# Monica Uddin, PhD

### **CONTACT INFORMATION**

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# **EDUCATION**

1993	<b>BA</b> in Human Biology (with honors and distinction). Stanford University, Stanford, CA.
2003	<b>PhD</b> in Biological Anthropology New York University, New York, NY. Area of Concentration: Molecular Anthropology
2003-2004	Postdoctoral Fellowship Center for Molecular Medicine & Genetics Wayne State University School of Medicine, Detroit, MI.

# PROFESSIONAL APPOINTMENTS

I. Academic Research		
8/2018-present	Professor, University of South Florida, College of Public Health,	
_	Genomics Program and Global Health and Infectious Disease Research	
	Program, Tampa, FL.	
2018	Richard and Margaret Romano Professorial Scholar, University of	
	Illinois-Urbana Champaign, Urbana-Champaign, IL.	
8/2014-8/2018	Associate Professor, University of Illinois-Urbana Champaign,	
	Department of Psychology; Core Faculty, Carl R. Woese Institute for	
	Genomic Biology; Faculty affiliate, Beckman Institute (2015-2020),	
	Urbana-Champaign, IL.	
5/2011-7/2014	Assistant Professor, Wayne State University School of Medicine, Center	
	for Molecular Medicine and Genetics and Department of Psychiatry &	
	Behavioral Neurosciences, Detroit, MI.	
1/2011-5/2011	Research Assistant Professor, University of Michigan School of Public	
	Health, Department of Epidemiology, Ann Arbor, MI.	
2009-2010	Assistant Research Scientist, University of Michigan School of Public	
	Health, Department of Epidemiology, Ann Arbor, MI.	
2005-2008	Research Scientist, Wayne State University School of Medicine, Center	
	for Molecular Medicine & Genetics, Detroit, MI.	

## **SERVICE ACTIVITIES**

## I. Disciplinary Professional Service

2014-present Membership Chair, American Psychopathological Association (elected

position).

2014-present Council Member, American Psychopathological Association (elected

position).

2014-present Reviewer of Robins/Guze Early Career Promise Applicants on behalf

of the American Psychopathological Association

2014-present Early Career and New Investigator Roundtable Discussion Organizer,

Annual Meeting of the American Psychopathological Association, New

York, NY.

2015 (Spring) Judge, Student Research Showcase, Sigma Xi Foundation Scientific advisory board member, Michigan Biotrust

2010-present **Academic Editor**, *PLoS One* 

### **II. Review Activities**

#### A. Grant Review Panels

2018 NIH Mechanisms of Emotion, Stress and Health, AdHoc Reviewer

2017 NSF Career Grant AdHoc Reviewer

National Institute for Occupational Safety and Health, Centers for Disease

Control, World Trade Center Program Reviewer

NIH Mechanisms of Emotion, Stress and Health, AdHoc Reviewer
UK Economic and Social Research Council, AdHoc Reviewer

2015 Deutsche Forschungsgemeinschaf (German Research Foundation), AdHoc

Reviewer

2014-2015 VA Review Panel Member, Special Panel on Genomics

Netherlands Organisation for Health Research and Development (ZonMw)

NIH Behavioral Genetics and Epidemiology Early Career Reviewer

### B. Manuscript Reviewer (ongoing)

Proceedings of the National Academy of Sciences (USA)

Biological Psychiatry Depression and Anxiety

**Epigenomics** 

Psychoneuroendocrinology Journal of Health and Place Journal of Psychiatric Research International Journal of Epidemiology

Journal of Neuroinflammation

Childhood Development
Psychiatry Research

PloS ONE

Journal of Traumatic Stress Social Science and Medicine Behavioral and Brain Functions

Social Psychiatry and Psychiatric Epidemiology

Developmental Psychology

Molecular Phylogenetics and Evolution

BMC Evolutionary Biology

## BMC Bioinformatics American Journal of Primatology.

### III. Departmental and University Service

2017-2018	<b>Faculty Search Committee Member</b> , Neuroscience Focus, Department of Comparative Biosciences, School of Veterinary Medicine, <i>University of</i>
	Illinois at Urbana-Champaign.
2017-2018	Grievance Committee, Neuroscience Program, University of Illinois at
	Urbana-Champaign
2017 (Fall)	Faculty Mentor, NIH Grant Writing Series, University of Illinois at
	Urbana-Champaign.
2016 (Spring)	Campus Research Board Reviewer, University of Illinois at Urbana-
	Champaign.
2016-present	Undergraduate Studies Committee Member, Department of
	Psychology, <i>University of Illinois at Urbana-Champaign</i> .
2016 (Spring)	CompGen Executive Committee Member, University of Illinois at
	Urbana-Champaign.
2015-2016	Grievance Committee, Neuroscience Program, University of Illinois at
	Urbana-Champaign (elected position).
2015 (Spring).	Seminar director, Human Sociogenomics lecture series, Carl R Woese
, 1	Institute for Genomic Biology, <i>University of Illinois Urbana-Champaign</i> ,
	Urbana, II.
2014 (Winter)	Brain Research Foundation Seed Grant Reviewer, University of Illinois
, ,	at Urbana-Champaign.

#### **AWARDS AND HONORS**

- Richard and Margaret Romano Professorial Scholar, University of Illinois at Urbana-Champaign (2018-2020)
- Membership Chair and Officer, American Psychopathological Association (elected positions; 2014-2019).
- Invited participant, workshop on Social and Behavioral Epigenetics (2014).
- Robins/Guze Award for Early Career Promise, American Psychopathological Association (2012).
- Young Scholar Travel Fellowship, University of Michigan (2010).
- Systems Biology Symposium Poster Prize Award Winner, University of Michigan (2009).
- Wayne State University Postdoctoral Fellowship (2003-2004).
- Best Postdoctoral Poster, Center for Molecular Medicine and Genetics Retreat (2002).
- Graduate Fellowship, New York University (2002).
- New York Consortium in Evolutionary Primatology (NYCEP). Fellowship (2001).
- Sokol Predoctoral Research Travel Award (2000).
- New York University Student Travel Award (2000, 2002).
- Henry Mitchell MacCracken Scholarship (1996-1999).
- Stanford University Human Biology Commencement Speaker (1993).
- Cap and Gown Society Member (Stanford Women's Honor Society). (1993-present).

### PROFESSIONAL MEMBERSHIPS

American Psychopathological Association Society of Biological Psychiatry International Society for Traumatic Stress Studies Sigma Xi American Association for the Advancement of Science Psychiatric Genomics Consortium, PTSD Working Group

### **GRANT SUPPORT**

### **Current Funding:**

1U01MH115485 National Human Genome Research Institute 9/20/17-6/20/22

Role: MPI

Transgenerational Epigenomics of Trauma and PTSD in Rwanda

The goal of this project is to characterize the transgenerational genomic impact of genocide exposure and post-traumatic stress disorder (PTSD) in women survivors of the Rwandan genocide and their offspring, and build scientific capacity in Rwanda and elsewhere in Africa. Amount: \$1,299,907

1R01MD011728 National Institute of Minority Health and Health Disparities 8/16/17-5/31/21 Role: PI

Epigenomic Predictors of PTSD and Traumatic Stress in an African American Cohort This project will characterize how social adversity influences epigenomic processes that elevate risk for stress-related psychopathology among African-Americans.

Amount: \$2,835,169

R01 MD011728-02S1 Office of Research on Women's Health

9/1/18-8/31/2019

Epigenomic Predictors of PTSD and Traumatic Stress in an African American Cohort (Administrative Supplement)

This project will expand sample testing to enable analyses of potential sex-specific epigenetic signatures of stress-related psychopathology among African-Americans.

1R01 MH108826

*National Institute of Mental Health* 

07/31/16-06/30/20

Role: MPI

The impact of traumatic stress on the methylome: implications for PTSD

The purpose of this study is to facilitate an epigenome-wide association study (EWAS) of PTSD in participating cohorts in Psychiatric Genomics Consortium (PGC). PTSD workgroup. Amount: \$2,222,029

BCS 16-20239 National Science Foundation 09/15/16 - 08/14/21

Role: Co-PI (PI: Malhi)

IBSS-L: Epigenomic Effects of European Colonization on Alaskan Natives

The purpose of this Alaskan community-based research is to examine the epigenomic effect resulting from the European colonization of indigenous peoples of the Americas and consequential adverse health.

Amount: \$860,000

1R01AI129788 National Institute of Allergy and Infectious Diseases 11/15/16-10/31/21

Role: Co-I, Subcontract PI (PI: Nagarkatti)

Epigenetic Mechanism of T cell dysregulation in PTSD

This project will test the hypothesis that PTSD associates, at least in part, with dysregulation in the epigenetic mechanisms that alter the nuclear factor of activated T cells (NFAT) signaling pathway leading to a pro-inflammatory state.

Subcontract Amount: \$72,421

Research for Health in Humanitarian Crises (r2hc)

4/1/18-3/31/20

Role: Co-I; Jansen (PI)

Evaluating the Biological, Psychological and Social Impact by Promoting Positive Masculinity through the 'Living Peace' Program in the DRC

This project will conduct a randomized control trial of men in Goma, Eastern Democratic Republic of Congo, to objectively evaluate the impact of the Living Peace intervention on reducing gender based violence and PTSD symptoms.

Amount: £440,041 (prime)

1R01 MH103291 (Supplement) National Institute of Mental Health

09/1/16-08/31/19

Role: Subcontract PI; McLaughlin (PI)

Child Trauma and the Development of Neural Systems Underlying Emotion Regulation This research examines the impact of childhood trauma on the development of neural networks involved in emotion regulation. It also seeks to identify epigenetic biomarkers of environmental adversity that associate with neural phenotypes of emotion regulation.

Amount: \$180,748; Subcontract Amount: \$18,489

2R01 GM082937 National Institute of General Medical Sciences

09/21/15 - 06/30/20

Role: Collaborator (PI: Bell)

Epigenetic mechanisms and consequences of fathering in sticklebacks

The goal of this work is to understand the behavioral, molecular and epigenetic mechanisms that contribute to the effects of fathering on offspring, using threespined stickleback fish as a model organism.

Amount: \$1,348,000

U01 DK106908 *National Institute of Diabetes, Digestive and Kidney Disease* 08/15/15-06/30/20 Role: Consultant (PI: Rickey)

Prevention of Lower Urinary Tract Symptoms in Women: Yale Bladder Health Clinical Center The objective of this work is to demonstrate how we can build the knowledge base for bladder health using Ecological Systems Theory as a guiding framework, an approach that addresses risk factors at the individual, family/peer, and community levels.

Amount: \$1,600,000

## **Previous Funding:**

University of Illinois Health Disparities Initiative

2016

Role: PI

Leukocyte transcriptome and Risk of PTSD in a Prospective Cohort of African Americans

This project seeks to characterize how leukocyte-derived RNA expression before and after trauma exposure shapes risk of post-traumatic stress disorder (PTSD). in African-Americans. Amount: \$90,000

## Office of the Vice Chancellor for Research, University of Illinois

2016

Role: PI

Epigenetic and Neural Correlates of the Transgenerational Transmission of PTSD in Rwanda The goal of this travel grant is to conduct an in-person visit to strengthen an existing collaboration with investigators from the University of Rwanda, in order to investigate the transgenerational epigenetic effects of post-traumatic stress disorder (PTSD). and trauma exposure in women survivors of the Rwandan genocide.

