# JEREMY I. BORJON

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## **EDUCATION & POSITIONS**

Postdoctoral Fellow Indiana University, Bloomington, IN Dept. of Psychological and Brain Sciences Advisor: Linda B. Smith Co-Advisors: Chen Yu (University of Texas at Austin) & John E. Richards (University of South Carolina)	2017 –
Ph.D. in Psychology and Neuroscience  Princeton University, Princeton, NJ  Dept. of Psychology & Princeton Neuroscience Institute  Advisor: Asif A. Ghazanfar  Oral Committee: Asif A. Ghazanfar, Elizabeth Gould, & Casey Lew-Williams  Reading Committee: Asif A. Ghazanfar, Michael S.A. Graziano, & Jordan A. Taylor  Dissertation Title: "Autonomic nervous system dynamics and primate vocal production"	2012 – 2017
M.A. in Psychology  Princeton University, Princeton, NJ  Dept. of Psychology & Princeton Neuroscience Institute  Advisor: Asif A. Ghazanfar  Thesis Title: "Cardiorespiratory coupling during vocal communication in the common marmoset"	2012 – 2014
Simons Fellow in Computational Neuroscience  Emory University School of Medicine, Atlanta, GA	2011 – 2012
Marcus Autism Center  Yale University School of Medicine, New Haven, CT  Child Study Center  Advisors: Ami Klin & Warren R. Jones	2010 – 2011
A.B. in Psychology with certificate in Neuroscience  Princeton University, Princeton, NJ  Advisors: Asif A. Ghazanfar & Alexander Todorov  Thesis Title: "The influence of eye gaze and facial expression on spatial hearing"	2006 – 2010
RESEARCH GRANTS AND FELLOWSHIPS	
K99/R00 NICHD 105920 Pathway to Independence Award (PI, \$1,026,360) NSF SBE Postdoctoral Research Fellowship 1908519 (PI, \$144,750) Society for Research in Child Development Small Research Grant for Early Career Scholars (PI, \$7,500) Emerging Areas of Research Initiative, Indiana University F32 NICHD 100092 National Research Service Award (\$60,610, Percentile 21, Payline 30, Likely Funded) T32 NICHD 007475-23:24 Training Program in Integrative Developmental Process (\$96,288) NSF Graduate Research Fellowship DGE-1148900 (\$138,000, Awarded in April 2012) President's Fellowship, Princeton University (\$134,300) Simons Fellowship in Computational Neuroscience (\$68,000) Round Table Senior Thesis Grant, Office of the Dean of the College, Princeton University (\$678)	2021 - 2026 2019 - 2021 2019 - 2021 2017 - 2020 Withdrawn 2017 - 2019 2014 - 2017 2012 - 2014 2010 - 2012 2009 - 2010
PUBLICATIONS	

## PUBLICATIONS

## RESEARCH REPORTS

Borjon J.I.\*, Abney D.H., Yu C., Smith L.B. (2021). Stable gaze and stable heads: Looking behavior in 12- to 24-month old infants. *Journal of Vision.* 21(8), 1-18.

 $<sup>^{\</sup>dagger}$  = equal contribution  $^{*}$  = corresponding author

Gustison M.L., **Borjon J.I.**, Takahashi D.Y., Ghazanfar A.A. (2019). Vocal and locomotor coordination develops in association with arousal state. *eLife*, 8.

**Borjon J.I.** †\*, Abney D.H. †\*, Smith L.B., Yu C. (2018). Developmentally changing attractor dynamics of manual actions on objects in late infancy. *Complexity*. (2018), 4714612.

**Borjon J.I.**, Takahashi D.Y., Cordero D.C., Ghazanfar, A.A. (2016). Arousal dynamics drive vocal production in marmoset monkeys. *Journal of Neurophysiology*. 116, 753-764.

Takahashi D.Y., Fenley A.R., Teramoto Y., Narayanan D.Z., **Borjon J.I.**, Holmes P., Ghazanfar A.A. (2015). The developmental dynamics of marmoset monkey vocal production. *Science*. *349*(6249), 734-8.

