

# Anna Iouchmanov

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(412) 334-5469

## EDUCATION

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### UNIVERSITY OF GEORGIA

**Graduate Student**

**Department:** Genetics

3.910 GPA

8/2020-present

### UNIVERSITY OF PITTSBURGH

**Undergraduate Student**

**Major:** Biological Sciences

**Minors:** Chemistry and Italian

3.670 GPA

8/2016-12/2019

## RESEARCH INTERESTS

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CRISPR/Cas9 • Reptiles as an Animal Model • Functional Outcomes of Gene Modification • Scientific Illustration

## RESEARCH APPOINTMENTS

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12/2020 - present

**Graduate Researcher- Laboratory of Doug Menke, Ph.D.**

Franklin College of Arts and Sciences

Paul D. Coverdell Center for Biomedical and Health Sciences

University of Georgia Department of Genetics

12/2019 - 7/2020

**Lab Manager and Technician- Laboratory of Corina O. Bondi, Ph.D.**

Safar Center for Resuscitation Research

Children's Hospital of Pittsburgh

UPMC Department for Physical Medicine & Rehabilitation

12/2016 - 12/2019

**Undergraduate Research Assistant- Laboratory of Corina O. Bondi, Ph.D.**

Safar Center for Resuscitation Research

Children's Hospital of Pittsburgh

UPMC Department for Physical Medicine & Rehabilitation

## MANUSCRIPTS IN PREPARATION

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Alan Garcia-Elfring, Christina E. Sabin, **Anna L. Iouchmanov**, Heather L. Roffey, Sukhada P. Samudra, Aaron J. Alcalá, James D. Lauderdale, Andrew P. Hendry, Douglas B. Menke, and Rowan D.H. Barrett. The piebald phenotype in snakes is caused by a nonsense mutation in the *tfec* gene (in revision, pre-print in BioRxiv).

Kutash LA, **Iouchmanov A**, Sunleaf C, O'Neil DA, Kutash L, Craine T, Bondi CO (2019). The effect of experimental brain trauma on sustained attention and behavioral flexibility in female versus male rats (2019). *J. Neurotrauma* (in review).

Craine TJ, O'Neil DA, Kutash LA, **Iouchmanov A**, Sha S, Patel A, Cheng JP, Kline AE, Bondi CO (2019). Multimodal assessment of behavioral flexibility deficits after frontal brain trauma: beneficial effects of milnacipran in male rats (in preparation).

Bondi CO, Grobengieser K, Turocy A, Craine T, **Iouchmanov A**, Sunleaf C, Kutash L (2019). Instrumental learning and behavioral flexibility in adolescent rats following pediatric traumatic brain injury (in preparation).

## PRESENTATIONS AND ABSTRACTS

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- 6/2022      Determining the Impact of Deletions in Hindlimb Enhancer B (HLEB) on *T-box Transcription Factor 4 (tbx4)* Expression and Hindlimb Length in *Anolis sagrei*.  
**Anna Iouchmanov**, Christina Sabin, Sukhada Samudra, Ed Stanley, Doug Menke. *Southeastern Society for Developmental Biology Conference, June 1, 2022, Friday Center for Continuing Education, University of North Carolina at Chapel Hill, Chapel Hill NC*
- 4/2022      Determining the Impact of Deletions in Hindlimb Enhancer B (HLEB) on *T-box Transcription Factor 4 (tbx4)* Expression and Hindlimb Length in *Anolis sagrei*.  
**Anna Iouchmanov**, Christina Sabin, Sukhada Samudra, Ed Stanley, Doug Menke. *DevBio Spring Retreat, April 22, 2022, Complex Carbohydrate Research Center, University of Georgia, Athens GA*
- 11/2021     Mutations in Transcription Factor EC (*TFEC*) Result in Piebald Phenotypes in the Brown Anole, *Anolis sagrei*.  
**Anna Iouchmanov**, Christina Sabin, Sukhada Samudra, Aaron Alcalá, Alan Garcia-Elfring, Heather L. Roffey, Andrew P. Hendry, Rowan D. H. Barrett, Jim Lauderdale, Doug Menke. *DevBio Fall Symposium, November 11, 2021, University of Georgia Webinar*
- 7/2021      Panelist in the Menke Lab's Lizard Gene-Editing Virtual Workshop, *July 29, 2021, University of Georgia Webinar*
- 5/2021      Mutations in Transcription Factor EC (*TFEC*) Result in Piebald Phenotypes in the Brown Anole, *Anolis sagrei*.  
**Anna Iouchmanov**, Christina Sabin, Sukhada Samudra, Aaron Alcalá, Alan Garcia-Elfring, Heather L. Roffey, Andrew P. Hendry, Rowan D. H. Barrett, Jim Lauderdale, Doug Menke. *DevBio 'Virtual' Spring Retreat, May 10, 2021, University of Georgia Webinar*
- 2/2020      Instrumental Learning and Behavioral Flexibility in Adolescent and Adult Rats Following Traumatic Brain Injury.  
**Anna Iouchmanov, B.S.**, Katherine Grobengieser, Aarti Patel, Alaina Turocy, Sarah Sha, Taylor Magdelinic, Lindsay A. Kutash, B.S., Jeffrey P. Cheng, B.S., Anthony E. Kline, Ph.D., and Corina O. Bondi, Ph.D. *University Honors College Research Fair, February 2020, William Pitt Union, University of Pittsburgh, Pittsburgh PA*
- 10/2019     The Effect of Experimental Brain Trauma on Sustained Attention in Female versus Male Rats  
**Anna L. Iouchmanov**, Lindsay A. Kutash, B.S., Carlson Sunleaf, Timothy Craine, B.S., Jeffrey P. Cheng, B.S., Anthony E. Kline, Ph.D., and Corina O. Bondi, Ph.D. *Neuroscience 2019 Conference, October 19-23, McCormick Place, Chicago IL*