Amount: \$4,000

### Research for Health in Humanitarian Crises (r2hc)

2016

Role: Co-I; Jansen (PI)

Evaluating the Biological, Psychological and Social Impact by Promoting Positive Masculinity through the 'Living Peace' Program in the DRC

This seed funding will facilitate the development of a full proposal with the goal of conducting a randomized control trial of men in Goma, Eastern Democratic Republic of Congo, to objectively evaluate the impact of the Living Peace intervention on reducing gender based violence and PTSD symptoms, as well as assess changes in stress-related genomic biology. Amount: £5,600

## Centers for Disease Control

2014-2016

Role: Consultant; Luft (PI)

Deciphering Biological Linkages between PTSD and Respiratory Disease in WTC Responders This work seeks to uncover the biologic mechanisms, including epigenetic, gene expression, and cytokine levels, linking PTSD and respiratory disease in world trade center responders Amount: \$998,324

## Children's Research Center of Michigan

2014

Role: MPI (with V Diwadkar)

Risk for Schizophrenia: Epigenetics, Stress and Impact on Brain Network Function This work seeks to understand how epigenetic factors mediate the disordered stress response in adolescents at genetic high risk for schizophrenia, and how these factors in turn will predict dysfunction in schizophrenia-associated brain networks

Amount: \$25,000

### Brain and Behavior Research Foundation Young Investigator Award

2012-2014

Role: Collaborator (PI M Thomason)

Neural and epigenetic bases of PTSD in youth

The proposed research aims to elucidate epigenetic and neurobiological factors that contribute to pediatric PTSD, with an additional aim toward discovering reliable risk factors to serve as targets for future intervention

Amount: \$60,000

### The Michigan Bloodspot Environmental Epidemiology Project

2013

Role: Co-I (PI: C Trentacosta)

Gene-Environment Interplay and Young Children's Executive Functioning

The proposed work will explore the roles of family and neighborhood-level socioeconomic position during the prenatal period and early childhood and genetic and epigenetic processes in the emergence of differences between twins in executive functioning

Amount: \$25,000

## The Michigan Bloodspot Environmental Epidemiology Project

2013

Role: Co-I (PI: A Simanek)

Intergenerational Impact of Maternal Psychosocial Stress on Offspring Health Outcomes as Mediated by Maternal Immune Response to Persistent Pathogens in Pregnancy This project examines the association between maternal experience of traumatic events during pregnancy, exposure of offspring to elevated maternal immune response to persistent pathogens *in utero*, and presence of anxiety disorders in offspring of females from Detroit Amount: \$25,000

# OVPR Faculty Award Program, Wayne State University

2012-2014

Role: PI

This award was funded following a university-wide competition and provides supplemental funding for a postdoctoral fellow in the Uddin laboratory

Amount: \$60,000

#### BCS-0827546 National Science Foundation

2008-2013

Role: Consultant (PI: D Wildman)

Collaborative Research: Evolutionary Origins of the Brain Energetics and Adaptive Plasticity of Humans

The purpose of this research is to understand the evolution of the human brain, particularly plasticity Approaches being used include PET scans, microarray analysis, next generation sequencing, and evolutionary population genetics

Amount: \$1,771,119

### Jack Ryan Award, Wayne State University School of Medicine

2013

Role: PI

Epigenetic dysregulation and brain network disruption in obsessive-compulsive disorder (OCD)

The overall goal of the proposed work is to determine the impact of epigenetic dysregulation in serotonin- and dopamine-related genes on brain networks in OCD

Amount: \$2,000

#### American Association of Anatomists Postdoctoral Fellowship

2013

Role: Mentor

The goal of this award is to support the career development of postdoctoral fellow Lisa Nevell Through the support of these funds, Dr Nevell is using cell culture approaches to investigate the functional consequences of adaptive evolution of cis-regulatory regions implicated in human neuronal plasticity

Amount: \$20,000

## R01 DA022720-S1 National Human Genome Research Institute

2011-2012

Role: Collaborator (PI A Aiello)

Ecological stressors, PTSD, and drug use in Detroit (supplement)

To investigate the interrelationships among genetic variation, neighborhood-level stressors, and complex diseases known to be frequently comorbid with PTSD, specifically illicit drug use and coronary artery disease

Amount: \$100,000

### R01 DA022720-S1 National Institute on Drug Abuse

2009-2012

Role: Co-I (PI A Aiello)

Ecological stressors, PTSD, and drug use in Detroit (supplement)

To assess how gene X social environment interactions influence the risk of PTSD and other psychopathologies in a population-representative cohort of adult Detroit residents

Amount: \$1,063,870

# R01-DA022720 National Institute on Drug Abuse

2007-2012

Role: Co-I (PI A Aiello)

Ecological stressors, PTSD, and drug use in Detroit

To assess how neighborhood-level ecologic factors influence risk of PTSD and other psychopathologies in a population-representative cohort of adult Detroit residents Amount, \$3,181,614

### MH088283-01

National Institute of Mental Health

2009-2011

Role: Co-I (PI A Aiello)

Candidate epigenetic biomarkers for PTSD: insights from Detroit

The goal of this study was to assess whether methylation profiles differ among individuals with current PTSD compared to those who have once had PTSD but are now PTSD free, and individuals who have never had the disorder

Amount: \$996,421

#### BCS-0550209

National Science Foundation

2006-2011

Role: Co-I (PI L Grossman)

Genotypic and Phenotypic Changes Associated with Encephalization

The goal of this grant was to investigate whether brain important genes associated with encephalization in humans also show adaptive change in other mammalian lineages with evidence of increased encephalization

Amount: \$373,311

## Robert Wood Johnson Health & Societies Scholar Small Grant Program

2009-2010

Role: PI

Social Context and the Epigenetics of Post-traumatic Stress Disorder (PTSD).

The goal of this grant was to determine whether socioeconomic position modified PTSD-associated DNA methylation profiles

Amount: \$23,760

### OVPR Faculty Grants & Award Program, University of Michigan

2009-2010

Role: PI

Epigenetics of Post-traumatic Stress Disorder (PTSD)

The goal of this grant was to assess whether DNA methylation profiles differ among trauma exposed individuals with and without PTSD

Amount: \$15,000

# National Science Foundation Doctoral Dissertation Improvement Grant

2001

Role: Co-I (PI CJ Jolly)

Genetic Transposition of Baboon Endogenous Virus (BaEV) in Hybrid Old World Monkeys (Primates: Papionini)

The goal of this project was to determine the extent of copy number and DNA sequence variation in BaEV in a multiple wild primate populations, and to identify the social structures that influenced this variation

Amount: \$4,800

# Wenner-Gren Foundation for Anthropological Research Small Grant Award

2000

Role: PI

Genetic Transposition of Baboon Endogenous Virus (BaEV) in Ethiopian Hybrid Baboons The goal of this project was to determine the extent of copy number and DNA sequence variation in BaEV in a wild baboon population

Amount: \$7,700

# Sigma Xi Grant-in-Aid-of-Research Award

1999, 2000

Role: PI

Genetic Transposition of Baboon Endogenous Virus (BaEV) in Ethiopian Hybrid Baboons The goal of this project was to verify whether BaEV copy number and DNA sequence variation existed in a wild baboon population

Amounts: \$700 (1999), \$800 (2000).

#### PEER REVIEWED PUBLICATIONS

(\*indicates papers with corresponding author status; \*indicates author is a student whom I mentored).

- 1. **Uddin M\***, Ratanatharathorn A, Armstrong D, Kuan P, Aiello AE, Bromet EJ, Galea S, Koenen KC, Luft B, Ressler KJ, Wildman DE, Nievergelt CM, Smith, A. (in press). Epigenetic meta-analysis across three civilian cohorts identified *NRG1* and *HGS* as blood-based biomarkers for post-traumatic stress disorder. *Epigenomics*.
- 2. Sumner JA, Colich NL, **Uddin M**, Armstrong D, McLaughlin KA. (in press). Early experiences of threat, but not deprivation, are associated with accelerated biological aging in children and adolescents. *Biol. Psych*.
- 3. Matt SM, Zimmerman JD, Lawson MA, Bustamante AC<sup>+</sup>, **Uddin M**, Johnson RW. (in press). Inhibition of DNA methylation with zebularine alters lipopolysaccharide-induced sickness behavior and neuroinflammation in mice. *Front. Neurosci*.

- 4. Pfeiffer J<sup>+</sup>, Mutesa L, **Uddin M\***. Traumatic stress epigenetics. (2018). *Curr Behav Neurosci Rep.* Published online Feb. 13, 2018. <a href="https://doi.org/10.1007/s40473-018-0143-z">https://doi.org/10.1007/s40473-018-0143-z</a> \*\*Invited review
- 5. Nievergelt N, Ashley-Koch AE, Dalvie S. Hauser MA, Morey R, Smith AK, **Uddin M.** Genomic approaches to post-traumatic stress disorder: The psychiatric genomic consortium initiative. (2018). *Biol. Psych.* 83:831-39. PMID: 29555185. PMCID: PMC5915904.
- 6. Wolf EJ, Maniates H, Nugent N, Maihofer AX, Armstrong A, Ratanatharathorn A, Ashley-Koch AE, Garrett M, Kimnrel NA, Lori A, VA MIRECC Workgroup, Aiello AE, Baker DG, Beckham JC, Boks MP, Galea S, Geuze Em Hauser MA, Kessler RC, Koenen KC, Miller MW, Ressler KJ, Risbrough V, Rutten BPF, Stein MB, Ursano RJ, Vermetten E, Vinkers CH, Uddin M, Smith AK, Nievergelt CM, Logue MW. Traumatic stress and accelerated DNA methylation age: A meta-analysis. (2018) *Psychoneuroendocrinol*. 92:123-34. PMID: 29452766. PMCID: PMC5924645.
- 7. Bustamante A<sup>+</sup>, Aiello A, Guffanti G, Galea S, Wildman D, **Uddin M\***. *FKBP5* DNA methylation does not mediate the association between childhood maltreatment and depression symptom severity in the Detroit Neighborhood Health Study. (2018). *J Psychiatr. Res.* 96:39-48. PMID: 28961425 PMCID: PMC5698158

  \*\*First author was a PhD student in the Uddin lab.
- 8. Duncan LE, Ratanatharathorn A, Aiello AE, Almli LM, Amstadter AB, Ashley-Koch AE, Baker DG, Beckham JC, Bierut LJ, Bisson J, Bradley B, Chen CY, Dalvie S, Farrer LA, Galea A, Garrett ME, Gelerntner JE, Guffanti G, Hauser MA, Johnson EO, Kessler RC, Kimbrel KA, King A, Koen N, Kranzler HR, Logue MW, Maihofer AX, Martin AR, Miller MW, Morey RA, Nugent NR, Rice JP, Ripke S, Roberts AL, Saccone NL, Smoller JW, Stein DJ, Stein MB, Sumner JA, Uddin M, Ursano RJ, Wildman DE, Yehuda R, Zhao H, MIRREC, Daly MJ, Liberzon I, Nivergelt CN, Koenen KC. (2018). Largest GWAS of PTSD (N=20,070). Yields Genetic Overlap with Schizophrenia and Sex Differences in Heritability. *Mol. Psychiatry*. 23: 666-673. PMID: 28439101. PMCID: PMC5696105. doi: 10.1038/mp.2017.77
  - \*\*This paper generated widespread media interest, including a press release that was picked up by CNN and had 2.2 million views and coverage that came from US News, United Press International, Philly.com and MSN.com\*\*
- 9. Bustamante A<sup>+</sup>, Armstrong D, **Uddin M\***. Epigenetic profiles associated with Major Depression in the Human Brain. (2018). *Psychiatry Res.* 260:439-442. PMID: 29272728 \*\*First author was a PhD student in the Uddin lab.
- 10. Lowe SR, Joshi S, Galea S, Aiello AE, **Uddin M**, Koenen KC, Cerda M. (2017). Pathways from assaultive violence to posttraumatic stress, depression, and generalized anxiety symptoms through stressful life events: Longitudinal mediation models. *Psychol. Med.* 47:2556-66. PMID: 28464960. PMCID: PMC5675529

