P.S. *Prenatal EDC exposure followed by chronic treatment with estradiol affects brain monoamine levels in female rats*. The FASEB Journal, 2019. **33**(1).

**Kaimal, A.**, Cherry, A.D., Martin, N.M., Buechter, H.E., Hoover-Smith, J.M., Holmes, P.V., MohanKumar, S.M., MohanKumar, P.S. *Sex differences in the effects of prenatal exposure to low doses of endocrine disruptors on stress-related behavior*. The FASEB Journal, 2018. **32**(1).

### POSTER PRESENTATIONS

Bou Dagher, J., Almansi, M.H., **Kaimal, A.**, Rzepka, K., Czaja, K., Almond, A.E., Bougouma, B.D.K., Campbell, E.J., MohanKumar, P.S., MohanKumar, S.M.J. (April, 2021). *Maternal exposure to a mixture of Bisphenol A and Diethyl Hexyl Pthalate predisposes female offspring to growth retardation and metabolic dysfunction in adulthood*. Poster presented at the 133<sup>rd</sup> annual Experimental Biology meeting.

Almansi, M.H., Chuang, Y.J., **Kaimal, A.**, Jeyaraj N.A., MohanKumar, P.S., MohanKumar, S.M.J. (April, 2021). *Prenatal exposure to bisphenols affects blood pressure and hormone levels in male and female offspring*. Poster presented at the 133<sup>rd</sup> annual Experimental Biology meeting.

Bou Dagher, J., Campbell, E.J., **Kaimal, A.**, Hahn, C., Enriquez, J., Almansi, M.H., Tran, D., Laurent, C., Bacak, C., Cambric, C., Spivey, J.H., Buechter, H.E., Chuang, Y.J., MohanKumar, S.M., MohanKumar, P.S. (April, 2020). *Independent and combined effects of bisphenol A and diethylhexyl phthalate on gestational outcomes and offspring development in Sprague-Dawley rats*. Poster presented at the 132<sup>nd</sup> annual Experimental Biology meeting, San Diego, CA.

**Kaimal, A.,** Hooversmith, J.M., Almansi, M.H., Holmes, P.V., MohanKumar, S.M., MohanKumar, P.S. (March, 2020). *Region-specific effects of the exposome on brain monoamine levels in female rats*. Poster presented at the 102<sup>nd</sup> annual meeting of the Endocrine Society, San Francisco, CA.

**Kaimal, A.,** Hooversmith, J.M., Almansi, M.H., Holmes, P.V., MohanKumar, S.M., MohanKumar, P.S. (April-May, 2019). *Prenatal EDC exposure followed by chronic treatment with estradiol affects behavior and brain dopamine levels in female rats.* Poster presented at the 131<sup>st</sup> annual Experimental Biology meeting, Orlando, FL and the 2<sup>nd</sup> annual Southeastern and Greater Atlanta Chemical Biology Symposium, Athens, GA.

Kaimal, A., Hooversmith, J.M., Cherry, A.D., Martin, N.M., Buechter, H.E., Holmes, P.V., MohanKumar, S.M., MohanKumar, P.S. (November, 2018). *Effects of prenatal exposure to endocrine* 

*disruptors and chronic exposure to estradiol in adulthood on stress-related behavior in female rats.* Poster presented at the 48<sup>th</sup> annual meeting of the Society for Neuroscience, San Diego, CA.

**Kaimal, A.**, Cherry, A.D., Martin, N.M., Buechter, H.E., Hoover-Smith, J.M., Holmes, P.V., MohanKumar, S.M., MohanKumar, P.S. (April, 2018). *Sex differences in the effects of prenatal exposure to low doses of endocrine disruptors on stress-related behavior*. Poster presented at the 130<sup>th</sup> annual Experimental Biology meeting, San Diego, CA.

MohanKumar, P.S., Campbell, E.J., **Kaimal, A.**, Bou Dagher, J., Almond, A., Tran, D., Chuang, Y.J., Kianian, R., Buechter, H.E., MohanKumar, S.M. (March, 2018). *Impact of prenatal exposure to low doses of bisphenol-A, bisphenol-S, and bisphenol-F on offspring development: Focus on sex differences.* Poster presented at the 100<sup>th</sup> annual meeting of the Endocrine Society, Chicago, IL.

MohanKumar, S.M., Campbell, E.J., Bou Dagher, J., Almond, A., Tran, D., **Kaimal, A.**, Chuang, Y.J., Kianian, R., Buechter, H.E., MohanKumar, P.S. (March, 2018). *Impact of prenatal exposure to a combination of bisphenol-A and diethyl hexyl phthalate on rat development*. Poster presented at the 100<sup>th</sup> annual meeting of the Endocrine Society, Chicago, IL.

**Kaimal, A.**, Hoover-Smith, J.M., Cherry, A.D., Holmes, P.V., MohanKumar, P.S., MohanKumar, S.M. (October, 2017). *Effects of prenatal exposure to low doses of Bisphenol A (BPA) and di(2-ethylhexyl) phthalate (DEHP) in combination with predator scent stress exposure in adulthood on stress-related behavior in male rats.* Poster presented at the 2017 Science of Veterinary Medicine Symposium, Athens, GA.

Challa, S., **Kaimal, A.**, Fani, N. (April, 2017). *Neuropsychological profiles of dissociation in the context of emotion.* Poster presented at the 8<sup>th</sup> annual meeting of the Anxiety and Depression Association of America, San Francisco, CA.

Tiwary, N., **Kaimal, A.**, Challa, S., Surapaneni, S., Bradley, B., Jovanovic, T., Fani, N. (May, 2016). *FKBP5 polymorphism associations with cognitive performance and emotion recognition*. Poster presented at the 71<sup>st</sup> annual meeting of the Society of Biological Psychiatry, Atlanta, GA.

Challa, S., **Kaimal, A.**, Amos, R., Tiwary, N., Lott, A., Surapaneni, S., Bradley, B., Jovanovic, T., Fani, N. (April, 2016). *Emotion recognition and facial memory in PTSD: Associations with PTSD subtypes.* Poster presented at the 7<sup>th</sup> annual meeting of the Anxiety and Depression Association of America, Philadelphia, PA.

Godwin, C., Hunter, M., Bezdek, M., Lieberman, G., Martin, N., Kumar, A., **Kaimal, A.**, Bell, B., Jones, A., Trumbo, M., Coffman, B., McCallion, E., Armenta, M., O'Sickley, A., Brown, D., Roos, C., Robinson, S., Combs, A., Witkiewitz, K., Clark, V., Schumacher, E. (April, 2016). *Large-scale resting-state network correlations predict mind wandering tendencies*. Poster presented at the 23<sup>rd</sup> annual meeting of the Cognitive Neuroscience Society, New York, NY.