Curriculum Vitae

Seth A. Ament, Ph.D.

Associate Professor, Department of Psychiatry

University of Maryland School of Medicine

**Date**: September 4, 2021

**Contact Information**

Business Address: Institute for Genome Sciences

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**Education**

1999 – 2003 A.B.,Biology, Harvard University (cum laude)

2004 – 2010 Ph.D., Neuroscience, University of Illinois

 Advisor: Gene E. Robinson

 Dissertation: “Nutrition, Hormones, Transcriptional Regulatory Networks and Division of Labor in Honey Bee Colonies”

**Post Graduate Education and Training**

2010 – 2011 Postdoctoral Fellow, University of California, Berkeley, California

 Mentor: Kristin Scott

2012 – 2016 Postdoctoral Fellow, Institute for Systems Biology, Seattle, Washington

 Co-Mentors: Nathan Price and Leroy Hood

**Employment History**

**Academic Appointments**

2016 – 2021 Assistant Professor, Psychiatry, UMSOM

2016 – present Member, Institute for Genome Sciences, UMSOM

2016 – present Member, Maryland Psychiatric Research Center, UMSOM

2021 – present Associate Professor, Psychiatry, UMSOM

**Professional Society Membership**

2004 – present Society for Neuroscience

2012 – present Bipolar Genome Study

2012 – present Bipolar Sequencing Consortium

2012 – present International Society for Psychiatric Genetics

2013, 2015 American Society for Human Genetics

2013 – present Molecular Psychiatry Association

**Honors and Awards**

1999 National Finalist, Intel Science Talent Search

2000 – 2003 Harvard College Scholarship

2002 Center for Genomics Research Internship, Harvard University

2009 Ladd Prosser Memorial Award, Neuroscience Program, University of Illinois

2010 University of Illinois Neuroscience Program Award for Outstanding Research

2010 Procter & Gamble Company Doctoral Student Research Award

2010 George C. Eickwort Student Research Award, International Union for the Study of Social Insects, North American Section (runner-up)

2014 Early Career Investigator Oral Presentation Award, World Congress of Psychiatric Genetics

2014 Early Career Investigator Travel Award, World Congress of Psychiatric Genetics

2015 Oral Presentation Award (2nd Prize), Gordon Research Seminar on Human Genetics and Genomics

2015 Travel Award, Molecular Psychiatry Association

**Administrative Service**

**Institutional Service**

2017 – 2018 Admissions Committee, Graduate Program in Molecular Medicine

2017 – present Faculty Search Committee, Institute for Genome Sciences

2019 – present Lab Committee, Institute for Genome Sciences, UMSOM (Chair, beginning Fall 2020)

2019 Faculty Retreat Planning Committee, Institute for Genome Sciences

2019 Seminar Organizing Committee, Program in Neuroscience

2019 – present Executive Committee, High Performance Computing Cluster

2019 – present SOM Committee on Artificial Intelligence & Medicine

2020 Reviewer, MPower Covid-19 seed funding grants

2020 Panelist, Town Hall on Strategies for Remote Mentoring, Office of Career and Professional Development, GPILS/OPS

2021 Reviewer, MPower Seed Grants, Brain Health and Human Performance

**Local and National Service**

**National Service**

2008 – 2012 *Ad Hoc* Reviewer, *Insect Molecular Biology (1x/yr)*

2010 Chair, Gordon Research Seminar on Genes and Behavior, Ventura, CA

2010 *Ad Hoc* Reviewer, *Molecular Ecology (1x/yr)*

2010 – 2012 *Ad Hoc* Reviewer, *Naturwissenschaften (1x/yr)*

2010 – present *Ad Hoc* Reviewer, *PLoS One (1x/yr)*

2010 – 2014 *Ad Hoc* Reviewer, *Journal of Experimental Biology (1x/yr)*

2011 *Ad Hoc* Reviewer, *PLoS Genetics (1x/yr)*

2011, 2019 *Ad Hoc* Reviewer, *Proc. National Academy of Sciences, U.S.A. (1x/yr)*

2014 Discussion Leader, “Bioinformatics and Behavior,” Gordon Research Conference on Genes & Behavior, Galveston, TX

2015 Discussion Leader, “Extending the Interpretation of the Exome / Noncoding Genomics: Beyond the Exome,” Gordon Research Seminar on Human Genetics and Genomics, Newport, RI

2015 Chair, Nanosymposium, “Genomic and Systems Level Analyses of Neurologic Disease,” Society for Neuroscience, Chicago, IL

2016, 2018 *Ad Hoc* Reviewer, *JAMA Psychiatry (1x/yr)*

2016 *Ad Hoc* Reviewer, *Molecular Neuropsychiatry (1x/yr)*

2016, 2018 *Ad Hoc* Reviewer, *Psychiatric Genetics* (1x/yr)

2017 *Ad Hoc* Reviewer, *Biological Psychiatry (1x/yr)*

2017, 2018 *Ad Hoc* Reviewer, *Schizophrenia Bulletin (1x/yr)*

2017 Chair, Nanosymposium, “Corticolimbic Circuits in Emotion and Psychiatric Disorders,” Society for Neuroscience, Washington, DC

2019 Guest Associate Editor, *PLoS Genetics (1x/yr)*

2020 *Ad Hoc* Reviewer, *PLoS Computational Biology (1x/yr)*

2020 Early Career Reviewer, NIH special emphasis panel, ZRG1 MDCN P (57), Cellular and Molecular Biology of Complex Brain Disorders, June 2020

2020 Reviewer, NIH special emphasis panel, ZRG1 MDCN P (57), Cellular and Molecular Biology of Complex Brain Disorders, October 2020

2021 Reviewer, NIH PRAT fellowship review panel, March 2021

2021 *Ad Hoc* Reviewer, *Nature Communications (1x)*

2021 Reviewer, NIH K99/R00 fellowship applications, July 2021

2021 *Ad Hoc* Reviewer, *Cell Reports (1x)*

2021 *Ad Hoc* Reviewer, *Schizophrenia Bulletin (1x)*

**Local Service**

2006 Posters Co-Chair, UIUC Cell & Molecular Biology Training Grant Symposium

2006 Coordinator, Open House Poster Session, UIUC Neuroscience Program

2006 – 2010 Presenter at Brain Awareness Day, UIUC: “What’s the Buzz About?”