- 9/2019 When Two Wrongs Make a Right: The Effect of Acute and Chronic Binge Drinking on TBI Outcomes in Young Adult Female Rats  
J. Christensen, E. Eyolfson, S. Salberg, D. Bhatt, H. Weerawardhena, J. Tabor, R. Mychasiuk. *Presented at the Safar Center for Resuscitation Research Neurointensive Critical Care and Resuscitation Journal Club, John G Rangos Research Center, University of Pittsburgh, Pittsburgh PA*
- 6/2019 The Effect of Experimental Brain Trauma on Sustained Attention and Behavioral Flexibility in Female Rats  
**Anna Iouchmanov**, Lindsay Kutash, Carlson Sunleaf, Katherine Grobengieser, Sarah Sha, Aarti Patel, Timothy Craine, Jeffrey Cheng, B.S., Anthony E. Kline, Ph.D., Corina O. Bondi, Ph.D. *37<sup>th</sup> National Neurotrauma Society Symposium, June 29-July 3, Wyndham Grand Pittsburgh Downtown, Pittsburgh PA*
- 6/2019 The Effect of Experimental Brain Trauma on Sustained Attention and Behavioral Flexibility in Female Rats  
**Anna Iouchmanov**, Lindsay Kutash, Carlson Sunleaf, Katherine Grobengieser, Sarah Sha, Aarti Patel, Timothy Craine, Jeffrey Cheng, B.S., Anthony E. Kline, Ph.D., Corina O. Bondi, Ph.D. *37<sup>th</sup> National Neurotrauma Society Symposium during the "Bridging Gaps in Understanding the Neurobiology and Neurotechnology of Function after Neurotrauma" community event, June 29<sup>th</sup>, Wyndham Grand Pittsburgh Downtown, Pittsburgh PA*
- 4/2019 The Effect of Experimental Brain Trauma on Sustained Attention and Behavioral Flexibility in Female Rats  
**Anna Iouchmanov**, Lindsay Kutash, Carlson Sunleaf, Katherine Grobengieser, Timothy Craine, Jeffrey Cheng, B.S., Anthony E. Kline, Ph.D., Corina O. Bondi, Ph.D. *Presented as an oral presentation at the 2019 Safar Center Multi-Departmental Research Day, April 22<sup>nd</sup>, John G Rangos Research Center, University of Pittsburgh, Pittsburgh PA. One of top 5 abstracts chosen for an oral presentation (out of 45 submissions)*
- 2/2019 The Effect of Experimental Brain Trauma on Sustained Attention and Behavioral Flexibility in Rats  
**Anna Iouchmanov**, Timothy J. Craine, Darik A. O'Neil, B.S./B.A., Lindsay A. Kutash, Jeffrey P. Cheng, B.S., Anthony E. Kline, Ph.D., Corina O. Bondi, Ph.D. *University of Pittsburgh's Department of Biological Sciences Research Day, February 2019, Langley Hall, University of Pittsburgh, Pittsburgh PA*
- 8/2018 The Effect of Experimental Brain Trauma on Sustained Attention and Behavioral Flexibility in Rats.  
**Anna Iouchmanov**, Nima Patel, Timothy J. Craine, Darik A. O'Neil, B.S./B.A., Lindsay A. Kutash, Jeffrey P. Cheng, B.S., Anthony E. Kline, Ph.D., Corina O. Bondi, Ph.D. *NeuroTrauma 2018 Conference, August 11-16, Westin Harbor Castle, Toronto, Canada*
- 7/2018 Magnesium Administration After Experimental Traumatic Brain Injury Improves Decision-Making Skills  
Jennica M. Young, Michael R. Hoane. *Presented at the Safar Center for Resuscitation Research Neurointensive Critical Care and Resuscitation Journal Club, July 2018, John G Rangos Research Center, University of Pittsburgh, Pittsburgh PA*
- 7/2018 The Effect of Experimental Brain Trauma on Sustained Attention and Behavioral Flexibility in Rats.

