**Andrew J. Riquier, M.A.**

2216 S. 143rd Plz, Omaha, NE 68144. Phone: (402)-613-6728 Email: ariquier@unomaha.edu

**Education**

University of Nebraska at Omaha

Neuroscience and Behavior PhD. (expected 2020)

Advisor: Dr. Suzanne Sollars

University of Nebraska at Omaha

Neuroscience and Behavior M.A. 2016

*Title:* *Microglia Presence in the Nucleus of the Solitary Tract Following Transection of the Chorda Tympani Nerve at Various Points in Rat Development*

Advisor: Dr. Suzanne Sollars

Nebraska Wesleyan University

Major: Psychology B.A. 2011

Minors: Music, Religious Studies

**Awards and Honors**

Association for Chemoreception Sciences Student Travel Award (2019)

Association for Chemoreception Sciences Student Travel Award (2017)

Association for Chemoreception Sciences Student Travel Award (2016)

Nu Rho Psi – National Neuroscience Honor Society (2014-present)

Mu Phi Epsilon- National Music Honorary (2009-2011)

**External Research Funding Earned (Total: $29,000)**

Grant: **Buffett Early Childhood Institute Graduate Scholar** (*PI: A. J. Riquier; Advisor: S. I. Sollars, Ph.D.)*

Title: Identifying a Target for the Prevention and Treatment of Autism Spectrum Disorder

Sponsor: The Buffett Early Childhood Institute

Amount: $25,000 Grant Period: 7/1/2018-6/1/2019

Fellowship: **NASA Nebraska Space Fellowship** (*PI: A. J. Riquier; Advisor: S. I. Sollars, Ph.D.)*

Title: The Effect of Long-term Caloric Restriction on Neuroinflammation and Abnormal Microglia Activity.

Sponsor: NASA Nebraska Space Grant

Amount: $4000 Grant Period: 9/1/2018-3/1/2019

**Internal Research Funding Earned (Total: $20,973.35)**

Grant: **GRACA Grant for Research and Creative Activity for Graduate Students** (*PI:* *A. J. Riquier; Advisor: S. I. Sollars, Ph.D.*)

Title: Satellite Glial Cells in the Geniculate Ganglion Following Chorda Tympani Transection in Young and Adult Rats

Sponsor: University of Nebraska at Omaha: University Committee on Research and Creative Activity

Amount: $5000 Grant Period: 4/1/2018 – 4/1/2019

Grant: **UCRCA Grant for Research and Creative Activity for Graduate Students** (*PI:* *A. J. Riquier; Advisor: S. I. Sollars, Ph.D.*)

Title: Assessing Astrocytes in the Developing and Injured Rat Brain

Sponsor: University of Nebraska at Omaha: University Committee on Research and Creative Activity

Amount: $500 Grant Period: 1/1/2018 – 6/30/2018

Grant: **GRACA Grant for Research and Creative Activity for Graduate Students** (*PI:* *A. J. Riquier; Advisor: S. I. Sollars, Ph.D.*)

Title: Time Course of Microglia Response to Chorda Tympani Nerve Transection in Neonatal Rats

Sponsor: University of Nebraska at Omaha: University Committee on Research and Creative Activity

Amount: $5000 Grant Period: 4/1/2016 – 4/1/2017

Grant: **GRACA Grant for Research and Creative Activity for Graduate Students** (*PI:* *A. J. Riquier; Advisor: S. I. Sollars, Ph.D.*)

Title: The Impact of Sodium-deprivation on Microglia Levels in Response to Chorda Tympani Nerve Transection in Developing Rats

Sponsor: University of Nebraska at Omaha: University Committee on Research and Creative Activity

Amount: $5000 Grant Period: 4/1/2015 – 4/1/2016

Grant: **GRACA Grant for Research and Creative Activity for Graduate Students** (*PI:* *A. J. Riquier; Advisor: S. I. Sollars, Ph.D.*)

Title: Microglia Levels in Response to Chorda Tympani Nerve Transection in Developing Rats

Sponsor: University of Nebraska at Omaha: University Committee on Research and Creative Activity

Amount: $4973.35 Grant Period: 4/1/2014 – 3/1/2015

The purpose of this project is to examine the microglial response to chorda tympani nerve transection across rat development.