2006 – 2007 Student Representative, Admissions Committee, UIUC Neuroscience Program

2007 Nontechnical research presentation to the Heart of Illinois Beekeeper’s Association

2007 – 2008 Co-Chair, Student-Invited Speaker Committee, UIUC Neuroscience Program

2008 Contributor to *Illinois NeuroNews*

2008 Speaker, University of Illinois Short Course on Bees and Beekeeping

2009 Nontechnical research presentation to the Cook-Dupage Beekeeping Association

2009 Speaker at the University of Illinois Pollinator Museum

2011 Co-Chair for Professional Development, UC Berkeley Postdoctoral Association

2012 – 2013 Co-Chair, Postdoctoral Advisory Board, Institute for Systems Biology

2013 Guest Speaker, HERO Institute, STEM Education Enrichment Program for Underrepresented Youth

2014 Judge, Aki Kurose Middle School Science Fair, Seattle, Washington

2018 Poster Judge, Baltimore Chapter, Society for Neuroscience

2021 Judge, Falmouth Academy Science Fair, Falmouth, MA

**Teaching Service**

**Undergraduate Student Teaching**

2003 – 2004 Mentor, Research Assistants, Laboratory of James Traniello, Boston University

 3, undergraduate, ~10 hours per week

2004 – 2006 Mentor, Research Assistant, Laboratory of Gene Robinson, University of Illinois

 1, undergraduate, Mira Kolodkin, 6 hours per week and daily contact during the summer

2005, 2006, 2007 Mentor, Summer Research Training Program, Laboratory of Gene Robinson, University of Illinois

 1, undergraduate, Henry Pollock, daily contact during three consecutive summers

2005 – 2006 Mentor, Research Assistant, Laboratory of Gene Robinson, University of Illinois 1, undergraduate, Daniel Moyse, 6 hours per week and daily contact during the summer

2007 Laboratory Coordinator, Illinois Summer Neuroscience Institute

 ~20, undergraduate, daily contact for one week

2008 Laboratory Coordinator, Illinois Summer Neuroscience Institute

 ~20, undergraduate, daily contact for one week

2008 – 2010 Mentor, Research Assistant, Laboratory of Gene Robinson, University of Illinois

 1, undergraduate, Jeff Hinchman, 6 hours per week and daily contact during the summer

2009 Teaching Assistant for Merit Sections, MCB 252, “Cells, Tissues, and Development”, University of Illinois

 30, undergraduate, 1.5 hours per week for 1 semester

2012 Lecturer, Summer Intern Program, Institute for Systems Biology

 10, undergraduates, 1 hour lecture

2012 Mentor, Summer Research Internship Program, Institute for Systems Biology

 1 undergraduate, Nathaniel Howard, daily contact for the summer

2013 Panelist, Undergraduate Intern Program, Institute for Systems Biology

 10, undergraduate, 1 hour

2015 Mentor, Summer Research Internship Program, Institute for Systems Biology

 1, undergraduate, Bijou Basu, daily contact for the summer

2020 Mentor, Undergraduate Intern

 1, undergraduate, Samuel Hong (Temple University), 4 hours

2020 – present Mentor, Undergraduate Interns

 3, undergraduate, Meyerhoff Fellows from UMBC, 2 hours / week

2021 Mentor, Undergraduate Intern

 1, undergraduate, Sachiko Keane (Columbia University), 1 / hr week

**Post-Graduate Teaching**

2007 Mentor, Post-Baccalaureate Student, Laboratory of Gene Robinson, University of Illinois

 1, post-graduate, S. Pier Johnson, daily contact for 1 year

2008 – 2009 Mentor, Entering Ph.D. student, Laboratory of Gene Robinson, University of Illinois

 1, post-graduate, Marsha Wheeler, daily contact for 9 months

2008 – 2009 Mentor, Masters Student, Laboratory of Gene Robinson, University of Illinois

 1, post-graduate, daily contact for 1 year

2009 Mentor, Rotation Student, Laboratory of Gene Robinson, University of Illinois

 1, post-graduate, Martina Mustroph, daily contact for 3 months

2014 Lecturer, Summer Course on Systems Biology, Institute for Systems Biology

 50, post-graduate, 1 hour

2015 Lecturer, Summer Course on Systems Biology, Institute for Systems Biology

 50, post-graduate, 1 hour

2015 – 2016 Mentor, Post-Baccalaureate Student, Institute for Systems Biology

 1, post-graduate, Dani Bergey, daily contact for 12 months

2016 – present Instructor, Current Topics in Genome Biology GPLS692, University of Maryland, Baltimore

 10, post-graduate, 1.5 hours

2017 Advisor, Rotating Graduate Student in Microbiology, UMB (Trudymae Atuobi)

 1, post-graduate, daily contact for 3 months

2017, 2019 Instructor, Genetic Epidemiology PREV711, University of Maryland, Baltimore

 20, post-graduate, 1.5 hours

2017 – present Instructor, Genomics and Bioinformatics GPLS716, University of Maryland, Baltimore

 10, post-graduate, 1.5 hours

2017 – present Instructor, HGEN 601 Human Genetics I HGEN601, University of Maryland, Baltimore

 10, post-graduate, 1.5 hours

2017 Advisory Committee, Graduate Program in Neuroscience (Houman Qadir)

2017 – present Supervisor, Rotation Students, Programs in Molecular Medicine, Human Genetics, Neuroscience, 4 hours per week, 1-3 students / year

 Students who rotated in the lab but did not / have not yet joined the lab: Kevin Rose (Spring 2018), Kevin Herold (Spring 2018), Rebecca Lorsung (Summer 2020), Gautam Kumar (Winter 2020/21), Meghann Ryan (Spring 2021), Hassan Saadi (Summer 2021), Jayme Choe (Summer 2021)

2017 – 2021 Thesis Committee Chair, PhD in Molecular Medicine

 1, post-graduate, 4 hours per week (Gurmannat Kalra).

Dissertation title: “Multi-omic analysis of hearing difficulty risk loci and gene regulatory networks in the mammalian cochlea”

Defended May 5, 2021

Now a bioinformatics scientist at Glaxo Smith Kline

2017 – present Thesis Committee Chair, PhD in Molecular Epidemiology

 1, post-graduate, 4 hours per week (Elizabeth Humphries)

2017 – 2021 Thesis Committee Chair, MD/PhD in Molecular Medicine

 1, post-graduate, 4 hours per week (Alex Casella)

 Dissertation title: “Characterizing enhancer-driven transcriptional networks in schizophrenia”

 Defended, June 15, 2021

 Returning to clinical years of medical school, Fall 2021

2017 – 2020 Thesis Advisor, MS in Human Genetics

 1, post-graduate, 4 hours per week (Wissam Saleh)

Successfully defended thesis, June 2020

Now a research scientist in Palestine.

