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EDUCATION

- 2013 **Ph.D., Neuroscience**
Georgetown University (Washington, D.C.)
- 2008 **B.S., Biology** (*summa cum laude*)
Saint Joseph's University (Philadelphia, P.A.)

PROFESSIONAL APPOINTMENTS

- 2018-Present **Dominican University**
Assistant Professor
Psychology Department
- 2016-2017 **California State University Channel Islands**
Lecturer
Department of Psychology
- 2014-2016 **University of Southern California**
Postdoctoral Scholar-Research Associate
Laboratory of Neuro Imaging
USC Mark and Mary Stevens Neuroimaging and Informatics Institute
- 2013-2014 **Georgetown University**
Post-Doctoral Fellow
Center for the Study of Learning
Department of Pediatrics

PUBLICATIONS

Peer Reviewed Journal Articles

Danylkiv, A.*, and **Krafnick A.J.** (2020) A meta-analysis of gray matter differences between bilinguals and monolinguals. *Frontiers in Human Neuroscience*, 14:146.

Krafnick, A.J., and Evans, T.M. (2019) Neurobiological Sex Differences in Developmental Dyslexia. *Frontiers in Psychology*, 9:2669.

Krafnick, A.J., Tan, L-H, Flowers, D.L., Luetje, M.M., Napoliello, E.M., Siok, W-T, Perfetti, C.A., and Eden, G.F. (2016) Chinese Character and English Word processing in children's ventral occipitotemporal cortex: fMRI evidence for script invariance. *NeuroImage*, 133: 302-312.

Krafnick, A.J., Flowers, D.L., Luetje, M.M., Napoliello, E.M., and Eden, G.F. (2014) An investigation into the origin of anatomical differences in dyslexia. *The Journal of Neuroscience*, 34 (3): 901-908.

Ullrich, L.E., **Krafnick, A.J.**, Dumanis, S.B., and Forcelli, P.A. (2012) Drugs, the Brain, and Behavior: A Graduate Student-Run Comprehensive Course in Neuroscience. *The Journal of Undergraduate Neuroscience Education*, 10 (2): A105-A112.

Krafnick, A.J., Flowers, D.L., Napoliello, E.M., and Eden, G.F. (2011) Gray matter volume changes following reading intervention in dyslexic children. *NeuroImage*, 57 (3): 733-741.

McElrone, A.J., Hamilton, J.G., **Krafnick, A.J.**, Aldea, M., Knepp, R.G., and Delucia, E.H. (2010) Combined effects of elevated CO₂ and natural climatic variation on leaf spot diseases of redbud and sweetgum trees. *Environmental Pollution*, 158 (1): 108-114.

Peer Reviewed Provisional Acceptance (Stage 1 Pre-registration)

Hall, B., Wagge, J., Gerit, P., Stieger, S., Vergauwe, E., Ijzerman, H., Musser, E., Schmidt, K., Weissgerber, S., Buchanan, E., Sau-Chin, C., Werner, K., Field, A., Meijer, E., Andreychik, M., Storage, D., Voracek, M., Tran, U., Hartanto, A., Schild, C., Cramblet Alvarez, L., Henderson, E., Cova, F., Nusbaum, A., Barzykowski, K., Szecsi, P., Kaminski, G., Legate, N., **Krafnick, A.**, Lamb, C.*, Özdoğru, A., Baltres, C., Schulte-Mecklenbeck, M., Mathis, N., Weisberg, Y., Dranseika, V., Arnal, J., Haeffel, G., Evans, T., Lee, T.H.S., Tkalic, A., Fallon, M., Solas, S., Li, M., Levitan, C., Godkin, N., Sampaio, W., Pernerstorfer, F., Warne, R., Wiggins, B., Kabut, R., Kovacs, M., Dunleavy, D., Brandt, M., Chartier, C., Grahe, J. Registered Replication Report: Turri, Buckwalter, & Blouw (2015). *Advances in Methods and Practices in Psychological Science*

* = Dominican Student

Book Chapters

Guinevere F. Eden, Olumide A. Olulade, Tanya M. Evans, **Anthony J. Krafnick**, and Diana R. Alkire. (2015) Developmental Dyslexia. In Hickok, G. and Small S., editors. *Neurobiology of Language*, pp. 815-826. Academic Press: Elsevier.

Guinevere F. Eden, Olumide A. Olulade, Tanya M. Evans, **Anthony J. Krafnick**, and Diana R. Alkire. (2015) Imaging Studies of Reading and Reading Disability. In Arthur W. Toga, editor. *Brain Mapping: An Encyclopedic Reference*, vol. 3, pp. 571-578. Academic Press: Elsevier.