- 11. Ratanatharathorn A, Boks MP, Maihofer AX, Aiello AE, Amstadter AB, Ashley-Koch AE, Baker DG, Beckham JC, Bromet E, Dennis M, Garrett ME, Geuze E, Guffanti G, Hauser MA, Kilaru V, Kimbrel NA, Koenen KC, Kuan PF, Logue MW, Luft BJ, Miller MW, Mitchell C, Nugent NR, Ressler KJ, Rutten BPF, Stein MB, Vermetten E, Vinkers CH, Youssef NA; VA Mid-Atlantic MIRECC Workgroup; PGC PTSD Epigenetics Workgroup, Uddin M, Nievergelt CM, Smith AK. (2017). Epigenome-wide association of PTSD from heterogeneous corhots with a common multi-site analysis pipeline. *Am. J. Med. Genet B Neuropsychiatry Genet*. 174:619-30. PMID: 28691784. PMCID: PMC559272
- 12. Horesh D, Lowe S, Galea S, **Uddin M**, Koenen KC (2017). An in-depth look into PTSD-depression comorbidity: A longitudinal study of chronically-exposed Detroit residents. *J Affect. Disord.* 208:653-661. PMID: 27816322
- 13. Bustamante AC<sup>+</sup>, Aiello AE, Galea S, Ratanatharathorn A, Noronha C, Wildman DE, **Uddin M\***. (2016). Glucocorticoid Receptor DNA Methylation, Childhood Maltreatment and Major Depressive Disorder. *J Affect Disord*. 206:181-188. PMID: 27475889. \*\*First author was a PhD student in the Uddin lab.
- 14. Simanek AM, **Uddin M**, Yolken R, Aiello A. (2016). Use of archived neonatal bloodspots for examining associations between prenatal exposure to potentially traumatic or stressful life events, maternal herpesvirus infection and lifetime history of generalized anxiety disorder in offspring. *Front. Environ. Sci.* https://doi.org/10.3389/fenvs.2016.00054
- Feinstein L, Ferrando-Martínez S, Leal M, Zhou X, Sempowski GD, Wildman DE, Uddin M, Aiello AE. (2016). Population Distributions of Thymic Function in Adults: Variation by Sociodemographic Characteristics and Health Status. *Biodemography Soc Biol*. 62:208-21. PMID: 27337555.
- Aiello AE, Feinstein L, Down JB, Pawelec G, Derhovanessian E, Galea S, Uddin M, Wildman DE, Simanek AM. (2016). Income and markers of immunological cellular aging. *Psychosom Med.* 78:657-66. PMID: 27187853.
- 17. Aiello AE, Dowd JB, Jayabalasingham B, Feinstein L, **Uddin M**, Simanek AM, Cheng CK, Wildman DE, Koenen K, Pawelec G. (2016). PTSD is associated with an increase in aged T cell phenotypes in adults living in Detroit. *Psychoneuroendocrinol*. 67:133-41. PMID: 26894484.
- 18. Nugent N, Goldberg A, **Uddin M**. (2016). Topical Review: The Emerging Field of Epigenetics: Informing Models of Pediatric Trauma and Physical Health. *J. Pediatr. Psychol.* 41:55-64. PMID: 25825520.
- 19. Wingo AP, Almli LM, Stevens JJ, Klengel T, **Uddin M**, Li Y, Bustamante AC<sup>+</sup>, Lori A, Koen N, Stein DJ, Smith AK, Aiello AE, Koenen KC, Wildman DE, Galea S, Bradley B, Binder EB, Jin P, Gibson G, Ressler KJ (2015). DICER1 and microRNA regulation in post-traumatic stress disorder with comorbid depression. *Nat. Commun.* 6: 10106. PMID: 26632874.

- 20. Mota N, Sumner JA, Lowe SR, Neumeister A, **Uddin M**, Aiello A E, Wildman DE, Galea S, Koenen KC, Pietrzak RH (2015). The rs1049353 polymorphism in the *CNR1* gene interacts with childhood abuse to predict posttraumatic threat symptoms. *J. Clin. Psychiatry*. 76:e1622-3. PMID: 26717543.
- 21. Weckle A, Aiello AE, Uddin M, Galea S, Coulbourn RM, Soliven R, Meier HCS, Wildman DE (2015). Rapid fractionation and isolation of whole blood components in samples obtained from a community-based setting. *J Vis Exp.* 105. PMID: 26649992.
- 22. Meyers J, Salling M, Almli L, Ratanatharathorn, **Uddin M**, Galea S, Wildman D, Aiello AE, Bradkley B, Ressler K, Koenen K (2015). Frequency of Alcohol Consumption in Humans; the Role of Metabotropic Glutamate Receptors and Downstream Signaling Pathways. *Transl. Psychiatry*. 5:e586. PMID: 26101849. PMCID: PMC4490281.
- 23. Straughen JK, Sipahi L+, **Uddin M**, Misra DP, Misra VK (2015). Racial differences in *IGF1* methylation and birth weight. *Clin. Epigenetics*. 7:47. PMID: 25945130 PMCID: PMC4419394.
- 24. Lowe SR, Meyers JL, Galea A, Aiello AE, **Uddin M**, Wildman DE, Koenen KC (2015). RORA and posttraumatic stress trajectories: main effects and interactions with childhood physical abuse history. *Brain Behav.* 5:e00323. PMID: 25798337 PMCID: PMC4356849.
- 25. Logue MW, Amstadter AB, Baker DG, Koenen KC, Liberzon I, Miller MW, Morey RA, Nievergelt CM, Ressler KJ, Smith AK, Smoller JW, Stein MB, Sumner JA, **Uddin M** (2015). The Psychiatric Genomics Consortium Posttraumatic Stress Disorder Workgroup: Posttraumatic stress disorder enters the age of large-scale genomic collaboration. *Neuropsychopharmacology*. 40:2287-91. PMID: 25904361. PMCID: PMC4538342.
- 26. Logue MW, Smith AK, Baldwin C, Wolf EJ, Guffanti G, Ratanatharathorn A, Stone A, Schichman SA, Humphries D, Binder EB, Menke A, Uddin M, Wildman D, Galea S, Aiello AE, Koenen KC, Miller MW (2015). An analysis of gene expression in PTSD implicates genes involved in the glucocorticoid receptor pathway and neural responses to stress. *Psychoneuroendocrinology*. 57:1-13. PMID: 25867994 PMCID: PMC4437870
- 27. Demmer RT, Gelb S, Suglia SF, Keyes KM, Aiello AE, Colombo PC, Galea S, **Uddin M**, Koenen KC, Kubzansky LD (2015). Sex differences in the association between depression, anxiety, and type 2 diabetes mellitus. *Psychosom Med.* 77:467-77. PMID: 25867970 PMCID: PMC4431947
- 28. Pietrzak RH, Sumner JA, Aiello AE, **Uddin M**, Neumeister A, Guffanti G, Koenen, KC (2015). Association of the rs2242446 polymorphism in the norepinephrine transporter gene *SLC6A2* and anxious arousal symptoms of posttraumatic stress disorder. *Journal of Clinical Psychiatry*, 76, e537-8. PMID: 25919853. PMCID: PMC4526154.
- 29. Bustamante A<sup>+</sup>, **Uddin M\*** (2014). Epidemiology, Epigenetics, and Psychopathology. *Med Epigenet*. 2: 60-70.

- \*\*Invited review. First author was a PhD student in the Uddin lab.
- 30. Simanek AM, Cheng C, Yolken R, **Uddin M**, Galea S, Aiello AE (2014). Herpesviruses, inflammatory markers and incident depression in a longitudinal study of Detroit residents *Psychoneuroendocrinology* 50C:139-48. PMID: 25218654 PMCID: PMC4306348
- 31. Hatzenbuehler ML, Keyes KM, **Uddin M**, Aiello A, Hamilton A, Galea S (2014). The Collateral Damage of Mass Incarceration: Increased Risk of Psychiatric Morbidity among Non-Incarcerated Residents of High-Incarceration Neighborhoods *Am J Pub Health* PMID: 25393200 PMCID: PMC4265900

  \*\*Article was profiled in *The Atlantic*http://www.theatlantic.com/health/archive/2015/03/how-incarceration-infects-a-community/385967/
- 32. Wolf EJ, Mitchell KS, Logue MW, Baldwin CT, Reardon AF, Aiello AE, Galea S, Koenen KC, **Uddin M**, Wildman DE, Miller M (2014). The Dopamine D<sub>3</sub> Receptor Gene and Posttraumatic Stress Disorder *J Trauma Stress* 27:379-87. PMID: 25158632. PMCID: PMC4147673.
- 33. Sipahi L<sup>+</sup>, Wildman DE, Aiello AE, Koenen KC, Galea S, Abbas A, **Uddin M\*** (2014). Longitudinal epigenetic variation of DNA methyltransferase genes is associated with vulnerability to post-traumatic stress disorder *Psych Med* 44:3165-79. PMID: 25065861 \*\*First author was an MD/PhD student whom I co-mentored
- 34. **Uddin M\*** (2014). Blood based biomarkers in depression: Emerging themes in clinical research *Mol Diagn Ther* 8(5):469-82. PMID: 24923456 \*\*Invited review
- 35. Horesh D, Lowe SR, Galea S, **Uddin** M, Koenen KC (2015). Gender differences in the long-term associations between PTSD and depression symptoms: Findings from the Detroit Neighborhood Health Study *Depress Anx* 32(1):38-48. PMID: 25044027 PMCID: PMC4289474
- 36. Diwadkar VA, Bustamante A<sup>+</sup>, Rai H, **Uddin M** (2014). Epigenetics, stress, and their potential impact on brain network function: a focus on the schizophrenia diathesis *Front Psych* 5:71 doi: 103389/fpsyt201400071 PMID: 25002852

  \*\*Article profiled in the BrainBlogger
  http://brainblogger.com/2015/03/04/less-stress-less-psychosis/
- 37. Sumner JA, Pietrzak RH, Aiello AE, **Uddin M**, Wildman DE, Galea S, Koenen KC (2014). Further support for an association between the memory-related gene *WWC1* and posttraumatic stress disorder: Results from the Detroit Neighborhood Health Study. *Biol Psych* 76(11).:e25-6. PMID: 24947539 PMCID: PMC4318800
- 38. Sipahi L<sup>+</sup>, **Uddin M**, Hou ZC, Aiello AE, Koenen KC, Galea S, Wildman DE (2014). Ancient evolutionary origins of epigenetic regulation associated with posttraumatic stress