2017 – 2019 Thesis Committee Member, PhD in Molecular Medicine

 1, post-graduate, 4 hours per year (Daniel Harris)

2017 – present Supervisor, Postdoctoral Fellow Rediet Oshone

 1, post-graduate, 4 hours per week

2017 – present Supervisor, Postdoctoral Fellow Naushaba Hasin

 1, post-graduate, 4 hours per week

2018 Instructor, PREV 720 Statistical Methods In Epidemiology, University of Maryland, Baltimore

 10, post-graduate, 1.5 hours

2018 Advisory Committee, Graduate Program in Neuroscience (Garrett Bunce)

2018 – present Thesis Committee Member, PhD Program in Molecular Medicine

 1, post-graduate, 4 hours per year (Kevin Rose)

2018 – 2019 Thesis Advisor, MS in Human Genetics

1, post-graduate, 4 hours per week (Sonia Malaiya)

Successfully defended thesis, November 2019

Now a Research Fellow in the Ament lab.

2018 – 2019 Supervisor, Postdoctoral Fellow Fahimeh Mirakhori

1, post-graduate, 4 hours per week

2019 Advisory Committee, Graduate Program in Neuroscience (Katia Matychak)

2019 – present Thesis Advisor, PhD in Molecular Medicine

 1, post-graduate, 4 hours per week (Robert Lease)

2019 – present Thesis Committee Member, PhD in Neuroscience

 1, post-graduate, 4 hours per year (Jack Hussey)

2019 – present Thesis Committee Member, PhD in Neuroscience

 1, post-graduate, 4 hours per year (Ashley Marquardt)

2019 – present Thesis Committee Member, PhD in Human Genetics

 1, post-graduate, 4 hours per year (Doug Loesch)

2019 – present Thesis Committee Member, Graduate Program in Biochemistry

 1, post-graduate, 4 hours per year (Eric Choi)

2019 Instructor, GPLS691 Molecular Neuroscience and Biophysics, University of Maryland, Baltimore

2020 – present Thesis Committee Member, PhD in Human Genetics

 1, post-graduate, 4 hours per year (Jennifer French)

2020 – present Thesis Committee Member, Masters in Human Genetics

 1, post-graduate, 4 hours per year (Kennedy McDaniel)

2020 – present Thesis Committee Member, Graduate Program in Neuroscience

 1, post-graduate, 4 hours per year (Nichole Kanyuch)

2021 Qualifying Examination Committee Member, Program in Neuroscience

 1, post-graduate, 5 hours (Colin Robertson)

2021 – present Thesis Advisor, MD/PhD, Program in Molecular Medicine

 1, post-graduate, 4 hours per week (Erin Wildermuth)

2021 Qualifying Examination Committee Member, Program in Molecular Medicine

 1, post-graduate, 10 hours (Kevin Nguyen)

2021 – present Secondary Mentor, Psychiatry Resident (Andrew van der Vaart, MD/PhD)

2021 Advisory Committee, Graduate Program in Neuroscience (Lakota Watson)

2021 Advisory Committee, Graduate Program in Neuroscience (Christie Dionisos)

**Grant Support**

**Active Grants:**

9/15/17 – 7/31/22 (Co-I, 15%; PI – White)

*“A BRAIN Initiative Resource: The Neuroscience Multi-omic Data Archive”*

NIH/NIMH, R24 MH114788-02

Annual Direct Costs: $890,577

Role: coordinate interactions with multiple BRAIN Initiative sites

7/1/18 – 9/30/22 (PI, 5%)

*“Integrative Systems Biology of Hearing Restoration”*

Hearing Health Foundation, Hearing Restoration Project

Annual Total Costs: $148,000

9/1/18 – 8/31/21 (Co-I, 20%; PIs – Hertzano, White)

*“Illuminating Neurodevelopment through Integrated Analysis and Visualization of Multi-Omic Data”*

NIH/NIMH, R24 MH114815-01A1

Total Direct Costs: $1,389,183

Role: selection and curation of datasets, network analysis tools

7/1/19 – 4/30/21 (PI, 15%; MPIs, Elmer, DeTolla)

*“Modeling the Stress-biome-brain Axis in the Consequences of Early Life Trauma”*

NIH/NIMH, R21 MH118597-01A1

Total Direct Costs: $275,000

6/1/19 – 9/30/21 (PI, 10%)

*“Neurodevelopmental and psychiatric consequences of chromatin remodeling mutations in a population isolate”*

Maryland Stem Cell Research Fund, MSCRD-Discovery

Total Direct Costs: $300,000

7/1/19 – 12/31/21 (PI, 10%)

*“HD Transcriptional Dysregulation at Single-Cell Resolution”*

CHDI Foundation, CHDI Contract

Annual Direct Costs: $295,540

2/1/20 – 12/31/22 (PI, 0%; MPIs, Metwally, Beitelshees, Keller, Bjarnadottir)

*“Precision Therapy for Neonatal Opioid Withdrawal Syndrome”*

MPower, AIM-HI competition

Annual Costs: $200,000

4/1/20 – 3/31/25 (Co-I, 5%; PI – Lobo)

*“Cell Subtype Mechanisms Underlying Stress Susceptibility and Resilience”*

NIH/NIMH, R01 2R01MH106500-06A1

Annual Direct Costs: $332,430

Role: Co-I, responsible for bioinformatics and systems biology

8/1/20 – 6/30/25 (MPI, 15%; other PIs -- M.K. Lobo, D. Dietz)

*“Heroin-Induced genomic regulation of Ventral Pallidum neuron subtypes”*

NIH/NIDA, U01 1U01DA051947-01

Annual Direct Costs: $295,444

8/1/20 – 5/31/25 (Co-I, 15%; PI – White)

*“NeMO Archive: SCORCH Support, Coordination and Outreach”*

NIH/NIDA, UM1 DA052244-01

Annual Direct Costs: $1,024,528

Role: lead analysis working groups for national consortium

7/1/21 – 12/31/21 (sub PI, 3%; PI – Markx, New York State Psychiatric Institute)

*“Baseline characterization of cognitive deficits in Amish SETD1A mutation carriers”*

 Oryzon Genomics contract

 Total Costs: $63k

 Role: supervise enrollment, genotyping, and analysis

7/1/21 - 6/30/23 (Co-I, 3%; PI – Liang)

*“Intravital 2-photon microscopy enabling 6D single cell RNA seq in immunocompetent glioblastoma xenografts”*

NIH, R03

Total Costs: $154,000

Role: consult on single-cell genomics

**Pending Grants**

10/1/21 – 9/30/23 (PI, 15%)

 *“Single-nucleus transcriptomics and epigenomics of cerebellum in bipolar disorder and schizophrenia”*

 NIH/NIMH, R21

 Total federal funds requested: $424,875.00

 Status: 5th percentile

4/1/22 – 3/31/27 (PI, 15%)

 *“Multi-scale consequences of variants in the schizophrenia risk gene SETD1A in a population isolate.”*

 NIH/NIMH, R01

 Total federal funds requested: $1,931,250.03

 Status: Submitted 6/1/2021

7/1/21 – 6/30/23 (PI, 10%)