Manuscripts in Preparation

Danylkiv, A., **Krafnick, A.J.** Meta-analysis of task switching fMRI studies in monolinguals and bilinguals.

Krafnick, A.J., Napoliello, E.M., and Eden, G.F. Sex differences in response to intervention in dyslexia.

Krafnick, A.J., Evans, T.M. Sex and genotype effects in dyslexia risk gene DYX1C1.

Barakat, R., **Krafnick, A.J.**, Chau, S., Lynch, K., McGregor, H., Orozco, M., Manis, F., Zevin, J., and Clark, K. An Adaptive Behavioral Paradigm for Assessing Orthographic and Phonological Processing in Children with Dyslexia.

TEACHING EXPERIENCE

Dominican University

Instructor

PSYC/NEUR/NSC 105	Introduction to Neuroscience
PSYC 290	Behavioral Research and Stats I
PSYC 291	Behavioral Research and Stats II
PSYC 372L/NEUR 272L	Behavioral Neuroscience Lab
PSYC 393	Learning and Memory
PSYC 394	Neuropsychology of Language
PSYC 440	History and Systems of Psychology

Undergraduate Student Research Mentorship

Anastasiya Danylkiv (2019-2020)

Meta-analysis of Neuroimaging Studies in Bilinguals
Independent Research

Esmeralda Mariscal (2018-2019)

Distinguishing Between False Memory and False Belief
Capstone Project

Colleen Lamb/Josslyn Baron (2018-2020)
Accelerated CREP Replication of Turri et al. (2015)
Independent Research

Other student research experiences via PSYC/NEUR 495 Independent Research: Julissa Esquivel & Katelyn Flayter

California State University Channel Islands

Instructor

PSY 346 Human Motivation

PSY 310 History & Systems of Psychology

PSY 314 Behavioral Neuroscience

Training

2017 Blended Learning Preparation Program
Course redesign for blended/hybrid (half in-person/half online) format

University of Southern California

Director (Informal/Non-Credit)

CANDL Journal Club (undergraduates, graduate students, medical students)

Individual Class Lectures

Fall 2015 Fundamentals of Human Neuroimaging (master's students)
'Seminal Papers in Structural Neuroimaging', 'Task-based fMRI'

Spring 2015 Cognitive Development in Children (graduate students)
'Connectivity and Reading Development'

Fall 2014 Advanced Neuroscience (graduate students)
'Neuroanatomy to Connectomics'

Mentorship

Phoebe Cohen (high school student)

Musical ability and Asperger's syndrome genes with cortical thickness
Intel Science Talent Search Student Initiative Award Recipient

Omeed Alipour (medical student)

ADHD genes and cortical thickness
Student project for medical school requirement

Kevin Hsu (medical student)

Tourette's genes and cortical thickness

Student project for medical school requirement
Selected for USC Medical Student Research Presentation

Georgetown University

Co-Director

2010-2012 Drugs, the Brain, and Behavior I (undergraduates, master's students)
Fall Semester 2010-2012

2011-2012 Drugs, the Brain, and Behavior II (undergraduates, master's students)
Spring Semester 2011-2012

Individual Class Lectures

2013 Drugs, the Brain, and Behavior II (undergraduates, master's students)
'Multiple Sclerosis', 'Language'

2009-2012 IPN Summer Course (graduate students)
'Sensory Systems'
Summer Session 2009-2012

2010 Diseases and Disorders of the Brain (undergraduates)
'Multiple Sclerosis', 'Cerebellum'

2009 Diseases and Disorders of the Brain (undergraduates)
'Major Depressive Disorder', 'Language Development'

Mentorship

2009-2013 Student Mentor, Interdisciplinary Program in Neuroscience
Kyle Shattuck, Ted Turesky, Megan Allen, Caitlin Taylor

OTHER RESEARCH EXPERIENCE

2016 Research Consultant, Georgetown University (Washington, DC)
2006-2008 Student Researcher, Saint Joseph's University (Philadelphia, PA)

AWARDS AND HONORS

Dominican University Grants

Spring 2020 Faculty Development Special Support Grant
Dominican University
COVID-19 Studies

Spring 2020 Faculty Development Publication Assistance Grant
Dominican University

Frontiers in Human Neuroscience Brief Report (Danylkiv & Krafnick, 2020)

Spring 2019 Faculty Development Special Support Grant
Dominican University
Organization for Human Brain Mapping conference presentation support

Fall 2018 Academic Technology and Facilities Grant
Dominican University
Funding for two perpetual Matlab licenses for research

Teaching

2020-2021 Title V Faculty Learning Community (Part of Psychology Department team proposal)
2018-2019 Title V Faculty Fellowship and Learning Community on Responsive Teaching