**Anna Iouchmanov**, Nima Patel, Timothy J. Craine, Darik A. O’Neil, B.S./B.A., Lindsay A. Kutash, Jeffrey P. Cheng, B.S., Anthony E. Kline, Ph.D., Corina O. Bondi, Ph.D. *Presented as an oral presentation at the Safar Center for Resuscitation Research Student Research Day, July 17<sup>th</sup>, John G Rangos Research Center, University of Pittsburgh, Pittsburgh PA*

- 5/2018 The Effect of Experimental Brain Trauma on Sustained Attention and Behavioral Flexibility in Rats.  
**Anna Iouchmanov**, Nima Patel, Timothy J. Craine, Darik A. O’Neil, B.S./B.A., Lindsay A. Kutash, Jeffrey P. Cheng, B.S., Anthony E. Kline, Ph.D., Corina O. Bondi, Ph.D. *Safar Center Multi-Departmental Research Day, May 31<sup>st</sup>, University Club, University of Pittsburgh, Pittsburgh PA*
- 10/2017 Detrimental effects of traumatic brain injury on attentional set-shifting behavior in female rats.  
**Iouchmanov, A.**, Nicholas, M., Tennant, H., Free, K., Leary, J., LaPorte, M, Cheng, J., Kline A., Bondi C. *2017 SACNAS Conference, October 19-21, Salt Palace Convention Center, Salt Lake City UT*
- 5/2017 Detrimental effects of traumatic brain injury on attentional set-shifting behavior in female rats.  
**Iouchmanov, A.**, Tennant, H., Free, K., Leary, J., LaPorte, M, Cheng, J. , Kline A., Bondi C. *Presented as an oral presentation at the 2017 Safar Center Multi-Departmental Research Day, May 22-23, John G Rangos Research Center, University of Pittsburgh, Pittsburgh PA. Winner of 2<sup>nd</sup> place oral presentation (out of top 5 abstracts from 55 submissions)*
- 4/2017 Frontal lobe brain trauma impairs attentional set-shifting performance in male rats.  
**Iouchmanov, A.\***, Chipchase, A.\*, Ellison, D.\*, Marshall, I., Nicholas, M., Kutash, L., O’Neil, D.A., Radabaugh, H.L., Kline, A.E., & Bondi, C.O. *First Experiences in Research Symposium, April 2017, University of Pittsburgh, Pittsburgh PA (\* denotes equal first authorship)*

## HONORS AND SCHOLARSHIPS

- 6/2022 NIH T32 Genetics Training Grant (University of Georgia)
- 4/2021 NIH T32 Genetics Training Grant (University of Georgia)
- 4/2020 Osborne Assistantship Award (University of Georgia)
- 9/2019 University of Pittsburgh Student Government Board Travel Grant
- 9/2019 University of Pittsburgh Office of Undergraduate Research Curiosity Grant
- 12/2018 University of Pittsburgh Chancellor’s Undergraduate Research Fellowship
- 8/2018 Pitt Honors Travel Award
- 8/2018 Neurotrauma 2018 Diversity Fellowship
- 2017 2017 Society for Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS) Travel Scholarship Award
- 2016-19 Dean’s List (University of Pittsburgh)
- 2016-19 Lee Noble Scholarship (University of Pittsburgh)

## RELEVANT EXTRACURRICULAR ACTIVITIES

- 2021-22                    Developmental Biology Graduate Student Association- Secretary. *The DBGSA is the graduate student association for students interested in developmental biology. It is an interdisciplinary group with members comprised of students from several departments including but not limited to genetics, neuroscience, and cell biology.*
- 2018-20                    National Neurotrauma Society- Member. *The NNS is a society that is committed to the promotion of neurotrauma research by enhancing communications between researchers in the field and increasing support for the field on both a national and international level.*
- 2017-20                    Safar Center for Resuscitation Research Neurointensive Critical Care and Resuscitation Journal Club. *The Safar Center Journal Club is dedicated to bringing to light new and classic articles in the fields of rehabilitation and resuscitation. The club carefully discusses a new article each week, followed by questions and critiques that encourage critical thinking and attention to experimental design.*
- 2017-20                    National Society for Collegiate Scholars Pittsburgh Chapter- Member. *NSCS is an honor society that recognizes and elevates high-achieving students. Less than 10% of students at institutions with NSCS chapters qualify for membership in this prestigious society each year.*
- 2018                        Neuroscience Summer Undergraduate Research Internship Program. *The Summer Undergraduate Research Internship Program (SURIP) allows for independent and continued research during the summer months. At the end of the summer, every participant gives a presentation about their project to the others, lending a broader view of the field of Neuroscience as a whole. May - August 2018.*