*“Developing a stem cell model of epigenetic dysregulation in Huntington’s disease”*

 Maryland Stem Cell Research Fund, Discovery Award

 Total Costs: $345,000

 Status: Impact Score = 37, resubmit January 2022

4/1/21 – 3/31/26 (Co-I, 5%; PI -- McCarthy)

 *“Endocannabinoids Regulate Microglia in Developing Brain”*

 NIH/NIDA, R01

 Total Costs Year 1: $401,863

 Status: Plan to re-submit

9/1/21 – 8/31/25 (Co-I, 10%; PI – Kochunov)

 *“Solar-Eclipse Computational Tools for Imaging Genetics”*

 NIH/NIBIB

 Total Costs Year 1: $451,230

 Status: 1st percentile

7/1/21 – 6/30/23 (Co-I, 5%; PI – Barrett)

*“Targeting Type I IFN signaling to promote recovery following brain trauma in aged animals”*

NIH/NINDS, R03

Total Costs: $154,000

7/1/21 – 6/30/23 (Co-I, 5%; PI – Sabirzhanov)

*“Role of aging-dependent changes in neuronal sub-types in development of radiotherapy-induced cognitive decline in the elderly population”*

NIH/NINDS, R03

Total Costs: $154,000

7/1/21 – 6/30/26 (Co-I, 5%; PI – McCarthy)

 *“Prostaglandins and Cerebellum Development”*

NIH/NIMH, R01

 Total Costs Year 1: $492,955

4/01/22 – 3/31/27 (MPI, 5%; Other PIs – Lobo, Keller)

 *“Lasting Neurological Effects of Perinatal Opioids”*

 NIH/NIDA, R01

 Total Costs: $3,443,937.42

9/1/21 – 8/31/26 (Co-I, 5%; PIs – Stoica, Faden)

*“Bidirectional Brain-Gut interactions, chronic neuroinflammation and neurodegeneration after traumatic brain injury”*

NIH/NINDS, R01

Total Costs Year 1: $391,979

9/1/21 – 8/31/26 (Co-I, 10%; PI – Henry)

*“miR-155-mediated signaling drives chronic microgliopathy after traumatic brain injury”*

NIH/NINDS, R01

Direct Costs Year 1: $250,000

9/1/21 – 8/31/26 (Co-I, 5%; PI – Lobo)

*“Cocaine-induced mitochondrial mechanisms and molecular mediators in reward circuitry”*

NIH/NIDA, R01

Total Costs Year 1: $441,836

9/1/21 – 8/31/26 (Co-I, 10%; PI – Barrett)

*“Microglial cGAS/STING contributes to neuroinflammation and neurodegeneration following traumatic brain injury”*

NIH/NINDS, R01

Direct Costs Year 1: $307,380

9/1/21 – 8/31/26 (Co-I, 5%; PI – Henry)

*“Microglial NOX2 drive pro-inflammatory responses and neurodegeneration after traumatic brain injury”*

Direct Costs Year 1: $250,000

9/1/21 – 8/31/24 (Site PI, 5%; Other Site PI – Lobo)

*“Synucleinopathy in vulnerable neural circuitry underlying affective symptoms in Parkinson's disease”*

Michael J. Fox Foundation, ASAP Program

Total Costs Year 1: $533,637

11/1/21 – 10/31/26 (Co-I, 15%; PIs -- Dorsey/Renn/Wilson)

*“Development, validation and optimization of a small molecule to repress trkB.T1 expression for chronic pain relief”*

NIH/NINDS, U19

Direct Costs Year 1: $1,499,190

2/1/22 – 1/31/27 (Co-I, 5%; PI – Faden)

*“Central and systemic immune-inflammatory mechanisms in neurotrauma”*

NIH/NINDS, R35

Total Costs Year 1: $1,055,000

4/1/22 – 3/31/24 (Co-I; 5%; PI – Iffland)

 *“A high-throughput drug screening tool for mTORopathies”*

 Lisa Dean Moseley Foundation

 Total Costs: $250,000

8/1/22 – 7/31/27 (Co-I, 15%; PI – White)

*“A BRAIN Initiative Resource: The Neuroscience Multi-omic Data Archive”*

NIH/NIMH, UM1

Total Costs: $8,498,764

4/01/22 – 3/31/25 (Co-I, 5%, PI – Iffland)

 *“****Defining the mechanisms of neuronal aggregation in TSC”***

DOD - Tuberous Sclerosis Complex, Idea Development Award

 Total Costs: $771,799.59

**Completed Grants:**

7/1/06 – 6/30/09 (PI, 100%)

 National Science Foundation, Graduate Research Fellowship

 Annual Direct Costs: $30,000

 Total Direct Costs: $90,000

9/1/09 – 8/31/10 (Trainee, 100%)

 *“Sensory Neuroscience Training Program”*

 National Institute on Deafness and Other Communication Disorders, T32, 5T32DC006612-03

 Total Direct Costs: $24,000

1/1/14 – 12/31/14 (PI, 0%)

 *“Systems Biology Validation of Bipolar Disorder Risk Variants using CRISPR/Cas9 Genome Editing”*

 Institute for Systems Biology, Intramural Competitive Seed Funding Award

 Total Direct Costs: $16,000

1/15/15 – 1/15/17 (PI, 25%)

“*Identification and Validation of Genetic Risk Variants for Bipolar Disorder by Whole-genome Sequencing of an Extended Amish Pedigree*”

Brain and Behavior Research Foundation. NARSAD Young Investigator Award

Total Direct Costs: $64,038

5/1/17 – 4/30/18 (Co-I, 10%; PI -- Hertzano)

 *“Integrated Systems Biology of Hearing Restoration”*

 Hearing Restoration Project Grant, Hearing Health Foundation

 Total Direct Costs: $82,760

5/1/17 – 4/30/18 (Site PI, 10%)

 *“Integrated systems biology analysis of peripheral effects of Huntington’s disease mutations and HTT lowering”*

 CHDI Foundation, Sub-contract from Western Washington University

 Annual Total Costs: $217,000

6/1/18 – 5/31/19 (Site PI, 3%; PI – Zandi)

 *“The Bipolar Sequencing Consortium for Combined Analyses and Follow-Up – Admin. Supplement“*

 NIH/NIMH, R01 MH110437

 Annual Direct Costs: $42,464

7/1/18 – 6/30/20 (PI, 0%; MPIs, Hong, Poulopoulos)

*“Convergent Neuroscience of Processing Speed Deficits in Severe Mental Illness”*

UMB-SOM, RFP #2 Deans Challenge Award

Total Costs: $160,000

7/1/18 – 6/30/20 (Site PI, 5%; PI – Jeff Carroll, Western Washington University)

*“A CHDI/WWU Joint Steering Committee”*

CHDI Foundation, Joint Steering Committee

Annual Direct Costs: $132,460

**Publications**

**Peer-reviewed journal articles**

Note: For all publications, \* is used to indicate equal contributions, while # is used to indicate corresponding authors.