**Borjon J.I.** †, Shepherd S.V. †, Todorov A., Ghazanfar A.A. (2011). Eye-gaze and arrow cues influence elementary sound perception. *Proceedings of the Royal Society B. 278*, 1997-2004.

## **REVIEWS & COMMENTARIES**

**Borjon J.I.**, Ghazanfar A.A. (2014). Convergent evolution of vocal cooperation without convergent evolution of brain size. *Brain, Behavior and Evolution.* 84(2), 93–102.

Borjon J.I., Ghazanfar A.A. (2013). Neural tuning of human face processing. Proceedings of the National Academy of Sciences of the United States of America. 110(42), 16702–3.

#### **METHOD PAPERS**

Maitha C., Goode J.C., Maulucci D.P., Lasassmeh S.M.S., Yu C., Smith L.B., **Borjon J.I.**\* (2020). An open-source, wireless vest for measuring autonomic function in infants. *Behavior Research Methods*.

Slone L.K., Abney D.H., **Borjon J.I.**, Chen C., Pearcy D., Suarez-Rivera C., Zhang Y., Smith L.B., Yu C. (2018). Gaze in action: Head-mounted eye tracking of children's dynamic visual attention during naturalistic behavior. *Journal of visualized experiments: JoVE*. (141), e58496.

**Borjon J.I.** †\*, Schroer S.E.†, Bambach S., Slone L.K., Abney D.H., Crandall D.J., Smith L.B. (2018). A view of their own: Capturing the egocentric view of infants and toddlers with head-mounted cameras. *Journal of visualized experiments: JoVE*. (140), e58445.

#### **BOOK CHAPTERS**

Ghazanfar A.A., Takahashi D.Y., Zhang Y.S., **Borjon, J.I.** (2018). Marmoset monkey vocal communication: Common trajectories with humans and possible mechanisms. In J. Ellison & M. Sera (Eds.). *The Minnesota Symposia on Child Psychology*, Vol. 39. Hoboken: John Wiley & Sons, Inc..

#### **INVITED TALKS**

Developmental Seminar, Dept. of Psych. and Brain Sciences, Indiana University, Bloomington, IN		2017 - 2021
Center for Cognition, Action and Perception, University of Cincinnati, Cincinnati, OH	March	2020
Graduate Cognitive Research Seminar, Princeton University, Princeton, NJ		2013 - 2017
Huberman Lab, Dept. of Neurobiology, Stanford University, Palo Alto, CA	December	2016
Smith Lab, Dept. of Psych. and Brain Sciences, Indiana University, Bloomington, IN	November	2016
Leopold Lab, Laboratory of Neuropsychology, National Institutes of Health, Bethesda, MD	August	2016
Princeton Research Day, Princeton University, Princeton, NJ	May	2016
Klin Lab, Emory University School of Medicine, Marcus Autism Center, Atlanta, GA	March	2016
PSY/NEU 260 Life Cycle of Behaviors, Princeton University, Princeton, NJ	May	2014
Eskandar Lab, Massachusetts General Hospital, Harvard Medical School, Boston, MA	March	2012

#### **CONFERENCE PRESENTATIONS**

**Borjon J.I.**, Abney D.H., Yu C., Smith L.B. (2020, July). Stable gaze in 12- to 24-month old infants requires a still head and eyehead alignment. International Congress of Infant Studies. Virtual. Poster.

**Borjon J.I.**, Abney D.H., Ouzzine A., Nystrom O., Yu C., Smith L.B. (2020, July). The motor coordination of vocal production in late infancy. International Congress of Infant Studies. Virtual. Poster.

Maitha C., Goode J.C., Maulucci D.P., Lasassmeh S.M.S., Yu C., Smith L.B., **Borjon J.I.** (2020, July). An open-source, wireless vest for measuring autonomic function in infants. International Congress of Infant Studies. Virtual. Poster.