- disorder *Front Hum Neurosci* 8: 284 doi: 103389/fnhum201400284 PMID: 24860472. PMCID: PMC4026723
- \*\*First author was an MD/PhD student whom I co-mentored
- 39. Nevell L, Zhang K, Aiello AE, Koenen KC, Galea S, Soliven R, Zhang C, Wildman DE, Uddin M\* (2014). Elevated systemic expression of ER stress related genes is associated with stress-related mental disorders in the Detroit Neighborhood Health Study *Psychoneuroendocrinology* 43:62-70. PMID: 24703171 PMCID: PMC4106129
- 40. Walsh K, **Uddin M**, Soliven R, Wildman DE, Bradley B (2014).. Associations between the SS variant of 5-HTTLPR and PTSD among adults with histories of childhood emotional abuse: results from two African-American independent samples *J Affect Disord* 161:91-6. PMID: 24751314 PMCID: PMC4066731
- 41. Lowe SR, **Uddin M**, Aiello A, Wildman DE, Galea S, Koenen KC (2014).. Trajectories of posttraumatic stress among urban residents *Am J Community Psychol* 53(1-2).:159-72 PMID: 24469249 PMCID: PMC3991929
- 42. Solovieff N, Roberts AL, Ratanatharathorn A, Haloosim M, De Vivo I, King AP, Liberzon I Aiello A, **Uddin M**, Wildman DE, Galea S, Smoller JW, Purcell SM, Koenen KC (2014). Genetic association analysis of 300 genes identifies a risk haplotype in *SLC18A2* for posttraumatic stress disorder in two independent samples *Neuropsychopharmacology* 39: 1872-9. PMID: 24525708 PMCID: PMC4059895
- 43. Walsh K, Koenen K, Aiello AE, **Uddin M**, Galea S (2014). Prevalence of sexual violence and posttraumatic stress disorder in an urban African-American population *Journal of Immigrant and Minority Health* 16:1307-10. PMID: 23686528 PMCID: PMC3797217
- 44. Guffanti G, Galea S, Yan L, Roberts AL, Solovieff N, Aiello AE, Smoller JW, De Vivo I, Ranu H, **Uddin M**, Wildman DE, Purcell S, Koenen KC (2013). Genome-wide association study implicates a novel RNA gene, the lincRNA AC0687181, as a risk factor for post-traumatic stress disorder in women *Psychoneuroendocrinology* 38:3029-38 PMID: 24080187 PMCID: PMC3844079
- 45. **Uddin M\***, Sipahi L<sup>+</sup>, Li J, Koenen KC (2013). Sex differences in DNA methylation may contribute to risk of PTSD and depression: a review of the evidence *Dep Anxiety* 30:1151-60 PMID: 23959810
- 46. Meyers J, Cerdá M, Galea S, Keyes KM, Aiello AE, **Uddin M**, Wildman DE, Koenen KC (2013). Interaction between Polygenic Risk for Cigarette Use and Environmental Exposures in the Detroit Neighborhood Health Study *Transl Psychiatry* 3:e290 PMID: 23942621 PMCID: PMC3756291
- 47. Mitchell KS, Aiello AE, Galea S, **Uddin M**, Wildman D, Koenen KC (2013). PTSD and obesity in the Detroit Neighborhood Health Study *Gen Hosp Psychiatry* 35:671-3 PMID: 24035634 PMCID: PMC3823753

- 48. Keyes KM, McLaughlin KA, Demmer R, Cerda M, Koenen KC, **Uddin M**, Galea S (2013). Potentially traumatic events and the risk of six physical health conditions in a population-based sample *Depress Anxiety* 30:451-60 PMID: 23495094 PMCID: PMC4180235
- 49. Sterner KN, McGowen MR, Chugani HT, Tarca AL, Sherwood CC, Hof PR, Kuzawa CW, Boddy AM, Rauum RL, Weckle A, Lipovich L, Grossman LI, **Uddin M**, Goodman S, Wildman DE (2013). Characterization of human cortical gene expression in relation to glucose utilization *Am J Hum Biol* 25:418-30 PMID: 23559490
- 50. Uddin M\*, Chang SC, Zhang C, Ressler K, Galea S, Keyes KM, McLaughlin K, Wildman DE, Aiello AE, Koenen KC (2013). ADCYAP1R1 genotype, posttraumatic stress disorder and depression among women exposed to childhood maltreatment Depress Anxiety 30:251-8 PMID: 23280952 PMCID: PMC4081452
  \*\*\*Article was profiled by MDLinx, an award-winning website that indexes articles to help physicians and other health care professionals stay up to date with current research and clinical developments\*\*\*
  http://wwwmdlinxcom/internal-medicine/news-articlecfm/4363659
- 51. Lipovich L, Tarca AL, Cai B, Jia H, Chugani HT, Sterner KN, Grossman LI, **Uddin M**, Hof PR, Sherwood CC, Kuzawa CW, Goodman M, Wildman DE (2013). Developmental Changes in the Transcriptome of Human Cerebral Cortex Tissue: Long Non-Coding RNA (lncRNA). Transcripts *Cerebral Cortex*. 24:1451-9. PMID: 23377288
- 52. **Uddin M\***, Galea S, Chang SC, Koenen KC, Goldmann E, Wildman DE, Aiello AE (2013). Epigenetic Signatures May Explain the Relationship Between Socioeconomic Position and Risk of Mental Illness: Preliminary Findings from an Urban Community Based Sample *Biodemography and Social Biology* 59:68-84 PMID: 23701537 PMCID: PMC3754421
- 53. Logue MW, Baldwin C, Guffanti G, Melista E, Wolf EJ, Reardon AF, **Uddin M**, Wildman, D, Galea S, Koenen KC, Miller MW (2013). A genome-wide association study of posttraumatic stress disorder identifies the retinoid-related orphan receptor alpha (*RORA*). gene as a significant risk locus. *Mol Psychiatry* 18:937-42 PMID: 22869035 PMCID: PMC3494788
- 54. Chang SC, Koenen KC, Galea A, Aiello AE, Soliven R, Wildman DE, **Uddin M\*** (2012). Molecular variation at the *SLC6A3* locus predicts lifetime risk of PTSD in the Detroit Neighborhood Health Study *PLoS One* 7(6).:e39184 PMID: 22745713 PMCID: PMC3383758
- 55. Sterner KN, Weckle A, Chugani HT, Tarca AL, Sherwood CC, Hof PR, Kuzawa CW, Boddy AM, Abbas Am Raaum RL, Gregoire L, Lipovich L, Grossman LI, **Uddin M**, Goodman M, Wildman DE (2012). Dynamic Gene Expression in the Human Cerebral Cortex Distinguishes Children from Adults *PLoS One* 7(5).:e37714 PMID: 22666384

- 56. Johns L, Aiello AE, Cheng C, Galea S, Koenen KC, **Uddin M\*** (2012). Neighborhood social cohesion and posttraumatic stress disorder in a community-based sample: findings from the Detroit Neighborhood Health Study *Soc Psychiatry Psychiatr Epidemiol* 47:1899-906 PMID: 22526824
  - \*\*This paper is based on the master's thesis of the first author, Lauren Johns, which was completed under my supervision
- 57. Aiello AE, Perez V, Coulborn RM, Davis BM, **Uddin M**, Monto AS (2012). Facemasks, hand hygiene, and influenza among young adults: a randomized intervention trial *PLoS One* 7(1)::e29744 PMID: 22295066
- 58. Keyes KM, McLaughlin KA, Koenen KC, Goldmann E, **Uddin M**, Galea S (2012). Child maltreatment increases sensitivity to adverse social contexts: Neighborhood physical disorder and incident binge drinking in Detroit *Drug Alcohol Depend* 122:77-85 PMID: 21981990 PMCID: PMC3288803
- 59. Perez V, **Uddin M**, Galea S, Monto AS, Aiello AE (2012). Stress, adherence to preventive measures for reducing influenza transmission and influenza-like illness *J Epidemiol Community Health* 66:605-10 PMID: 21224242
- 60. Chang SC, Xie P, Anton RF, DeVivo I, Farrere LA, Kranzler HR, Oslin D, Purcell SM, Roberts AL, Smoller JW, **Uddin M**, Gelernter J, Koenen KC (2011). No association between *ADCYAP1R1* and post-traumatic stress disorder in two independent samples *Mol Psychiatry* 17: 239-241 PMID: 21912390
- 61. Toyokawa S, **Uddin M\***, Koenen KC, Galea S (2011). How does the social environment 'get into the mind'? Epigenetics at the intersection of social and psychiatric epidemiology *Soc Sci Med* 74: 67-74 PMID: 22119520 PMCID: PMC3246041
- 62. McLaughlin KA, Nandi A, Keyes KM, Uddin M, Aiello AE, Galea S, Koenen KC (2011). Home foreclosure and risk of psychiatric morbidity during the recent financial crisis *Psychol Med* 42:1441-8 PMID: 22099861 PMCID: PMC3438142
- 63. Goldmann E, Aiello E, **Uddin M**, Delva J, Koenen K, Gant LM, Galea S (2011). Pervasive exposure to violence and posttraumatic stress disorder in a predominantly African American community: The Detroit Neighborhood Health Study *Journal of Traumatic Stress* 24:747-751 PMID: 22144187 PMCID: PMC4433006
- 64. Pierron D, Opazo JC, Heiske M, Papper Z, **Uddin M**, Chang G, Wildman DE, Romero R, Goodman M, Grossman LI (2011). Silencing, positive selection and parallel evolution: busy history of primate cytochromes C *PLoS One* 6(10).:e26269 PMID: 22028846
- 65. Dunn EC, **Uddin M**, Subramanian, Smoller SV, Galea S, Koenen KC (2011). Gene-Environment Interaction (GxE). Research in Youth Depression: A Systematic Review with Recommendations for Future Research *J Child Psychol and Psychiatry* 52:1233-38 PMID: 21954964

- 66. Wildman DE, **Uddin M**, Romero R, Murphy J, Hou ZC and Fritz J (2011). Spontaneous abortion and premature labor and delivery in nonhuman primates: evidence from a captive colony of chimpanzees (*Pan troglodytes*). *PLoS One* 6(9).:e24509 PMID: 21949724
- 67. **Uddin M\***, de los Santos R, Bakshis E, Cheng C, Aiello AE (2011). Building conditions, *5-HTTLPR* genotype and depressive symptoms in adolescent males and females *J Adolescent Health* 49:379-385 PMID: 21939868 PMCID: PMC3179607
- 68. Koenen KC, **Uddin M**, Chang SC, Aiello AE, Wildman DE, de los Santos R, Goldmann E, Galea S (2011). *SLC6A4* methylation modifies the effect of the number of traumatic events on risk for posttraumatic stress disorder *Depress Anxiety* 28:639-647 PMID: 21608084 PMCID: PMC3145829
- 69. **Uddin M\***, Galea S, Chang SC, Aiello AE, Wildman DE, de los Santos R, Koenen KC (2011). Gene expression and methylation signatures of *MAN2C1* are associated with PTSD *Dis Markers* 30:111-121 PMID: 21508515 PMCID: PMC3188659
- 70. Galea S, **Uddin M**, Koenen K (2011). The Urban Environment and Mental Disorders: Epigenetic Links *Epigenetics* 6:400-404 PMID: 21343702 PMCID: PMC3230535
- 71. **Uddin M\***, Koenen KC, Aiello AE, Wildman DE, de los Santos R, Galea S (2010). Epigenetic and inflammatory marker profiles associated with depression in a community-based epidemiologic sample *Psychol Med* 14:1-11 PMID: 20836906 PMCID: PMC3065166
- 72. Koenen KC, **Uddin M**, Amstader A, Galea S (2010). Incorporating the social environment in genotype environment interaction studies of mental disorders *Int J Clin Pract* 64:1489-92 PMID: 20846196
- 73. **Uddin M**, Aiello AE, Wildman DE, Koenen KC, Pawelec G, de los Santos R, Goldmann E, Galea S (2010). Epigenetic and immune function profiles associated with post-traumatic stress disorder *Proc Natl Acad Sci USA* 107:9470-5 PMID: 20439746 PMCID: PMC2889041 \*\* This paper was recommended by the *Faculty of 1000 Biology* and covered extensively by national and UM media sources, including National Public Radio\*\* Faculty of 1000: F1000com/4753962 Meinlschmidt G, Kumsta R, Hellhammer D: 2010 F1000com/4753962#eval4649060 <a href="http://www.nprorg/templates/story/storyphp?storyId=126637629">http://www.nprorg/templates/story/storyphp?storyId=126637629</a> <a href="http://www.nprorg/templates/story/storyphp?storyId=1242">http://www.nprorg/templates/story/storyphp?storyId=1242</a>
- 74. **Uddin M\***, Koenen KC, de los Santos R, Bakshis E, Aiello AE, Galea S (2010). Gender differences in the genetic and environmental determinants of adolescent depression *Depress Anxiety* 27:658-666 PMID: 20336806 PMCID: PMC3124809
- 75. Vukotich CJ, Coulborn RC, Aragon TJ, Baker MG, Burrus BB, Cowling BJ, Duncan A, Enanoria W, Fabian P, Ferng Y, Larson EL, Leung GM, Markel H, Milton DK, Monto AS, Morse SS, Navarro A, Park SY, Priest P, Stebbins S, Stern AM, **Uddin M**, Wetterhall SF,