Scholarships and Academic Awards

2008-2013 Georgetown University Merit Scholarship
2008 Saint Joseph's University Biology Award
2004-2008 Saint Joseph's University Presidential Scholarship
2006 Saint Joseph's University Summer Scholar

Honors Societies

Inducted 2019 Psi Chi
Inducted 2008 Phi Beta Kappa
Inducted 2006 Alpha Epsilon Delta
Inducted 2005 National Society for Collegiate Scholars

INVITED & INTERNAL TALKS

November 2020 Dominican University (River Forest, IL) Faculty Development Seminar Series
'Reading and the Brain: Genetics, Sex, and Environmental Influence'

February 2017 Dominican University (River Forest, IL) Department of Psychology
'The Origin of Anatomical Differences in Developmental Dyslexia'

May 2016 State University of New York at Oswego (Oswego, NY) Department of Psychology
'Chinese Character and English Word processing in children's ventral occipitotemporal cortex: fMRI evidence for script invariance'

December 2015 Saint Joseph's University (Philadelphia, PA) Biology Department Seminar Series
'Effect of risk genes on cortical thickness in neurodevelopmental disorders'

CONFERENCE ACTIVITY

Abstracts-Posters

Danylkiv, A.*, and **Krafnick, A.J.** A Systematic Review and Meta-Analysis of Brain Differences in Bilingual and Multilingual Adults. Society for Neuroscience Abstract 8689, 2019. (Chicago, IL)

Krafnick, A.J., and Evans, T. Sex and *DYX1C1* genotype effects on pediatric cortical thickness and surface area. Organization for Human Brain Mapping Abstract 2336, 2019. (Rome, Italy)

Barakat, R., Gonzalez, S., Rajan, M., Azad, A., **Krafnick, A.J.**, Orozco, M., McGregor, H., Zevin, J., Manis, F., and Clark, K. Examining the role of Discrepant IQ and Reading Ability in Reading Network Activation. Organization for Human Brain Mapping Abstract T286, 2019. (Rome, Italy)

Barakat, R., Gonzalez, S., Rajan, M., Azad, A., **Krafnick, A.J.**, Orozco, M., McGregor, H., Zevin, J., Manis, F., and Clark, K. Examining the role of Discrepant IQ and Reading Ability in left hemisphere Reading Network Activation. Cognitive Neuroscience Society Annual Meeting Poster D56, 2019. (San Francisco, CA)

Krafnick, A.J. Behavior, sex, and the brain: relationships with dyslexia risk gene *DYX1C1*. Society for Neuroscience Abstract 695.06, 2018. (San Diego, CA)

Barakat, R., **Krafnick, A.J.**, Chau, S., Lynch, K., Orozco, M., McGregor, H., Yared, S., Zevlin, J., Manis, F., and Clark, K. Characterizing Functional Reading Networks in Children with Dyslexia. Organization for Human Brain Mapping Abstract 2094, 2018. (Singapore)

Tsu, T.K., **Krafnick, A.J.**, Toga, A.W., and Clark, K.A. Influence of Tourette Syndrome associated SNP on cortical thickness and behavior in children and young adults. Society for Neuroscience Abstract, 2016. (San Diego, CA)

Krafnick, A.J., Lynch, K.M., Holland, S.K., Toga, A.W., and Clark, K.A. Functional and structural relationship of left posterior temporal lobe with age. Organization for Human Brain Mapping Abstract 3639, 2016. (Geneva, Switzerland)

Krafnick, A.J., Rinker, D.A., Brown, T.T., Toga, A.W., Thompson, P.M., and Clark, K.A. Effect of ADHD candidate risk SNPs on cortical thickness in typical children and young adults. Society for Neuroscience Abstract 172.13, 2015. (Chicago, IL)

Krafnick, A.J., González-Zacarias, C., Toga, A.W., and Clark, K.A. Hemispheric differences in the heritability of cortical thickness and cortical surface area. Organization for Human Brain Mapping Abstract 3431, 2015. (Honolulu, HI)

González-Zacarias, C., **Krafnick, A.J.**, Toga, A.W., and Clark, K.A. Comparison of Mathematical Models of Heritability of Cortical Thickness. Organization for Human Brain Mapping Abstract 3423, 2015. (Honolulu, HI)

Mann, D., **Krafnick, A.**, Shaw, S., Chu Jr., R., Aisen, M., Hazany, S., and Clark, K. Longitudinal cortical changes with motor rehabilitation in hemispherectomy patients. Organization for Human Brain Mapping Abstract 3338, 2015. (Honolulu, HI)