1. **Ament S.A.,** Bullis R., Hanlon R.T., and Mensinger A. (1997) **Righting response and escape response in *Opsanus tau* are temperature dependent. *Biol Bull*** 193:265-266.
2. Hanlon R.T., **Ament S.A.,** and Gabr H. (1999) Behavioral aspects of sperm competition in cuttlefish, *Sepia officinalis* (Sepioidea: Cephalopoda). *Marine Biol* 134:719-728.
3. Shashar N., Borst D.T., **Ament S.A.,** Saidel W.M., Smolowitz R.M., and Hanlon R.T., (2001) **Polarization reflecting iridophores in the arms of the squid *Loligo pealeii.*** *Biol Bull* 201:267-268.
4. Smith A.B. et al. (along with the Honeybee Genome Sequencing Consortium, including **Ament S.A.]** (2006) Insights into social insects from the genome of the honeybee *Apis mellifera*. *Nature* 443:931-49.
5. Kunieda T.\*, Fujiyuki T.\*, Kucharski R.\*, Foret S.\*, **Ament S.A.\*,** Toth A.L.\*, Ohashi K., Takeuchi H., Kamikouchi A., Kage E., Morioka M., Beye M., Kubo T., Robinson G.E., and Maleszka R. (2006) Carbohydrate metabolism genes and pathways in insects: insights from the honey bee genome. *Insect Mol Biol* 15:563-576.
6. **Ament S.A.,** Corona M., Pollock H.S., and Robinson G.E. (2008) Insulin signaling is involved in the regulation of worker division of labor in honey bee colonies. *Proc Natl Acad Sci USA,* 105:4226-4231.
7. Brockmann A. AnnangudiS.P., RichmondT.A., **AmentS.A**., XieF., SoutheyB.R., Rodriguez-ZasS.R., SweedlerJ.V., and RobinsonG.E. (2009) Quantitative peptidomics reveal brain peptide signatures of behavior. *Proc Natl Acad Sci USA*. 106:2383-2388.
8. **Ament S.A**., Wang Y., and Robinson G.E. (2010) Nutritional regulation of worker division labor in honey bee colonies: a systems perspective. *Wiley Interdiscipl Rev: Systems Biol Med*. 2(5):566-576.
9. **Ament S.A**., Velarde R.A., Kolodkin M., Moyse D., and Robinson G.E. (2011) Neuropeptide Y-like signaling and nutritionally-mediated gene expression and behavior in the honey bee. *Insect Mol Biol.* 20(3):335-345.
10. **Ament S.A.,** Chan Q.W., Wheeler M.W., Nixon S.E., Johnson S.P., Rodriguez-Zas S.R., Foster L.J., and Robinson G.E. (2011) Mechanisms of stable lipid loss in a social insect. *J Exp Biol.* 214:3808-3821*.*
11. Chandrasekaran S., **Ament S.A.,** Eddy J.A., Rodriguez-Zas S.R., Schatz B.R., Price N.D., and Robinson G.E. (2011) Behavior-specific changes in transcriptional modules lead to distinct and predictable neurogenomic states. *Proc Natl Acad Sci USA.* 108:18020-18025.
12. **Ament S.A.\*,** Wang Y.\*, Chen C.-C., Blatti C., Hong F., Negre N., White K.P., Rodriguez-Zas S.L., Mizzen C.A., Sinha S., Zhong S., and Robinson G.E. (2012) The transcription factor ultraspiracle influences honey bee social behavior and behavior-related gene expression. *PLoS Genet*. 8(3):e1002596*.*
13. **Ament S.A.\*,** Blatti C.\*, Alaux C.\*, Wheeler M.W., Toth A.L., Le Conte Y., Hunt G.J., Guzmán-Novoa E., DeGrandi-Hoffman G., Uribe-Rubio J.L., Amdam G.V., Page R.E., Rodriguez-Zas S.L, Robinson G.E. and Sinha S*.* (2012) New meta-analysis tools reveal common transcriptional regulatory basis for multiple determinants of behavior. *Proc Natl Acad Sci USA.* 109:E1801-E1810.
14. Greenberg J., Xia J., Zhou X., Thatcher S.R., **Ament S.A.,** Newman T.C., Green P.J., Zhang W., Robinson G.E., and Ben-Shahar Y. (2012) Behavioral plasticity in honey bees is associated with differences in brain microRNA transcriptome. *Genes Brain Behav.* 11(6):660-670.
15. Ko Y.\*, **Ament S.A.\*,** Caballero J., Earls J.C., Hood L., Price N.D. (2013) Cell-type specific genes show striking and distinct patterns of spatial expression in the mouse brain. *Proc Natl Acad Sci USA.* 110(8):3095-3100.
16. Wheeler M.M., **Ament S.A.**, Rodriguez-Zas S.M., and Robinson G.E. (2013) Brain gene expression changes elicited by peripheral *vitellogenin* knockdown in the honey bee. *Insect Mol Biol.* 22:562-573*.*
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**Submitted or In-Revision Peer-reviewed journal articles**

1. Pearl J.R.\*, Shetty A.C.\*, Cantle J.P., Bergey D.E., Bragg R.M., Coffey S.R., Kordasiewicz H.B., Hood L., Price N.D., **Ament S.A.#,** Carroll J.B.#. Altered Huntingtin-chromatin interactions predict transcriptional and epigenetic changes in Huntington’s disease. *iScience. In revision.*
2. Hasin N., Riggs L.M., Shekhtman T., Ashworth J., Lease R., Oshone R.T., Humphries E.M., Badner J.A., Thompson P.A., Glahn D.C., Craig D.W., Edenberg H.J., Gershon E.S., McMahon F.J., Nurnberger J.I., Zandi P.P., Kelsoe J.R., Roach J.C., Gould T.D., **Ament S.A.** Rare variants implicate NMDA receptor signaling and cerebellar gene networks in risk for bipolar disorder. *Mol Psychiatry. In revision.*
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**Abstracts**