- and Aiello A (2010). Findings, Gaps and Future Direction for Research in Non-Pharmaceutical Interventions for Pandemic Flu *Emerg Infect Dis* 16:e2 PMID: 20350370
- 76. Aiello AE, Coulborn RM, Aragon TJ, Baker MG, Burrus BB, Cowling BJ, Duncan A, Enanoria W, Fabian MP, Ferng Y, Larson EL, Leung GM, Markel H, Milton DK, Monto AS, Morse SM, Navarro JA, Park SY, Priest P, Stebbins S, Stern AM, Uddin M, Wetterhall SF, and Vukotich CJ (2010). Research findings from nonpharmaceutical intervention studies for pandemic influenza and current gaps in the research *Am J Infect Control* 38:251-258 PMID: 20226569
- 77. Aiello AE, Murray G, Perez V, Davis B, Coulborn R, **Uddin M**, Waterman S, Shay D, Monto AS (2010). Mask use and seasonal influenza-like illness among young adults: A randomized intervention trial *J Infect Dis* 4:491-498 PMID: 20088690
- 78. Sherwood CC, Raghanti MA, Stimpsom CD, Spocter MA, **Uddin M**, Boddy AM, Wildman DE, Bonar CJ, Lewandowski AH, Phillips KA, Erwin JM, Hof PR (2010). Inhibitory interneurons of the human prefrontal cortex display conserved evolution of the phenotype and related genes *Proc R Soc B* 277:1011-1020 PMID: 19955152
- 79. **Uddin M**, Cherkowski G, Liu G, Zhang J, Monto A, Aiello AE (2010). Demographic and Socioeconomic Determinants of Influenza Vaccination Disparities among University Students *J Epidemiol Community Health* 64:808-813 PMID: 19828514
- 80. Goodman M, Sterner KN, Islam M, **Uddin M**, Sherwood CC, Hof PR, Hou Z, Lipovich L, Hui J, Grossman LI, Wildman DE (2009). Phylogenomic analyses reveal convergent patterns of adaptive evolution in elephant and human ancestries *Proc Natl Acad Sci USA* 106: 20824-20829 PMID: 19926857
- 81. Papper Z, Jameson NM, Romero R, Weckle AL, Mittal P, Benirschke K, Santolaya-Forgas J, **Uddin M**, Haig D, Goodman M, Wildman DE (2009). Ancient origin of placental expression in the growth hormone genes of anthropoid primates *Proc Natl Acad Sci USA* 106:17083-17088 PMID: 1980516
- 82. Than NG, Romero R, Goodman M, Weckle A, Xing J, Don Z, Xu Y, Tarquini F, Szilagyi A, Gal O, Hour Z, Tarca AL, Kim CJ, Kim JS, Haidarian S, **Uddin M,** Bohn H, Benirschke K, Santolaya-Forgas J, Grossman LI, Erez O, Hassan SS, Zavodsky O, Papp Z, Wildman DE (2009). A primate subfamily of galectins expressed at the maternal-fetal interface that promote immune cell death *Proc Natl Acad Sci USA* 106:9731-9736 PMID: 19497882
- 83. Hou Z, Romero R, **Uddin M**, Than NG, Wildman DE (2009). Adaptive history of single copy genes highly expressed in the term human placenta *Genomics* 93:33-41 PMID: 18848617
- 84. Chen C, Opazo JC, Erez O, Uddin M, Santolaya-Forgas J, Goodman M, Grossman LI, Romero R, and Wildman DE (2008). The human progesterone receptor shows evidence of

- adaptive evolution associated with its ability to act as a transcription factor *Mol Phyl Evol* 47:637-49 PMID: 18375150
- 85. **Uddin M**, Goodman M, Erez O, Romero R, Liu G, Islam M, Opazo JC, Sherwood CC, Grossman LI and Wildman DE (2008). Distinct genomic signatures of adaptation in pre- and post-natal environments during human evolution *Proc Natl Acad Sci USA*105:3215-3220 PMID: 18305157
- 86. **Uddin M**, Opazo JC, Wildman DE, Sherwood CC, Hof PR, Goodman M, and Grossman LI (2008). Molecular evolution of the cytochrome *c* oxidase subunit 5A gene in primates *BMC Evol Biol* 8:8 PMID: 18197981
- 87. Liu G, **Uddin M**, Islam M, Goodman M, Grossman LI, Romero R, and Wildman DE (2007). OCPAT: an online codon-preserved alignment tool for evolutionary genomic analysis of protein coding sequences *Source Code Biol Med* 2:5 PMID: 17877817
- 88. Wildman DE, **Uddin M**, Opazo JC, Liu G, Lefort V, Guindon S, Gascuel O, Grossman LI, Romero R, Goodman M (2007). Genomics, biogeography and the diversification of placental mammals *Proc Natl Acad Sci USA* 104:14395-14400 PMID: 17728403
- 89. Koike C, **Uddin M**, Wildman DE, Gray EA, Trucco M, Starzl TE, and Goodman M (2007). Functionally important glycosyltransferase gain and loss during catarrhine primate emergence *Proc Natl Acad Sci USA* 104:559-564 PMID: 17194757
- 90. Sherwood CC, Stimpson CD, Raghanti MA, Wildman DE, **Uddin M**, Grossman LI, Goodman M, Redmond JC, Bonar CJ, Erwin JM, and Hof PR (2006). Evolution of increased glia-neuron ratios in the human frontal cortex *Proc Natl Acad Sci USA* 103:13606-13611 PMID: 16938869
- 91. Johnson RM, Prychitko T, Gumucio D, Wildman DE, Uddin M, and Goodman M (2006). Phylogenetic comparisons suggest that distance from the locus control region guides developmental expression of primate beta-type globin genes *Proc Natl Acad Sci USA* 103:3186-3191 PMID: 16488971
- 92. Schmidt TR, Wildman DE, Uddin M, Opazo JC, Goodman M, and Grossman LI (2005). Rapid electrostatic evolution at the binding site for cytochrome c on cytochrome c oxidase in anthropoid primates *Proc Natl Acad Sci USA* 102: 6379-6384 PMID: 15851671
- 93. Doan JW, Schmidt TR, Wildman DE, **Uddin M**, Goldberg A, Hüttemann M, Goodman M, Weiss ML, and Grossman LI (2004). Coadaptive evolution in cytochrome c oxidase: 9 of 13 subunits show accelerated rates of nonsynonymous substitution in anthropoid primates *Mol Phylogenet Evol* 33: 944-950 PMID: 15522815
- 94. **Uddin M**, Wildman DE, Liu G, Xu W, Johnson RM, Hof PR, Kapatos G, Grossman LI, and Goodman M (2004). Sister grouping of chimpanzees and humans as revealed by genome-

- wide phylogenetic analysis of brain gene expression profiles *Proc Natl Acad Sci USA* 101: 2957-2962 PMID: 14976249
- 95. Wildman DE, **Uddin M**, Liu G, Grossman LI, and Goodman M (2003). Implications of natural selection in shaping 994% nonsynonymous DNA identity between humans and chimpanzees: enlarging genus *Homo. Proc Natl Acad Sci USA* 100:7181-7188 PMID: 12766228
- 96. **Uddin M\*** (1996). College women's sexuality in an era of AIDS *Journal of American College Health* 44:252-260 PMID: 8735162
  \*This paper was based on my undergraduate honors thesis

### BOOK CHAPTERS, BOOK REVIEWS AND SOLICITED COMMENTARY

(\*indicates contributions with corresponding author status; <sup>+</sup>indicates author is a student whom I mentored).

- 1. Kim GS+, Smith AK, Nievergelt C, **Uddin M\***. (2018). Neuroepigenetics of Post-traumatic Stress Disorder. In B. Rutten (Ed.), Neuroepigenetics and Mental Illness, *Progress in Molecular Biology and Translational Science*, volume 156. pp 227-253 \*\*First author was a PhD student in the Uddin lab.
- 2. **Uddin M\***, Jansen S, Telzer EH (solicited commentary). (2017). Adolescent depression linked to socioeconomic status? Molecular approaches for revealing premorbid risk factors. *Bioessays*. 39. doi: 10.1002/bies.201600194. PMID: 28090662.
- 3. Sumner JA, Bustamante AC<sup>+</sup>, Koenen KC, **Uddin M\*** (2016). Genetics of PTSD. In: Liberzon I, Ressler K (eds.). *Neurobiology of PTSD* (New York, NY: Oxford University Press). pp 197-219.
- 4. Rusiecki JA, **Uddin M**, Alexander SA, Moore LE (2016). Post-traumatic stress disorder and DNA methylation. In: Martin C, Preedy V, and Patel V, (eds.). *Comprehensive Guide to Post-traumatic Stress Disorders (PTSD)*. (New York: Springer), pp. 1069-1096
- 5. **Uddin M\*** and Diwadkar VAD (solicited commentary). (2014). Inflammation and psychopathology: what we know now, and what we need to know. *Soc Psychiatry Psychiatr Epidemiol*. 49:1537-9. PMID: 25073607
- 6. **Uddin M\*,** Bustamante A<sup>+</sup>, Toyokawa S (2014). Epigenetic epidemiology of psychiatric disorders In: Avramopoulos D, Grayson DR, and Peedicayil J (eds). *Epigenetics in Psychiatry* (Waltham, MA: Elsevier), pp 101-127
- 7. Koenen KC, Guffanti G, Yan L, Haloossim M, Uddin M, Nugent NR, Amstadter AB (2014). Genetics of PTSD In Friedman MJ, Keane TM and Resick PA (eds). *Handbook of PTSD* (New York, NY: The Guildford Press). pp 300-312

- 8. **Uddin M\***, Sipahi L+ (2013). Epigenetic influences on mental illness over the life course In: Koenen KC, Rudensteine S, Susser ES and Galea S (eds)., *Life Course Epidemiology of Mental Disorders* (New York, NY: Oxford University Press)., pp 238-248
  \*\*Levent Sipahi was an MD/PhD student in the lab
- 9. **Uddin M\***, Amstadter AB, Nugent NR, Koenen KC (2012). Genetics and genomics of post-traumatic stress disorder In: Beck JG and Sloan D (eds)., *Handbook of Traumatic Stress Disorders* (New York, NY: Oxford University Press)., pp 143-158
- 10. **Uddin M\***, Bakshis E, De los Santos R (2012). Childhood maltreatment and county-level deprivation jointly modify the effect of serotonin transporter promoter genotype on depressive symptoms in adolescent girls In: L'Abate L (ed), *Mental Illness Understanding, Prediction and Control* (Rijeka: Intech), pp 225-238
- 11. Koenen KC and **Uddin M** (solicited commentary). (2010). *FKBP5* Polymorphisms Modify the Effects of Childhood Trauma *Neuropsychopharmacology* 35:1623-1624 PMID: 20551900
- 12. **Uddin M**, Wildman DE, Goodman M (2008). Comparing the human and chimpanzee genomes In Cooper D N and Kehrer-Sawatzki H (eds). *Handbook of Human Molecular Evolution* (Hoboken, NJ: John Wiley & Sons, Inc).
- 13. **Uddin M\***, Phillips-Conroy J, and Jolly, CJ (2006). Social organization, reproductive systems, and mediation of baboon endogenous virus (BaEV) copy number in gelada, hamadryas, and other *Papio* baboons In: Leigh S and Swedell L (eds), *Reproduction & fitness in baboons: Behavioral, Ecological, and Life History Perspectives* (New York: Springer)., pp 123-143
- 14. **Uddin M\*** (2004). (solicited). Book review of: "Microarray Analysis" By Mark Schena *Am J Phys Anthropol* 124:381-382

#### **INVITED ORAL PRESENTATIONS**

- 1. **Uddin M**. Epigenomics of traumatic stress in human populations. <u>Invited Keynote Presentation</u>, African Society for Human Genetics, Kigali, Rwanda, **Sept. 2018.**
- 2. **Uddin M.** Transgenerational epigenomics of trauma and PTSD in Rwanda. <u>Invited Oral Presentation</u>, 12<sup>th</sup> meeting of the H3Africa Consortium, Kigali, Rwanda, **Sept. 2018.**
- 3. **Uddin M.** Epigenetic approaches to understanding stress and trauma in humans. <u>Invited Oral Presentation</u>, Georgia Institute of Technology, Department of Biology, Atlanta, GA. **Feb. 2018**.
- 4. **Uddin M.** Genomics of traumatic stress and stress-related mental disorders. <u>Invited Oral Presentation</u>, University of South Florida College of Public Health, Department of Global Health, Tampa, FL. **Jan 2018**.