Updated 08/15/2021 2

- Borjon J.I., Abney D.H., Yu C., Smith L.B. (2019, August). Attractor dynamics of vocal production in late infancy. Lancaster Conference on Infant and Child Development. Lancaster, UK. Talk.
- Borjon J.I., Abney D.H., Yu C., Smith L.B. (2019, July). The development of vocal-manual coordination in late infancy. International Conference on Perception and Action. Gronigen, NL. Talk.
- **Borjon J.I.**, Abney D.H., Mendez A., Yu C., Smith L.B. (2019, March). The sensorimotor coordination of vocal production in late infancy. Biennial Meeting of the Society for Research in Child Development. Baltimore, MD. Poster.
- **Borjon J.I.,** Abney D.H., Smith L.B., Yu C. (2019, March). Developmentally changing attractor dynamics of manual actions on objects in late infancy. Biennial Meeting of the Society for Research in Child Development. Baltimore, MD. Poster.
- Gustison, M.L, **Borjon, J.I.**, Takahashi, D.Y., Ghazanfar, A.A. (2018, August). Energy mediates developmental interactions between vocal, postural and locomotor behaviors in marmoset monkeys. 55th Annual Conference of the Animal Behavior Society, Milwaukee, WI. Poster.
- Borjon, J.I., Abney D.H., Yu C., Smith L.B. (2018, July). The sensorimotor development of naturalistic looking behavior in infants. International Congress for Neuroethology. Brisbane, QLD. Poster.
- Borjon, J.I., Abney D.H., Yu C., Smith L.B. (2018, July). The sensorimotor development of naturalistic looking behavior in infants. International Congress of Infancy Studies. Philadelphia, PA. Poster.
- Borjon J.I., Takahashi D.Y., Cordero D.C., Ghazanfar, A.A. (2015, October). Cardiorespiratory dynamics of vocal production in marmoset monkeys. Society for Neuroscience Annual Meeting. Chicago, IL. Poster.
- **Borjon J.I.**, Takahashi D.Y. and Ghazanfar A.A. (2013, October) Vocal-respiratory coupling in marmoset monkeys. Society for Neuroscience Annual Meeting. San Diego, CA. Poster.
- Borjon J.I., Trubanova A., Shepherd S.V., Jones W., Klin A., Ghazanfar A.A. (2012, March). Socially contextualized multisensory integration processing in autism. International Meeting for Autism Research. Toronto, ON. Poster.
- **Borjon J.I.**, Goursaud A.P., Jones W., Bachevalier J. (2011, May). Social monitoring in rhesus monkeys with lesions to either the amygdala, hippocampus, or orbitofrontal cortex. International Meeting for Autism Research. San Diego, CA. Talk.
- **Borjon J.I.**, Shepherd S.V., Jones W., Klin A., Ghazanfar A.A. (2011, May). The influence of perceived gaze cues on elementary sound perception in individuals with autism. International Meeting for Autism Research. San Diego, CA. Poster.
- **Borjon J.I.**, Shepherd S.V., Todorov A., Ghazanfar A.A. (2010, October). Social cues influence elementary sound perception. Social and Affective Neuroscience Society Annual Meeting. Chicago, IL. Poster.
- **Borjon J.I.**, Shepherd S.V., Todorov A., Ghazanfar A.A. (2010, May). Observed eye gaze influences elementary sound perception. Princeton University Undergraduate Research Symposium. Princeton, NJ. Poster.