Grant: **UCRCA Grant for Research and Creative Activity for Graduate Students** (*PI:* *A. J. Riquier; Advisor: S. I. Sollars, Ph.D.*)

Title: Astrocyte, Microglia, and Brain-derived Neurotrophic Factor Levels in Response to Neural Insult in Developing Rats

Sponsor: University of Nebraska at Omaha: University Committee on Research and Creative Activity

Amount: $500 Grant Period: 11/1/2013 – 06/1/2014

The aim of this project is to utilize immunohistochemistry to examine glial and neurotrophic factor levels following transection of the chorda tympani nerve in both immature and mature rats.

**Professional and Teaching Experience**

Instructor (2016-2018)

Instructor of Record: PSYCH 3140: Methods of Psychological Inquiry

Lectured, graded papers, guided design of project proposals.

University of Nebraska at Omaha

Academic Tutor (2013-2016)

Provided tri-weekly study and review sessions with small groups or individual students, prepared study guides and prepped for exams.

University of Nebraska at Omaha

Teaching Assistant (2012-2013)

Behavioral Neuroscience; Behavioral Neuroscience Laboratory

Senior-level courses. Graded exams and papers, taught study and review sessions, prepared experiments, taught laboratory sections.

University of Nebraska at Omaha

Supervisor: Dr. Suzanne Sollars

Peer Assistant (2008-2010)

Designed and organized community building activities, held office hours, weekly staff meetings, building security.

Nebraska Wesleyan University

**Invited Lectures**

Systems Neuroscience, University of Nebraska Medical Center (Spring 2019). Discussed the anatomy, cellular and system-wide function of the gustatory system.

Behavioral Neuroscience Proseminar, University of Nebraska at Omaha (Spring 2017). An introduction to the role of microglia in the healthy and pathological brain.

Behavioral Neuroscience Proseminar, University of Nebraska at Omaha (Spring 2016). Lectured on the mechanisms underlying the role of microglia in the pathology of Alzheimer’s Disease and Schizophrenia.

Behavioral Neuroscience, University of Nebraska at Omaha (Summer 2015). An informative lecture about microglia function, phenotypes, and roles in both the healthy and unhealthy brain.

Behavioral Neuroscience, University of Nebraska at Omaha (Spring 2015). Covered glia subtypes, as well as current research regarding the mechanisms underlying microglia processes.

Behavioral Neuroscience Laboratory, University of Nebraska at Omaha (Spring 2015). An overview of the biology and chemistry behind various histological techniques, immunohistochemistry, nerve labels, and microscopy.

Behavioral Neuroscience Laboratory, University of Nebraska at Omaha (Spring 2015). Explained and demonstrated the process of cryoprotection, freezing, and sectioning rat brainstems.

Behavioral Neuroscience, University of Nebraska at Omaha (2014). Discussed microglia, their role in neural inflammation, memory formation, and in the pathology of various disorders.

Research Methods, University of Nebraska at Omaha (2014). Demonstrated a scientific research proposal talk for educational purposes.

**Professional Qualifications**

Institutional Animal Care and Use Committee (IACUC) Certified

Collaborative Institutional Training Initiative (CITI) Certified

**Publications\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Riquier, A. J & Sollars, S. I. (2017). Microglia density decreases in the rat rostral nucleus of the solitary tract across development and increases in an age-dependent manner following denervation. *Neuroscience, 355*.

**Research Talks \_\_\_\_\_\_**

Riquier, A. J. & Sollars, S. I. (2019). Neonatal nerve injury induces a larger astrocyte response than adult injury. *University of Nebraska at Omaha Research and Creative Activity Fair*.

Riquier, A. J. & Sollars, S. I. (2019). Microglia: Tying together development, injury, and disease. *Invited Talk: Nu Rho Psi National Neuroscience Honor Society Alpha Chapter Meeting.*

Riquier, A. J. & Sollars, S. I. (2018). Identifying a target for the prevention and treatment of autism spectrum disorder. *Invited Talk: Buffett Early Childhood Institute.*

Riquier, A. J. & Sollars, S. I. (2017). Microglia response to taste nerve injury lasts less than two weeks in young rats. *University of Nebraska at Omaha Research and Creative Activity Fair*.

Riquier, A. J. & Sollars, S. I. (2016). The impact of sodium deprivation on microglia levels in response to chorda tympani transection in developing rats. *University of Nebraska at Omaha Research and Creative Activity Fair*.