- 5. **Uddin M**. Epigenetic impact of stress, trauma and social adversity, <u>Invited Oral Presentation</u>, Medicalization of Poverty Symposium Scholars Day, University of Illinois at Urbana-Champaign and Carle Hospital, Urbana, IL. **Nov. 2017.**
- 6. **Uddin M**. Molecular imprints of social adversity across the lifecourse. <u>Invited Oral Presentation</u>, Medicalization of Poverty Symposium Foundation Day, University of Illinois at Urbana-Champaign and Carle Hospital, Urbana, IL. **Nov. 2017.**
- 7. **Uddin M**. Epigenomics of traumatic stress. <u>Invited Oral Presentation</u>, Cognitive Science Division Brown Bag Seminar, Dept. of Psychology, University of Illinois at Urbana-Champaign, IL, **Sept. 2017**
- 8. **Uddin M**. The impact of traumatic stress on the dynamic genome. <u>Invited Oral Presentation</u>, Developmental Division Brown Bag Seminar, Dept. of Psychology, University of Illinois at Urbana-Champaign, IL, **Sept. 2017**
- 9. **Uddin M**. Epigenetics of Stress and Trauma. <u>Invited Oral Presentation</u>, Carle Hospital, Synapse: A Collaborative Neuroscience Conference. Aug. **2017**.
- 10. **Uddin M**. Molecular Profiles of Stress, Trauma and Resilience. <u>Invited Oral Presentation</u>, National Alliance for Mental Illness, Effingham Chapter, Effingham, IL. Mar. **2017**.
- 11. **Uddin M.** Epigenetic biomarkers of stress and trauma throughout the life course. <u>Invited Oral Presentation</u>, Clinical Division Brownbag Seminar Series, Dept. of Psychology, University of Illinois at Urbana-Champaign, Champaign, IL, Jan. **2017**.
- 12. **Uddin M.** Updates and results of the PTSD PGC Epigenetics Workgroup. <u>Invited Oral Presentation</u>, Pre-meeting of the International Society for Traumatic Stress Studies, Dallas, TX, Nov **2016**.
- 13. **Uddin M.** Genetic and epigenetic risk factors in stress-related mental disorders: focus on PTSD. Invited Oral Presentation, Osher Lifelong Learning Institute, University of Illinois at Urbana-Champaign, Champaign, IL. Oct. **2016**.
- 14. **Uddin M.** Transcriptional and epigenetic regulation of traumatic stress in a community-based cohort. <u>Invited Oral Presentation</u>, Neuroscience Program, Michigan State University, Lansing MI, Sept. **2016**.
- 15. **Uddin M.** Biologic Embedding of Traumatic Stress Within and Between Generations.

  <u>Invited Oral Presentation</u>, University of Rwanda, College of Medicine and Health Sciences, Kigali, Rwanda, June **2016**.
- 16. **Uddin M** Intergenerational transmission of traumatic stress. <u>Invited Oral Presentation</u>, Living Peace Institute, Goma, Democratic Republic of Congo, June **2016**.

- 17. **Uddin M.** Biologic Embedding of Stress and Trauma in Diverse Cohorts. <u>Invited Oral</u> Presentation, Kariosoke Research Center, Musanze, Rwanda, June **2016.**
- 18. **Uddin M.** Biologic Embedding of Stress and Trauma in an Urban, Population-based Sample. <u>Invited Oral Presentation</u>, Society for Neuroscience, Chicago Chapter, 2016 Annual Meeting, Chicago, IL Apr. **2016.**
- 19. **Uddin M.** Molecular imprints of stress, trauma and resilience across the lifecourse. <u>Invited Oral Presentation</u>, Undergraduate Neuroscience Society, University of Illinois at Urbana-Champaign, Urbana, IL Apr. **2016.**
- 20. **Uddin M.** Biomarkers of stress, trauma and resilience in a community-based setting. <u>Invited Oral Presentation</u> Behavioral Neuroscience Seminar, Department of Psychiatry, University of Illinois at Chicago, Chicago, IL Jan. **2016.**
- 21. **Uddin M.** Biomarkers of stress, trauma and resilience in a community-based setting. <u>Invited Oral Presentation</u> National Alliance on Mental Illness, Champaign Chapter; Champaign Public Library, Champaign, IL Dec **2015.**
- 22. **Uddin M.** PTSD PGC Epigenetics Working Group Update. <u>Invited Oral Presentation</u>, International Society for Traumatic Stress Studies, PTSD Psychiatric Genomics Consortium Pre-meeting, New Orleans, LA Nov **2015**.
- 23. **Uddin M.** Biomarkers of stress, trauma and resilience in the Detroit Neighborhood Health Study <u>Invited Oral Presentation</u> Illinois Summer Neuroscience Institute, University of Illinois Urbana-Champaign, Urbana, IL May **2015.**
- 24. **Uddin M.** Molecular imprints of stress and trauma across the life course <u>Invited Oral</u> Presentation, Palmer Symposium, Loyola University, Chicago, IL April **2015.**
- 25. **Uddin M.** Molecular imprints of stress and trauma across the life course <u>Invited Oral Presentation</u>, Developmental Division Seminar Series, Department of Psychology, University of Illinois Urbana-Champaign, Champaign, IL, April **2015**.
- 26. **Uddin M.** Biomarkers of stress, trauma and resilience: insights from the methylome <u>Invited Oral Presentation</u>, Neuroscience Program Seminar Series, University of Illinois Urbana-Champaign, Urbana, IL, Mar **2015.**
- 27. **Uddin M.** Molecular profiles of stress and trauma: insights from population-based studies. <u>Invited Oral Presentation</u>, Human Sociogenomics Group Meeting, Carl R. Woese Institute for Genomic Biology, Urbana, IL, Feb. **2015.**
- 28. **Uddin M.** Epigenetic workgroup update to the PTSD Psychiatric Genomic Consortium. <u>Invited Oral Presentation</u>, Pre-meeting of the International Society for Traumatic Stress Studies, Miami, FL, Nov **2014**.

- 29. **Uddin M** Stress, trauma and resilience: an epigenetic perspective. <u>Invited keynote address</u>, American Urology Association Summer Research Conference, Baltimore, MD Sept **2014**.
- 30. **Uddin M.** Molecular perspectives on trauma and resilience <u>Invited oral presentation</u>, Behavioral Neuroscience Seminar Series, Department of Psychology, University of Illinois Urbana-Champaign, Champaign, IL Sept **2014**.
- 31. **Uddin M.** Epigenetic regulation of traumatic stress. <u>Invited oral presentation</u>, University of Arizona, Department of Psychology, Tuscon, AZ February **2014.**
- 32. **Uddin M.** Koenen KC Genetic Studies of PTSD in Civilian Sample. <u>Invited oral presentation</u>, Inaugural meeting of the PTSD workgroup of the Psychiatric Genetics Consortium, San Francisco, CA, May **2013**.
- 33. **Uddin M.** Biologic embedding of stress and trauma across the lifecourse. <u>Invited oral presentation</u>, Department of Psychology, University of Illinois-Urbana Champaign, May **2013.**
- 34. **Uddin M.** Biologic embedding of traumatic stress across the lifecourse. <u>Invited oral presentation</u> Children's Hospital of Brooklyn and SUNY Downstate Grand Rounds, Brooklyn, NY, March **2013.**
- 35. **Uddin M.** Molecular underpinnings of stress and trauma: insights from a population-based study. <u>Invited oral presentation</u>, Wayne State University Department of Psychiatry Grand Rounds, Detroit, MI, Oct **2012**.
- 36. **Uddin M.** The influence of social and molecular variation on mental health and illness. <u>Invited oral presentation</u>, Wayne State University Institute of Environmental Health Studies Seminar Series, Detroit, MI, Oct **2012.**
- 37. **Uddin M.** The molecular underpinnings of stress and trauma. <u>Invited oral presentation</u>, Merrill Palmer Skillman Institute for Child & Family Development, Detroit, MI **Sept 2012**.
- 38. **Uddin M.** Molecular and environmental factors associated with risk of post-traumatic stress disorder. <u>Invited oral presentation</u> Department of Psychology, University of Michigan, Mar **2012.**
- 39. **Uddin M** Molecular and environmental determinants of mental illness: insights from population-based studies. <u>Invited oral presentation</u> Department of Society, Human Development, and Health, Harvard University Oct **2011.**
- 40. **Uddin M.** Biologic signatures of mental illness: insights from population-based studies. <u>Invited oral presentation</u> Department of Family Medicine and Public Health Sciences, Wayne State University, Detroit, MI, Oct **2011.**

- 41. **Uddin M.** Genetic and genomic perspectives on psychiatric illness: insights from population-based studies. <u>Invited oral presentation</u>, Department of Epidemiology, Mailman School of Public Health, Columbia University, Dec **2010**.
- 42. **Uddin M.** Genetic and genomic perspectives on psychiatric illness: insights from population-based studies. <u>Invited oral presentation</u>, Center for Molecular Medicine and Genetics, Wayne State University School of Medicine, Sept **2010**.
- 43. **Uddin M.** Gender differences in the genetic and environmental determinants of adolescent depression. <u>Invited oral presentation</u>, Cultural Neuroscience: Bridging Natural and Social Sciences, Institute for Social Research/Center for Culture, Mind and the Brain, University of Michigan, Apr **2010**.
- 44. **Uddin M.** How do stress and trauma get under the skin? Insights from psychiatric epidemiology. <u>Invited oral presentation</u>, Department of Epidemiology, University of Michigan, Feb **2010**.
- 45. **Uddin M.** How do stress and trauma get under the skin? Insights from psychiatric epidemiology. <u>Invited oral presentation</u>, Department of Mental Health, Johns Hopkins University Bloomberg School of Public Health, Dec **2009**.