#### ACADEMIC HONORS AND AWARDS

Sigma Xi Scientific Research Society Edward E. Jones Memorial Senior Thesis Prize, Dept. of Psychology, Princeton University	2010 2010
3rd Place Undergraduate Research Symposium, Princeton University	2010
Class Day Student Speaker, Dept. of Psychology, Princeton University	2010
The Frank A. Petito, Class of 1936 Scholarship, Princeton University	2009 - 2010
The Howard Crosby Warren Scholarship, Princeton University	2008 - 2010
Early Concentration, Dept. of Psychology, Princeton University	2008
Outstanding Work by a Sophomore (Fiction), Peter B. Lewis Center for the Arts, Princeton University	2008
The Class of 1916 National Scholarship, Princeton University	2007 - 2008
The Kenneth Sawyer Goodman War Memorial Scholarship, Princeton University	2007 - 2008
Walter E. Hope Class of 1901 Memorial Freshman Debate, Finalist, Princeton University	2007
The Edward Franklin Pelton Memorial Scholarship, Princeton University	2006 - 2007
The Class of 1898 Scholarship, Princeton University	2006 - 2007

#### **SERVICE**

Vice-President, Association of Latino Princeton Alumni	2020 -
Mentor, Office of the Vice President for Diversity, Equity, and Multicultural Affairs, Indiana University	2018 –
Board Member, Association of Latino Princeton Alumni	2017 –
Treasurer, Association of Latino Princeton Alumni	2018 - 2020

Updated 08/15/2021 3

President, Latino Graduate Student Association, Princeton University	2015 - 2016
ReMatch Graduate Mentor, Office of Undergraduate Research, Princeton University	2015 - 2016
Graduate Representative, Hidden Minority Council, Princeton University	2015 - 2016
Outreach Chair, Latino Graduate Student Association, Princeton University	2014 - 2015
Graduate Representative, Dept. of Psychology, Princeton University	2012 - 2015

## AD HOC REVIEWING

ACADEMIC JOURNALS

Developmental Science, Child Development, Animal Cognition, Behavioural Processes

GRANTS

Society for Research in Child Development Small Grants Program for Early Career Scholars (2021)

#### **MENTORING**

Brittany Alberts, Undergraduate Research Assistant at Indiana University - Currently a Program Coordinator at the University of Pittsburgh	2019 – 2021
<ul> <li>Manash "Kal" Sahoo, Undergraduate Research Assistant at Indiana University</li> <li>Advanced Summer Research Scholar, Indiana University</li> <li>J.R. Kantor Prize in Psychology, Indiana University</li> <li>Currently a Simons Fellow in Computational Neuroscience at Emory University</li> </ul>	2019 – 2021
Olivia G. Nystrom, Undergraduate Research Assistant at Indiana University  - Hutton Honors College Undergraduate Research Partner, Indiana University  - Emerging Areas of Research Undergraduate Research Scholar, Indiana University	2019 – 2020
Ellis S. Cain, Undergraduate Research Assistant at Indiana University - Currently a graduate student at the University of California, Merced	2020
Danielle P. Maulucci, Undergraduate Capstone Research Assistant at Indiana University - Currently a Research Technician at the Indiana University School of Medicine	2018 – 2020
Abir Ouzzine, Undergraduate Capstone Research Assistant at Indiana University - Currently a post-baccalaureate medical student at Indiana University, Purdue University, Indianapolis	2018 – 2020
Linnan Li, Undergraduate Research Assistant at Indiana University - Currently a Master's student in Health Informatics at Northeastern University	2017 – 2019
Zimeng Liu, Undergraduate Research Assistant at Indiana University - Currently a Master's student in Communication and Education at Columbia University	2017 – 2018
A.J. Sermarini, ReMatch Undergraduate Research Mentee at Princeton University - Currently a medical student at the Vanderbilt University School of Medicine	2016 – 2017

## PROFESSIONAL MEMBERSHIPS

Society for Research in Child Development International Congress of Infant Studies International Society for Neuroethology National Postdoctoral Association

Society for the Advancement of Native Americans and Chicanos in Science

## **SKILLS**

MATLAB computer programming for data analysis, R Programming Language, Python, SQL, SPSS/PASW, Presentation, Adobe Creative Suite, Apple Final Cut Pro, Microsoft Office

## **LANGUAGES**

Fluent in English and Spanish

Updated 08/15/2021 4