Krafnick, A.J., Flowers, D.L., Luetje, M.M., Napoliello, E.M., and Eden, G.F. Age- and reading level-matched VBM comparison of dyslexic children and typical readers. Organization for Human Brain Mapping Abstract 1089, 2013. (Seattle, WA)

Krafnick, A.J., Tan, L.H., Luetje, M., Napoliello, E.M., and Eden, G.F. Brain basis of Chinese character and English word reading in children. Society for Neuroscience Abstract 906.09, 2012. (New Orleans, LA)

Forcelli, P.A., Connor, T., Dumanis, S.B., Evans, T.M., **Krafnick, A.J.**, Smirnov, M., Ullrich, L., and Gale, K. Teaching as a “want-to” rather than a “have-to”. Society for Neuroscience Theme H Abstract 25.16SU, 2012. (New Orleans, LA)

Krafnick, A.J., Luetje, M., Napoliello, E.M., Flowers, D.L., Tan, L.H., and Eden, G.F. English word, Chinese character and object processing in young English speaking children. Organization for Human Brain Mapping Abstract 7323, 2012. (Beijing, China)

Krafnick, A.J., Dumanis, S.B., Ullrich, L., and Forcelli, P.A. Learning to teach through teaching neuroscience: Coordinating team taught courses. Society for Neuroscience Theme H Abstract 25.02, 2011. (Washington, DC)

Forcelli, P.A., **Krafnick, A.J.**, Dumanis, S.B., Connor, T., Pepe, L., Smirnov, M., and Ullrich, L. Learning to teach through teaching neuroscience: encouraging pedagogical awareness. Society for Neuroscience Theme H Abstract 25.03, 2011. (Washington, DC)

Ullrich, L., Forcelli, P.A., **Krafnick, A.J.**, and Dumanis, S.B. Learning to teach through teaching neuroscience: Developing scientific literacy. Society for Neuroscience Theme H Abstract 25.01, 2011. (Washington, DC)

Krafnick, A.J., Flowers, D.L., Napoliello, E.M., Wall, A.E., and Eden G.F. A longitudinal study of gray matter volume changes after reading intervention in dyslexic children. Organization for Human Brain Mapping Abstract 3488, 2010. (Barcelona, Spain)

* = Dominican Student

SERVICE TO PROFESSION

Journal Review Board

Frontiers in Psychology/Frontiers in Communication-Language Sciences Section
Journal of Undergraduate Neuroscience Education

Journal *ad-hoc* Reviewer

Brain Imaging and Behavior
Brain and Language
Brain Research
Brain Topography
Cerebral Cortex
Dyslexia
Frontiers in Human Neuroscience
Neuropsychologia

Conference Abstract *ad-hoc* Reviewer

Organization for Human Brain Mapping

Grant Review

2021	National Science Foundation Panelist
2020	National Science Foundation Panelist
2019	National Science Foundation Panelist
2018	National Science Foundation Panelist
2016	National Science Foundation Panelist

Textbook Review

Pearson Revel

DEPARTMENTAL/COLLEGE/UNIVERSITY SERVICE

Dominican University

2020-Present	Core Curriculum Committee STEM representative Chair of Foundations Governing Council
2020-Present	Academic Technology and Facilities Committee At-large Seat
Summer 2020	Summer Task Force-Distance Learning Template Canvas Course Team
2020-2021	Social Work Faculty Search Committee External Member
2020-Present	Faculty Evaluation Task Force
2019-Present	Caritas Veritas Planning Committee

- 2019-Present URSCI Subcommittee of the Committee on Higher Impact Practices (HIP)
- Summer 2019 Core Summer Working Group
- 2018-2020 RCAS Committee on Curriculum and Educational Policies (CCEP),
Humanities and Social Sciences Representative
- 2018-2020 Core Review Subcommittee
Spring 2020: Chair of Foundations Governing Council

Georgetown University

- 2010-2013 Executive Committee Student Representative, Interdisciplinary Program in Neuroscience
- 2009-2013 Coach/Captain of Myoclonic Jerks Softball Team, Interdisciplinary Program in Neuroscience
- 2010-2012 Interdisciplinary Program in Neuroscience Student President
- 2008-2010 Admissions Committee Student Representative, Interdisciplinary Program in Neuroscience

COMMUNITY OUTREACH

Educational Outreach

- 2012 Georgetown University Brain Awareness Week (elementary school students)
- 2009 Guest talk on brain anatomy to AP Psychology high school students at The School Without Walls in Washington, DC.

CURRENT AND FORMER PROFESSIONAL MEMBERSHIPS

Society for Neuroscience
 Organization for Human Brain Mapping
 Faculty for Undergraduate Neuroscience
 Society for the Neurobiology of Language
 International Society for Integrative Developmental Cognitive Neuroscience
 Midwestern Psychological Association