# **CONFERENCE PRESENTATIONS** (\*indicates individual presenting; last 5 years only).

- 1. Rudahindwa S\*, Mutesa L, Rutembesa E, Mutabaruka J, **Uddin M.** An analysis of PTSD symptom severity domains between genocide-exposed mothers and offspring. <u>Oral presentation</u>, Graduate Student Symposium in Memory Studies, University of Illinois at Urbana-Champaign, Urbana, IL, Apr. **2018.**
- 2. Rudahindwa S\*, Mutesa L, Rutembesa E, Mutabaruka J, **Uddin M.** An analysis of PTSD symptom severity domains between genocide-exposed mothers and offspring. <u>Poster Presentation</u>, Illinois Summit for Diversity in Psychological Science, Champaign, IL, Mar. **2018**.
- 3. Kim, GS\*, Wildman DE, Aiello AE, Koenen KC, Galea S, **Uddin M**. Genetic regulation of SRAP nuclease expression is moderated by post-traumatic stress disorder (PTSD) status in African Americans. <u>Poster Presentation</u>, Cold Spring Habor Conference on Systems Biology: Global Regulation of Gene Expression, Cold Spring Harbor, NY, Mar. **2018**.
- 4. Kim, GS\*, Wildman DE, Aiello AE, Koenen KC, Galea S, **Uddin M**. Genetic Regulation of Gene Expression in Vulnerability and Resilience to Post-traumatic Stress Disorder in African Americans. <u>Poster Presentation</u>, Illinois Summit for Diversity in Psychological Science, Champaign, IL, Mar. **2018**.
- 5. Ratanatharathorn A, Boks M, Logue M, Maihofer A, Kilaru V, Stein M, Vermetten E, Karestan K, Aiello A, Baker D, Hauser M, Kimbrel N, Ashley-Koch A, Kuan P, Miller M, Ressler K, Nievergelt C, Smith A, **Uddin M\***, Epigenetic Biomarkers of PTSD:

- Updates From the EWAS Working Group of the PGC PTSD. <u>Oral Presentation</u>, International Society for Traumatic Stress Studies, Chicago, IL, Nov. **2017**
- 6. Lowe S\*, Spruha H, Aiello A, **Uddin M**, Koenen K, Cerda, M. Pathways from assaultive violence to posttraumtic stress, depression, and generalized anxiety symptoms through stressful life events. <u>Oral Presentation</u>, International Society for Traumatic Stress Studies, Chicago, IL, Nov. **2017**
- 7. Kim GS\*+, Armstrong D, Koenen KC, Aiello A, Wildman DE, Uddin M. Genetic and epigenetic regulation of gene expression associated with post-traumatic stress disorder. Oral Presentation, International Society for Traumatic Stress Studies, Chicago, IL, Nov. 2017
- 8. Pfeiffer JP\*+, Bustamante A, Koenen KC, Nikolova Y, Hariri A, **Uddin M**. Epigenome-wide region-based methylation analysis of childhood trauma associated with functional neural phenotypes. <u>Poster Presentation</u>, International Society for Traumatic Stress Studies, Chicago, IL, Nov. **2017**
- 9. Pfeiffer JR\*+, Bustamante AC, Price JB, Tye S, **Uddin M**. Epigenetic modifications of stress-relevant genes as peripheral biomarkers of treatment-resistance depression. <u>Poster presentation</u>, 72nd Society for Biological Psychiatry Scientific Convention, San Diego, CA. May **2017**.
- 10. Kim GS\*+, Armstrong D, Koenen KC, Aiello A, Galea S, Zhao SD, Wildman DE, **Uddin M**. Sex differences in leukocyte compostion and transcriptional profiles associated with lifetime PTSD. <u>Poster presentation</u>, 72nd Society for Biological Psychiatry Scientific Convention, San Diego, CA. May **2017**.
- 11. Horesh D\*, Lowe SR, Galea S, Aiello AE, **Uddin M**, Koenen KC. Women living in a chronically-traumatic environment: PTSD and depression in a longitudinal study of innercity Detroit residents. <u>Oral Presentation</u>, 7<sup>th</sup> World Congress on Women's Mental Health, Dublin, Ireland, Mar. **2017**.
- 12. Ratanatharathorn A, Kuan P, Armstrong A, Boks M, Laogue M, Maihofer A, Luft B, Bromet E, Miller M, Ressler K, Koenen KC, Guffanti G, Hauser M, Kimbrel N, Vermetten E, Stein M, Baker D, Nievergelt C, Smith A, **Uddin M\***, PGC PTSD Epigenetics Workgroup. DNA methylation at *NRG1* may be an epigenetic biomarker of PTSD in civilian cohorts. Oral Symposium Presentation, International Society for Traumatic Stress Studies, Dallas, TX, Nov. **2016**.
- 13. Armstrong D\*+, Koenen KC, Smith A, Ressler K, Aiello A, Galea S, Guffanti G, Ratanatharathorn A, Wildman D, **Uddin M.** Differential methylation of imprinted genes in post-traumatic stress disorder. <u>Oral Symposium Presentation</u>, International Society for Traumatic Stress Studies, Dallas, TX, Nov. **2016**
- 14. Ratanatharathorn A\*, Aiello AE, Armstrong D, Binder EB, Bustamante AC, Galea S, Koenen KC, Kilaru V, Ressler KJ, Smith AK, Sumner JA, **Uddin M**, Wildman DE,

- Guffanti G. Region based analyses of differential methylation in post-traumatic stress disorder. <u>Oral Symposium Presentation</u>, International Society for Traumatic Stress Studies, Dallas, TX, Nov. **2016**
- 15. Bustamante A\*<sup>+</sup>, Aiello AE, Koenen KC, Galea S, Ratanatharathorn A, Wildman DE, Uddin M. Epigenetic profiles associated with childhood maltreatment and post-traumatic stress disorder. Oral Presentation, International Society for Traumatic Stress Studies, Dallas, TX, Nov. 2016.
- 16. **Uddin M\*.** Epigenetic Signatures of Risk and Resilience in an Urban Community Setting. Oral Symposium Presentation, Epidemiology Congress of the Americas 2016. Miami, FL June **2016.**
- 17. Smith A\*, Ratanatharathorn A, Boks M, Logue M, Maihofer A, Kilaru V, Garrett M, Guffanti G, Vermetten E, Koenen K, Aiello A, Baker D, Hauser M, Kimbrel N, Dennis M, Ashley-Koch A, VA-MIRECC, Luft B, Bromet E, Miller M, Ressler K, **Uddin M**, Nievergelt C, PGC PTSD Epigenetics Workgroup. Epigenome-Wide Association of PTSD from Heterogeneous Cohorts with a Common Multi-Site Analysis Pipeline. <u>Oral Presentation</u>, 71<sup>st</sup> Society for Biological Psychiatry Scientific Convention, Atlanta, GA, May **2016**.
- 18. Armstrong D\*, Koenen K, Smith A, Ressler K, Aiello A, Galea S, Gufanti G, Ratanatharathorn A, Wildman D, Uddin M. Differential Methylation of Imprinted Genes in Post-traumatic Stress Disorder. <u>Poster Presentation</u>, 71<sup>st</sup> Society for Biological Psychiatry Scientific Convention, Atlanta, GA, May 2016.
- 19. Bustamante A\*, Aiello AE, Koenen KC, Galea S, Wildman DE, **Uddin M**. Impact of Childhood Maltreatment and Post-traumatic Stress Disorder on the Leukocyte Transcriptome. <u>Poster Presentation</u>, 71<sup>st</sup> Society for Biological Psychiatry Scientific Convention, Atlanta, GA, May **2016**.
- 20. Bustamante AC\*, Aiello AE, Koenen KC, Galea S, Wildman DE, **Uddin M**. Epigenetic modifications of the glucocorticoid receptor (*NR3C1*). are associated with childhood maltreatment and major depressive disorder. <u>Oral Presentation</u>, International Society for Traumatic Stress Studies, New Orleans, LA Nov **2015**
- 21. Ratanatharathorn A\*, Boks M, Bromet E, Guffanti G, Koenen KC, Logue M, Luft B, Maihofer A, Miller M, Mitchell C, Ressler K, Stein M, Vermetten E, **Uddin M**, Nievergelt C, Smith A, PGC-PTSD Epigenetics Workgroup. Preliminary results from the psychiatric genomics consortium PTSD epigenetics workgroup. <u>Oral Presentation</u>, International Society for Traumatic Stress Studies, New Orleans, LA Nov **2015**
- 22. Logue M\*, Smith A, Baldwin C, Wolf E, Guffanti G, Ratanatharathorn A, Stone A, Schichman S, Humphries D, Binder E, Arloth J, Menke A, Uddin M, Wildman D, Galea S, Aiello A, Koenen K, Miller M. An analysis of gene expression in PTSD implicates genes involved in the glucocorticoid receptor pathway and neural responses to stress. Oral

- <u>Presentation, International Society for Traumatic Stress Studies, New Orleans, LA Nov</u> **2015**
- 23. Nugent N\*, **Uddin M**\*, Yehuda R\*, Amstadter A.\* Introduction to genetic and epigenetic research in traumatic stress studies <u>Oral Presentation</u>, Pre-meeting Institute at the International Society for Traumatic Stress Studies, Miami, FL, Nov **2014**
- 24. \*Bustamante A, Koenen KC, Aiello AE, Galea S, Wildman D, **Uddin M** *FKBP5* does not mediate the association between childhood maltreatment and depression in the Detroit Neighborhood Health Study <u>Oral Presentation</u> International Society for Traumatic Stress Studies, Miami, FL, Nov **2014**
- 25. \*Sipahi L, Aiello A, Galea S, Koenan K, Wildman D, **Uddin M** Longitudinal Epigenetic Variation at DNA Methyltransferase Genes is Associated with Risk for and Resilience to PTSD <u>Poster Presentation</u> International Society for Traumatic Stress Studies, Philadelphia, PA, November **2013.** Levent was a MD/PhD student in the Uddin lab.
- 26. \*Bustamante A, Koenen K, Aiello A, Galea S, Wildman D, **Uddin M** Distinct gene expression profiles characterize lifetime PTSD and childhood maltreatment in the Detroit Neighborhood Health Study <u>Poster Presentation</u> International Society for Traumatic Stress Studies, Philadelphia, PA, November **2013**
- 27. \*Walsh K, Bradley B, Galea S, Ressler K, Aiello A, Wildman D, **Uddin M**, Koenen K The SS genotype variant of 5HTTLPR protects against PTSD for inner city African Americans: Results from two independent samples <u>Oral presentation</u> International Society for Traumatic Stress Studies, Philadelphia, PA, November **2013**
- 28. \*Lowe S, Walsh K, **Uddin M**, Wildman D, Galea S, Koenen K Bidirectional relationships between trauma exposure and post-traumatic stress: A longitudinal study of adults living in Detroit <u>Oral presentation</u> International Society for Traumatic Stress Studies, Philadelphia, PA, November **2013**
- 29. \*Mitchell K, Aiello A, Galea S, Uddin M, Wildman W, Koenen K PTSD and Obesity in the Detroit Neighborhood Health Study <u>Oral presentation</u> International Society for Traumatic Stress Studies, Philadelphia, PA, November 2013
- 30. \*Uddin M, Zhang Z, Koenen KC, Galea S, Soliven R, Wildman DE, Aiello AE Evidence for shared molecular etiology of affective and physical disorders in the Detroit Neighborhood Health Study Oral presentation International Federation of Psychiatric Epidemiology, Leipzig, Germany June 2013
- 31. Arfken A, Aiello AE, Zhang C, Galea S, Koenen KC, Meier H, **Uddin M\*** Objectively assessed neighborhood disadvantage and risk of drug misuse in the Detroit Neighborhood Health Study <u>Poster presentation</u> International Federation of Psychiatric Epidemiology, Leipzig, Germany June **2013**