1. **Ament S.A.,** Robinson G.E. (2005) Regulation of nutritionally mediated social behavior in honey bees by NPF and insulin. Society for Neuroscience Annual Meeting, Washington, DC. Program Number 205.16. (poster presentation by S. Ament)
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23. Oshone R., Cortes-Gutierrez M., Casella A., Humphries E., Colantuoni C., Detera-Wadleigh S., Pollin T., Mitchell B., Shuldiner A., McMahon F., Hong L., **Ament S.** (2019) Molecular, cellular, neurodevelopmental, neuroimaging, and neurocognitive consequences of rare variants in the schizophrenia risk gene SETD1A. Society for Neuroscience Annual Meeting, Chicago, IL. Program Number 687.08 (poster presentation by R. Oshone)
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26. **Ament S.A.**, Orvis J., Gottfried B., Chatterjee A., Kancherla J., Herb B., Casella A.M., Rose K., Corrada Bravo H., Colantuoni C., Mahurkar A., White O., Hertzano R. (2019) NeMO Analytics: A multi-omic visualization and analysis resource for the BRAIN Initiative. Society for Neuroscience Annual Meeting, Chicago, IL. Program Number 275.07 (selected for oral presentation as part of a Nanosymposium on Single-Cell Analysis of Cortical Cell Type Diversity)
27. Oshone R., Cortes-Gutierrez M., Casella A., Humphries E., Kochunov P., Hong E., **Ament S.A.** (2019) Molecular, cellular, neurodevelopmental, neuroimaging, and neurocognitive consequences of rare variants in the schizophrenia risk gene *SETD1A*. World Congress of Psychiatric Genetics, Anaheim, CA. *European Neuropsychopharmacol.* Abstracts of the XXVIIth World Congress of Psychiatric Genetics, Los Angeles, CA, October, 2019. 29(Suppl 5): S80. (selected for oral presentation by S. Ament)
28. Humphries E., Kember R., Ahn K., Zandi P., Goes F., Pollin T., Van Hout C., Shuldiner A., Mitchell B., Bucan M., Hong E., McMahon F.J., **Ament S.** (2019) Genome sequencing in a founder population identifies population-enriched protein-coding variants in neurodevelopmental genes associated with risk for mood disorders. *European Neuropsychopharmacol.* Abstracts of the XXVIIth World Congress of Psychiatric Genetics, Los Angeles, CA, October, 2019. 29(Suppl 5): S145. (poster presentation by E. Humphries)
29. Casella A., Funk C., Price N., Colantuoni C., Ament S. (2019) Regulome-wide association study identifies transcription factor networks associated with risk for schizophrenia. *European Neuropsychopharmacol.* Abstracts of the XXVIIth World Congress of Psychiatric Genetics, Los Angeles, CA, October, 2019. 29(Suppl 5): S112. (oral presentation by A. Casella)
30. Herb B., Kalra G., Benkafadar N., Janesick A., Milon B., Rose K., Scheibinger M., Lovett M., Piotrowski T., Heller S., Hertzano R., Segil N., **Ament S.**, Barr-Gillespie P.G., Hearing Restoration Project (2020) Identification of Analogous Sub-types of Hair Cells and Support Cells Across Mammalian and Nonmammalian Species. Association for Research in Otolaryngology MidWinter Meeting, San Jose, CA. Program Number PS641 (poster presentation by B. Herb)
31. Kalra G., Herb B., Benkafadar N., Janesick A., Milon B., Rose K., Scheibinger M., Lovett M., Piotrowski T., Heller S., Hertzano R., Segil N., Ament S., Barr-Gillespie P.G., Hearing Restoration Project (2020) Cross-Species Analysis of Gene Regulatory Networks Underlying Hair Cell Regeneration. Association for Research in Otolaryngology MidWinter Meeting, San Jose, CA. Program Number PD99 (oral presentation by G. Kalra)
32. Hasin N., Riggs L.M., Shekhtman T., Ashworth J., Lease R., Oshone R.T., Humphries E.M., Badner J.A., Thompson P.A., The Bipolar Genome Study, Gershon E.S., Kelsoe J.R., Roach J.C., Gould T.D., **Ament S.A.** (2021) A Rare Variant in D-Amino Acid Oxidase Implicates NMDA Receptor Signaling and Cerebellar Gene Networks in Risk for Bipolar Disorder. World Congress of Psychiatric Genetics. Online.
33. Humphries E.M., Smolyak D., Parikh A.G., Pay F., Agarwal R., Bjarnadottir M., Beitelshees A.L., El Metwally D., **Ament S.A.** (2021) Polygenic prediction of response to pharmacotherapy in infants with neonatal opioid withdrawal syndrome. World Congress of Psychiatric Genetics. Online.
34. **Ament S.A.,** Basu M., Campbell R., Carter R., Creasy H.H., Degatano K., Herb B.R., Ifeonu K., Chang L., Giglio M., Hertzano R., Lobo M.K., Mahurkar A., Tickle T., White O.R. (2021) NeMO-SCORCH: Data coordination for the Single Cell Opioid Responses in the Context of HIV (SCORCH) Program. Society for Neuroscience Annual Meeting, Online. Program Number P919.

**Published Multimedia**

1. **Ament S.A.,** Shannon P., Richards M. (2017). *TReNA: Fit transcriptional regulatory networks using gene expression, priors, machine learning*. R package version 0.99.10.

**Major Invited Speeches**

**Local**

1. Ament S.A. “Family Genomics of Bipolar Disorder,” Research in Progress Seminar Series, Institute for Systems Biology, Seattle, WA, 2012
2. Ament S.A. “Family Genome Sequencing Reveals Genetic Causes of Bipolar Disorder,” University of Washington Postdoctoral Association Annual Research Symposium, 2012
3. Ament S.A. “Gene Networks Underlying Social Behavior in Honey Bees and Bipolar Disorder in Humans,” Computational Biology Seminar Series, University of Washington, Seattle, WA, 2012
4. Ament S.A. “Cell type-specific genes show striking and distinct patterns of spatial expression in the mouse brain,” Presentations of High-Profile Papers, Institute for Systems Biology Annual Retreat, Port Townsend, WA, 2013
5. Ament S.A. Research in Progress Seminar Series, Institute for Systems Biology, Seattle, WA, 2014
6. Ament S.A. “Rock Star Series” special presentation to ISB faculty, Institute for Systems Biology, Seattle, WA, 2015
7. Ament S.A. Research in Progress Seminar Series, Institute for Systems Biology, Seattle, WA, 2015
8. Ament S.A. “Systems genetics of neuropsychiatric disorders,” Center for Bioinformatics and Computational Biology, University of Maryland, College Park, November 18, 2016
9. Ament S.A. “Systems genetics of neuropsychiatric disorders,” Brain Science Research Consortium Unit Seminar Series, University of Maryland, Baltimore, December 6, 2016
10. Ament S.A. “Systems genetics of neuropsychiatric disorders,” Maryland Psychiatric Research Center, University of Maryland, Baltimore, December 16, 2016
11. Ament S.A. “Translating psychiatric genetics into a neurobiological understanding of mental illness,” CHIB Workshop on Network Medicine, University of Maryland, College Park, May 17, 2018
12. Ament S.A. “Translating psychiatric genetics into a neurobiological understanding of mental illness,” IGS/PPGM Joint Seminar Series, University of Maryland, Baltimore, December, 2018
13. Ament S.A. “Multi-omic profiling of cell types and cell states underlying psychiatric and neurodegenerative disorders.” Program in Neuroscience Virtual Seminar Series, University of Maryland, Baltimore, April 30, 2020
14. Ament S.A. “Convergent Neuroscience Mechanisms in Severe Mental Illnesses.” School of Medicine Board of Visitors Meeting, Baltimore, MD. December 1, 2020