Riquier, A. J. & Sollars, S. I. (2015). Microglia levels in response to chorda tympani transection in developing Rats. *University of Nebraska at Omaha Research and Creative Activity Fair*.

Riquier, A. J. (2010). The saliency of appearance and perceived expertise on persuasiveness. *Proposal Presentation, Nebraska Wesleyan University Psychology Research Symposium*.

**Poster Presentations \_\_\_\_\_\_\_\_\_\_\_\_\_**

**Riquier, A. J.,** Apa, K. L., Andersen, B. D., Sollars, S. I. (2019). Microglia and astrocytes are differentially upregulated in a developmentally dependent manner following nerve injury. *European Neuroscience Conference by Doctoral Students, London, England June 2019.*

**Riquier, A. J.,** Apa, K. A., Sollars, S. I. (2019). Astrocytic response to neonatal nerve injury is microglia-independent. *Regenerative Medicine Symposium, Omaha, NE., May 2019.*

**Riquier, A. J.** & Sollars, S. I. (2019). Astrocytic response to neonatal chorda tympani transection is larger compared to adult transection. *Annual Conference of* *Association for Chemoreception Sciences, Bonita Springs, FL., April 2019.*

Andersen, B. D., **Riquier, A. J.**, Sollars, S. I. (2019). Coupled microglia response in the brainstem following lingual nerve transection in Sprague-Dawley rats. *University of Nebraska at Omaha Research and Creative Activity Fair*.

Apa, K. L., **Riquier, A.** **J.**, Sollars, S. I. (2019). Neuroprotective effect of curcumin following nerve injury in rats. *University of Nebraska at Omaha Research and Creative Activity Fair*.

**Riquier, A. J.** & Sollars, S. I. (2018). The microglia response to transection of the chorda tympani nerve is resistant to manipulation by dietary sodium deprivation. *Regenerative Medicine Symposium, Omaha, NE., May 2018.*

**Riquier, A. J.** & Sollars, S. I. (2018). Developmental differences in the microglia response to nerve injury are resistant to dietary sodium deprivation. *University of Nebraska at Omaha Research and Creative Activity Fair*.

**Riquier, A. J.** & Sollars, S. I. (2018). Differential time course of the microglia response to neonatal and adult rat CTX is not influenced by dietary sodium deprivation. *40th* *Annual Conference of* *Association for Chemoreception Sciences, Bonita Springs, FL., April 2018.*

Kunze, N. & **Riquier, A. J.** (2018). Undergraduate employment: How does working effect GPA and attendance? *National Conference on Undergraduate Research, Edmond, OK, April, 2018*

**Riquier, A. J.** & Sollars, S. I. (2017). Microglia response at various time points following chorda tympani transection in neonatal rats. *39th* *Annual Conference of* *Association for Chemoreception Sciences, Bonita Springs, FL., April 2017.*

Bergwell, H. R., **Riquier, A. J.**, Sollars, S. I. (2017). Chronic consumption of capsaicin does not induce a microglia response in adult rats. *University of Nebraska at Omaha Research and Creative Activity Fair*.

**Riquier, A. J.** & Sollars, S. I. (2016). Developmentally dependent microglia increase following chorda tympani transection in rats. *Annual Conference of the Society for Neuroscience, San Diego, CA., November 2016.*

**Riquier, A. J.** & Sollars, S. I. (2016). Microglia response to chorda tympani transection in adult and juvenile rats. *38th* *Annual Conference of* *Association for Chemoreception Sciences, Bonita Springs, FL., April 2016.*

**Riquier, A. J.** & Sollars, S. I. (2014). An examination of microglia presence following chorda tympani transection across rat development. *University of Nebraska at Omaha Research and Creative Activity Fair*.

**Riquier, A. J.** & Sollars, S. I. (2013). Microglia levels in response to taste nerve transection in developing rats. *Nebraska Psychological Society Meeting*.

**Riquier, A. J.** & Sollars, S. I. (2013). Astrocyte, microglia, and brain-derived neurotrophic factor levels in response to neural insult in developing rats. *Nebraska's Experimental Program to Stimulate Competitive Research Conference.*

**Riquier, A. J.** (2011). The saliency of appearance and perceived expertise on persuasiveness. *Nebraska Wesleyan University Psychology Research Symposium*.