- 32. \*Sipahi L, Aiello AE, Galea S, Koenen KC, Wildman DE, **Uddin M** Longitudinal epigenetic variation at DNA methyltransferase genes is associated with risk for and resilience to PTSD <u>Poster presentation</u>, Society for Biological Psychiatry Annual Conference, San Francisco, CA, May **2013** Levent was a MD/PhD student in the Uddin lab
- 33. Guffanti G\*, Aiello AE, Uddin M, Wildman DE, Galea S, Koenen KC Genome-wide scan of copy number variant regions in post traumatic stress disorder <u>Poster presentation</u>, Annual Anxiety Disorders of America Association Meeting, La Jolla, CA Apr 2013
- 34. Guffanti G\*, Galea S, Yan L, Roberts AL, Solovieff N, Aiello AE, Smoller J, De Vivo I, Ranu H, **Uddin M**, Wildman DE, Purcell S, Koenen KC Genome-Wide Association Study Implicates a Novel RNA Gene, the lincRNA AC0687181, as a Risk Factor for Post-traumatic Stress Disorder in Women Oral presentation, Annual Anxiety Disorders of America Association Meeting, La Jolla, CA Apr **2013**
- 35. \*Sipahi L, Aiello AE, Galea S, Koenen KC, Wildman DE, **Uddin M** Longitudinal epigenetic variation at DNA methyltransferase genes is associated with risk for and resilience to PTSD <u>Poster presentation</u>, American Psychopathological Association Annual Conference, New York, NY, March **2013** Levent was a MD/PhD student in the Uddin lab
- 36. \*Bustamante AC, Aiello AE, Koenen KC, Galea S, Noronha C, Wildman DE, **Uddin M**Childhood maltreatment is associated with epigenetic differences in hypothalamic-pituitary-adrenal (HPA). axis genes in the Detroit Neighborhood Health Study <u>Oral presentation</u>, Wayne State University Department of Psychiatry and Behavioral Neurosciences Annual Research Conference, Detroit, MI, **March** 2013 Angela was a PhD student in the Uddin lab
- 37. \*Bustamante AC, Aiello AE, Koenen KC, Galea S, Noronha C, Wildman DE, Uddin M Childhood maltreatment is associated with epigenetic differences in hypothalamic-pituitary-adrenal (HPA). axis genes in the Detroit Neighborhood Health Study Poster presentation, American Psychopathological Association Annual Conference, New York, NY, March 2013 Angela was a PhD student in the Uddin lab

#### TEACHING AND MENTORING

#### I. Teaching

- 2016, '17, '18 (Fall) Course director and instructor, (PSYC210). Behavioral Neuroscience, University of Illinois Urbana Champaign, Urbana, IL.

  Course Description: This course provides a survey of current knowledge regarding the brain's role in perception, motivation, sexual behavior, thinking, memory, and learning, based upon human clinical data and research in animal models.
- 2015, '17, '18 (Spr.) Course director and instructor, Stress, Trauma and Resilience (PSYC365), *University of Illinois Urbana Champaign*, Urbana, IL. Course Description: This course provides an overview of traumatic stress, with a particular emphasis on the biological and social factors that shape human responses to trauma. Students will become familiar with the definition and range of potentially traumatic events in various social

contexts (e.g. military vs. civilian)., as well as the genetic and environmental features that influence vulnerability vs. resilience to trauma.

2016, '17, '18 (Spr.) Course instructor, Advances in Behavioral Neuroscience (PSYC510), University of Illinois Urbana Champaign, Urbana, IL.

2015-16

Course director and instructor, Capstone Undergraduate Research Seminar (PSYC492), University of Illinois Urbana Champaign, Urbana, IL.

Course Description: A two-semester seminar for undergraduates doing advanced research. Course is taken during the senior year and provides instruction on developing effective written and oral presentations of empirical research findings, and facilitates the completion of a Bachelor's thesis.

2014 (Winter)

Course director and instructor, Scientific Communication II (MBG7091). Center for Molecular Medicine and Genetics, Wayne State University, Detroit, MI.

Course Description: Advanced topics include organization of the NIH, function of study sections, the NIH grant application process, seeking alternative funding sources, and life after graduate school. An in depth analysis of a Citation Classic will be done to gain insights in scientific writing.

2014 (Winter)

**Instructor,** Molecular Neuropsychopharmacology (PYC7010/IBS7050), WSU School of Medicine, Detroit, MI (Course director: Matthew Galloway).

2012 (Fall)

Director and instructor, Scientific Communication I (MBG7090), Center for Molecular Medicine and Genetics, Wayne State University, Detroit, MI (with Wayne Lancaster).

Course Description: The course is designed to expose the student to the interpretation and presentation of scientific data in the form of written and oral communication exercises encompassing the basics of technical writing, use of electronic media, manuscript review, research paper abstraction and interview preparation. Other writing exercises include a curriculum vitae and personal statement.

2011-2013

Co-director and Instructor, Scientific Communication (MBG7090/91), Center for Molecular Medicine and Genetics, Wayne State University, Detroit, MI (with Wayne Lancaster).

2011, '12, '13 (Fall)

**Instructor**, Molecular Biology (IBS7010), Center for Molecular Medicine and Genetics, Wavne State University, Detroit, MI (Course director; Ladislau Kovari).

2011 (Spring)

**Co-director**, Field Methods in Epidemiology (Epid 655), Department of Epidemiology, University of Michigan, Ann Arbor, MI (with Lynda Lisabeth).

Course Description: Provides students with an opportunity to apply theoretical concepts learned in prior and concurrent coursework in epidemiology to the design and execution of an epidemiologic investigation in a pre-specified topic area. Students work both

2009-2011 2000-2001	individually and within small groups to examine a research question(s) within their pre-specified topic area, formulate constructs related to their specific research question, develop a tool (questionnaire) to measure these constructs, and consider ways to examine the validity of their measurements. Student groups then conduct a pilot study in the field and present their findings in both written and oral report formats at the end of the term.  Seminar Director, Center for Social Epidemiology and Population Health, <i>University of Michigan</i> , Ann Arbor, MI.  Teaching Assistant, Introduction to Human Evolution, <i>New York</i>
	University, Department of Anthropology, NY, NY.
II. Mentoring: Grad	uate Students, Postdocs and Research Scientists
2015-present	<b>PhD Mentor</b> , John Pfeiffer, PhD student, Department of Psychology,
	University of Illinois Urbana-Champaign, Urbana, IL.
2015-present	<b>PhD Mentor</b> , Grace Kim, MD/PhD student, Neuroscience Program, <i>University of Illinois Urbana-Champaign</i> , Urbana, IL.
2017- 2018	<b>PhD Mentor</b> , Brianna Bucknor, PhD student, Department of Psychology,
	University of Illinois Urbana-Champaign, Urbana, IL.
2014-2015	<b>PhD Mentor</b> , Tabitha Morris, PhD student, Neuroscience Program,
	University of Illinois Urbana-Champaign, Urbana, IL.
2012-2017	<b>PhD Mentor,</b> Angela Bustamante, Center for Molecular Medicine and
	Genetics, Wayne State University, Detroit, MI; Neuroscience Program,
	University of Illinois-Urbana Champaign, IL.
2011-2014	Co-PhD mentor, Levent Sipahi, MD/PhD Candidate, Center for
	Molecular Medicine and Genetics, Wayne State University, Detroit, MI.
2018	Comprehensive exam committee member, Haley Hanson, College of
	Public Health, <i>University of South Florida</i> , Tampa, FL
2018	Dissertation Committee member, Stephanie Matt, Neuroscience
	Program, University of Illinois Urbana-Champaign, Urbana, IL
2018	Preliminary exam committee member, Mariam Camacho, Neuroscience
	Program, University of Illinois Urbana-Champaign, Urbana, IL
2017	Dissertation Committee Member, Alex Brooks, Neuroscience Program,
	University of Illinois Urbana-Champaign, Urbana, IL.
2017	Preliminary exam committee member, Stephanie Matt, Neuroscience
	Program, <i>University of Illinois Urbana-Champaign</i> , Urbana, IL
2017	Qualifying exam committee member, Sara Westbrook, PhD student,
	Department of Psychology, <i>University of Illinois Urbana-Champaign</i> ,
	Urbana, IL
2017	Qualifying exam committee member, Tiffany Yang, PhD student,
	Department of Psychology, University of Illinois Urbana-Champaign,
	Urbana, IL
2017	Qualifying exam committee member, Francheska Merced-Nieves, PhD
	student, Neuroscience Program, University of Illinois Urbana-Champaign,
	Urbana, IL

2015-2017	<b>Research Scientist Supervisor</b> , Don Armstrong, Carl R. Woese Institute for Genomic Biology, <i>University of Illinois Urbana-Champaign</i> , Urbana, IL (Co-supervised with D. Wildman).
2016	Dissertation Committee Member, Petra Majdak, Neuroscience Program, University of Illinois Urbana-Champaign, Urbana, IL.
2016	Preliminary exam committee member, Alex Brooks, Neuroscience Program, <i>University of Illinois Urbana-Champaign</i> , Urbana, IL
2016	<b>Qualifying exam committee member</b> , Carly Drzewiecki, PhD student, Neuroscience Program, <i>University of Illinois Urbana-Champaign</i> , Urbana,
2015	Qualifying exam committee member, Alex Brooks and Stephanie Matt, PhD students, Neuroscience Program; and Mary Rogers, Department of
2012-2013	Anthropology, <i>University of Illinois Urbana-Champaign</i> , Urbana, IL. <b>Dissertation Committee Member</b> , Natalie Jameson, Center for Molecular Medicine and Genetics, <i>Wayne State University</i> , Detroit, MI.
2012-2014	<b>Postdoctoral Supervisor</b> , Lisa Nevell, Center for Molecular Medicine and Genetics, <i>Wayne State University</i> , Detroit, MI. (Co-supervised with D. Wildman).
2014 (Winter)	Rotation Supervisor, Amara Sugalski, CMMG PhD Candidate, Wayne State University, Detroit, MI.
2012 (Summer)	<b>Rotation Supervisor</b> , Arash Kairandish, MD/PhD Candidate; and Carol Noronha, Summer Undergraduate Research Participant, <i>Wayne State University</i> , Detroit, MI.
2010	<b>Dissertation Committee Member</b> , Jennifer Smith, Department of Epidemiology, <i>University of Michigan</i> , Ann Arbor, MI.
2010-2011	Master's thesis supervisor, Lauren Johns, Department of Epidemiology, University of Michigan, Ann Arbor, MI.
2009-2010	<b>Postdoctoral Supervisor</b> , Satoshi Toyokawa, Department of Epidemiology, <i>University of Michigan</i> , Ann Arbor, MI.
III. Mentoring: Un	idergraduate Students
2/2017-present	Undergraduate Research Supervisor, Susan Rudahindwa, <i>University of Illinois at Urbana-Champaign</i> . Susan is completing an individually-designed major in Neuroscience and is taking research credit in my laboratory. She is

2/2017-present	Undergraduate Research Supervisor, Susan Rudahındwa, University of
	Illinois at Urbana-Champaign. Susan is completing an individually-designed
	major in Neuroscience and is taking research credit in my laboratory. She is
	completing a project that contributes to the recently awarded U01 with the
	University of Rwanda, in which she is testing for differences in PTSD
	symptom domains among survivors of the Rwandan genocide and their
	offspring compared to demographically matched controls.
8/2016-12/2017	Undergraduate Research Supervisor, Aishwarya Raj, University of Illinois
	at Urbana-Champaign. Aishwarya is a Biochemistry major who took research
	credits in my laboratory. She was awarded a summer research opportunity
	award from the school of Molecular and Cellular Biology to support her
	research in my lab during the summer of 2017.
2015-2017	Undergraduate Research and Thesis Supervisor, Myrna Sobhy,

Undergraduate thesis title: <u>Stress is Associated with Increased DNA</u>
<u>Methylation in Select HPA-Axis Genes in the Rodent Adrenal Gland,</u> *University of Illinois at Urbana-Champaign*.

Rotation Supervisor, Lucas Schad, Summer student from the University of Minnesota, supported by the UIUC-Mayo Clinic Alliance, *University of Illinois at Urbana-Champaign*.
 Rotation Supervisor, Eren Sipahi, Summer Undergraduate Research Participant, *Wayne State University*, Detroit, MI. This work formed the basis for Eren's honor thesis, which was awarded a "high pass" grade.
 Rotation Supervisor, Carol Noronha, Summer Undergraduate Research Participant, *Wayne State University*, Detroit, MI. Carol collected original data that contributed to a publication on which she became an author (Bustamante et al., 2016).