**National**

1. Ament S.A. Student Data Blitz, Gordon Research Conference on Genes and Behavior, Ventura, CA, 2005
2. Ament S.A. Graduate Student and Postdoctoral Symposium, W.M. Keck Center for Behavioral Biology, North Carolina State University, Raleigh, NC, 2006
3. Ament S.A. Woods Hole Behavior Symposium, Marine Biological Laboratory, Woods Hole, MA, 2006
4. Ament S.A. Session on Neurobiology and Behavior, Workshop on Honey Bee Genomics and Biology, Cold Spring Harbor Laboratories, NY, 2007
5. Ament S.A. Departmental Seminar. Biology Department, Southeastern Missouri State University, Port Girardeau, MO, 2008
6. Ament S.A. Postdoc interview seminar, Laboratory of Kristin Scott, Department of Molecular and Cellular Biology, University of California, Berkeley, CA, 2009
7. Ament S.A. Junior Scientist Talks. Gordon Research Conference on Genes & Behavior, Ventura, CA, 2010
8. Ament S.A. Session on Neurobiology and Behavior, Workshop on Honey Bee Genomics and Biology, Cold Spring Harbor Laboratories, NY, 2011
9. Ament S.A. Postdoc interview seminar, Laboratory of Insect Social Evolution, Rockefeller University, 2011
10. Ament S.A. Postdoc interview seminar, Institute for Systems Biology, Seattle, WA, 2011
11. Ament S.A. “Behavior-specific Changes in Transcriptional Modules Lead to Distinct and Predictable Neurogenomic States,” Gordon Research Seminar on Genes & Behavior, Galveston, TX, 2012
12. Ament S.A. Data Blitz. Gordon Research Conference on Genes & Behavior, Galveston, TX, 2012
13. Ament S.A. “Finding Genetic Causes of Bipolar Disorder Through Family Genome Sequencing,” Institute for Genomic Biology, University of Illinois at Urbana-Champaign, Champaign, IL, 2012
14. Ament S.A. “Finding Genetic Causes of Bipolar Disorder Through Family Genome Sequencing,” Park City Meeting on Molecular Psychiatry, Park City, UT, 2013
15. Ament S.A. “Genome sequencing of multiplex pedigrees reveals genes and pathways underlying bipolar disorder,” Human Genetics Branch, Intramural Research Program, National Institute of Mental Health, Bethesda, MD, 2013
16. Ament S.A. “Genome sequencing of multiplex pedigrees reveals genes and pathways underlying bipolar disorder,” The Molecular Psychiatry Conference, San Francisco, CA, 2013
17. Ament S.A. “Targeted Sequencing of 30 Bipolar Disorder Candidate Genes in 4000 Cases and 2000 Controls,” Park City Meeting on Molecular Psychiatry, Park City, UT, 2014
18. Ament S.A. “Genome sequencing of multiplex pedigrees reveals genetic causes of bipolar disorder,” Gordon Research Seminar on Genes & Behavior, Galveston, TX, 2014
19. Ament S.A. “Systems genetics of neuropsychiatric disorders,” Laboratory of John Kelsoe, Department of Psychiatry, University of California-San Diego, La Jolla, CA, 2014
20. Ament S.A. “A Transcriptional Regulatory Basis for Brain Disease,” Gordon Research Seminar on Human Genetics and Genomics, Newport, RI, 2015
21. Ament S.A. “Systems Genetics of Bipolar Disorder,” The Molecular Psychiatry Association Annual Meeting, San Francisco, CA, 2015
22. Ament S.A. “Systems genetics of neuropsychiatric disorders,” Department of Genetics, Rutgers University, Piscataway, NJ, 2015
23. Ament S.A. “Systems genetics of neuropsychiatric disorders,” Center for Public Health Genomics, University of Virginia, Charlottesville, VA, 2016
24. Ament S.A. “Systems genetics of neuropsychiatric disorders,” Institute for Genome Sciences, University of Maryland School of Medicine, Baltimore, MD, 2016
25. Ament S.A. “Systems genetics of neuropsychiatric disorders,” Department of Biological Sciences, Vanderbilt University, Nashville, TN, 2016
26. Ament S.A. “Systems genetics of neuropsychiatric disorders,” Institute for Genomic Medicine, Columbia University Medical Center, New York, NY, 2016
27. Ament S.A. “Genome-scale transcriptional regulatory network models of psychiatric and neurodegenerative disorders,” The Molecular Psychiatry Association Annual Meeting, Maui, HI, 2016
28. Ament S.A. “Regulome-wide association studies of psychiatric disorders,” Translational Psychiatry Meeting, Park City, UT, 2018
29. Ament S.A. “Family-based sequencing studies to characterize rare variants influencing risk for bipolar disorder,” Molecular Psychiatry Association Annual Meeting, Kauai, HI, 2018
30. Ament S.A. “Translating psychiatric genetics into neurobiological understanding of mental illness,” Coppin State University, Baltimore, MD, Spring 2019
31. Ament S.A. “Searching for large-effect risk variants in mental illness,” Panel on Mental Health Genetics, Association of Health Care Journalists, Baltimore, MD, August 2019
32. Ament S.A. “Translating psychiatric genetics into neurobiological understanding of mental illness,” Neuroscience Program Seminar Series, University of Illinois at Urbana-Champaign, Urbana, IL, Oct. 2019
33. Ament S.A. “Translating psychiatric genetics into neurobiological understanding of mental illness,” Mortimer B. Zuckerman Mind Brain Behavior Institute, Columbia University, Nov. 2019
34. Ament S.A. “Translating psychiatric genetics into neurobiological understanding of mental illness,” Department of Anatomy, University of California San Francisco, Jan. 2020
35. Ament S.A. “Biological insights from epigenomic and single-cell transcriptomic profiling in knock-in mouse models of the Huntington’s disease mutation,” CHDI Huntington’s Disease Therapeutics Conference, Palm Spring, CA, February 2020 (invited speaker and session co-chair)
36. Ament S.A. “NeMO Archive: a BRAIN Initiative resource for single-cell multi-omic data from the mammalian brain,” Translational Psychiatry, virtual meeting, March 2021

**International**

1. Ament S.A. Student Data Blitz, Gordon Research Conference on Genes & Behavior, Barga-Gallicano, Italy, 2008
2. Ament S.A. “Future Challenges and Promises of Neuroethology,” Gordon Research Seminar on Neuroethology, Magdalen College, Oxford, UK, 2008
3. Ament S.A. Symposium on Evo-Behavio: cross disciplinary studies in behavior and its evolution, International Behavioral and Neural Genetics Society, Dresden, Germany, 2009
4. Ament S.A. “Finding Genetic Causes of Bipolar Disorder through Family Genomic Sequencing,” Symposium on Sequencing Studies of Bipolar Disorder, World Congress of Psychiatric Genetics, Hamburg, Germany, 2012
5. Ament S.A. “Rare variants in neuronal excitability genes influence risk for bipolar disorder,” Symposium on Family Sequencing Studies of Bipolar Disorder, World Congress of Psychiatric Genetics, Copenhagen, Denmark, 2014
6. Ament S.A. “Insights into Bipolar Disorder from Exome Sequencing of 148 Multiply Affected Pedigrees,” Symposium on Bipolar Disorder Genetics, World Congress of Psychiatric Genetics, Toronto, Canada, 2015
7. Ament S.A. “Genome-scale transcriptional regulatory network models of psychiatric disorders,” Symposium, From Gene Expression to Disease Association, World Congress of Psychiatric Genetics, Jerusalem, Israel, 2016
8. Ament S.A. “Is PRC2 the X-factor in HD?” HD Systems Biology Symposium IV, Oct. 2020 (virtual symposium, originally scheduled to be held in Paris, France)
9. Ament S.A. “Neuroimmune cell atlas for the human brain reveals gene networks activated in neurological disorders,” Symposium on Targeting Glial Cell Activation for Treatment of Neurodegenerative Disease.” XV European Meeting on Glial Cells in Health and Disease. Online, July 5-9, 2021

**Proferred Communications**

**Local**

1. Ament S.A. et al. “Mechanisms of stable weight loss in honey bees.” Institute for Genomic Biology Symposium, Urbana, IL, poster presentation, 2007
2. Ament S.A. et al. “Mechanisms of stable weight loss in honey bees.” Cell & Molecular Biology Training Grant Symposium, Urbana, IL, poster presentation, 2007
3. Ament S.A. et al. Institute for Genomic Biology Symposium, Urbana, IL, poster presentation, 2008
4. Ament S.A. et al. “Regulatory Variants in Calcium Signaling Genes Underlie Susceptibility to Bipolar Disorder.” Institute for Systems Biology International Symposium: Systems Biology and the Brain, Seattle, WA, poster presentation, 2013
5. Ament S.A. et al. “Risk variants for bipolar disorder influence multiple cellular and molecular mechanisms leading to altered neuronal excitability.” Institute for Systems Biology International Symposium: Tipping Points, Seattle, WA, poster presentation, 2015

**National**

1. Ament S.A. et al. Gordon Research Conference on Genes and Behavior, Ventura, CA, 2006
2. Ament S.A., Wang Y., Robinson G.E. Systems Biology: Networks, Cold Spring Harbor, NY, 2009 (poster presentation by S. Ament)
3. Ament S.A., et al. Gordon Research Conference on Genes and Behavior, Ventura, CA, 2010 (poster presentation by S. Ament)
4. Ament S.A., et al. Gordon Research Conference on Genes and Behavior, Galveston, TX, 2012 (poster presentation by S. Ament)
5. Ament S.A., et al. Gordon Research Conference on Genes & Behavior, Galveston, TX, 2014 (poster presentation by S. Ament)
6. **Ament S.A.,** Earls J., Grindeland A., St. Claire J., Gillis T., O'Moore J., Duong H., Guide J., Cassen V., Mysore L., Troisch P., Kovalenko M., Howland D., Kwak S., Carroll J., Gusella J., MacDonald M., Lee J.M., Geman D., Wheeler V., Carlson G., Price N., Goodman N., Hood L. “Dynamic perturbed networks in mouse models of HD CAG repeat expansions” CHDI HD Therapeutics Conference, Palm Springs, CA, 2014 (poster presentation by S. Ament)
7. **Ament S.A.,** Plaisier C., Pearl J.R., Baliga N.S., Carroll J.B., Hood L., Price N.D. “Genome-scale transcriptional regulatory network models for the mouse and human striatum reveal transcription factors underlying Huntington’s disease” CHDI HD Therapeutics Conference, Palm Springs, CA, 2015 (poster presentation by S. Ament)
8. **Ament S.A.,** Plaisier C., Pearl J.R., Basu B., The Bipolar Genome Study, Hood L., Roach J.C., Baliga N.S., Price N.D. “Probing the Transcriptional Regulatory Basis of Bipolar Disorder with TReNA.” Gordon Research Conference on Human Genetics and Genomics, Newport, RI, 2015 (poster presentation by S. Ament)
9. **Ament S.A.,** Plaisier C.L., Pearl J.R., Carroll J.B., Hood L., Baliga N.S., Price N.D. “Genome-scale transcriptional regulatory network models for the mouse and human striatum reveal transcription factors underlying Huntington’s disease.” CHDI HD Therapeutics Conference, Palm Springs, CA, poster presentation, 2016
10. **Ament S.A.** et al. “Genome-scale transcriptional regulatory network models of psychiatric disorders.” Gordon Research Conference on Human Genetics and Genomics, Stowe, VT, 2017 (poster presentation)
11. **Ament S.A.** et al. “Genome-scale transcriptional regulatory network models of psychiatric disorders.” NYU/Nature Neurogenetics Conference, New York, NY, 2017 (poster presentation)
12. Pearl J.R., Shetty A.C., Bergey D., Cantle J.C., Bragg R., Coffey S., Hood L., Price N.D., **Ament S.A.,** Carroll J.B. “Genomic occupancy of huntingtin in striatum of wildtype and *HttQ111/+* mice.” CHDI HD Therapeutics Conference, Palm Springs, CA, 2018 (poster presentation by J. Pearl)
13. Ament S.A. BRAIN Initiative Investigators Meeting, Washington, DC, poster presentation, 2018
14. **Ament S.A.,** Orvis J., Gottfried B., Chatterjee A., Kancherla J., Herb B., Casella A.M., Rose K., Corrada Bravo H., Colantuoni C., Mahurkar A., White O., Hertzano R. NeMO Analytics – a Multi-Omic Visualization and Analysis Resource for the BRAIN Initiative. BRAIN Initiative Investigators Meeting, Washington, DC, 2019 (poster presentations by S. Ament)

**International**

1. Ament S.A. et al. Gordon Research Conference on Genes and Behavior, Barga-Gallicano, Italy, poster presentation, 2008
2. Ament S.A. et al. Gordon Research Conference on Neuroethology, Oxford, UK, poster presentation, 2008