

Curriculum Vitae

Andrew S. Welleford

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Lexington, KY 40502

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Education

University of Kentucky College of Medicine, MD-PhD Program

PhD, Neuroscience - Anticipated 2019

MD - Anticipated 2021

Graduate Certificate in Anatomical Sciences Instruction - 2018

Graduate Certificate in Neuroscience Instruction - 2018

University of Kentucky

BS in Chemistry, BS in Biology, Minor in Neuroscience, Graduate of the UK Honors Program with Departmental Honors in Chemistry and Biology, *magna cum laude* - 2013

Awards and Honors

Travel Award, American Society for Neural Therapy and Repair - 2018

“Neuroscience 2017 *Hot Topic*”, Society for Neuroscience Annual Meeting - 2017

2nd Place, University of Kentucky 3-Minute Thesis Competition - 2016

University of Kentucky College of Medicine Scholarship – 2013, 2014

Dr. Hume and Ellen Towle Bedford Scholarship – 2012

Thomas B. Nantz Memorial Tuition Scholarship – 2011

Department of Chemistry Scholarship – 2010

Freshman Chemistry Award – 2009

University of Kentucky Academic Excellence Scholarship – 2009

Dean's List – various semesters, 2008-2013

Professional Experience

Graduate Research Assistant for Gerhardt Lab

University of Kentucky Department of Neuroscience, Aug 2015-Present

Graduate Teaching Assistant for Anatomy and Physiology I & II

University of Kentucky Department of Neuroscience, Aug 2015-Present

Graduate Teaching Assistant for Graduate Neuroscience

University of Kentucky Department of Neuroscience, Aug 2017-Dec 2017

Undergraduate Research Assistant for Butterfield Lab

University of Kentucky Department of Chemistry, May 2012 – July 2013

Research Experience and Collaborations

Sural Nerve Autograft in Combination with Deep Brain Stimulation Surgery for the Treatment of Parkinson's Disease

PI: Greg Gerhardt, PhD

A Modular, Adaptable, and Self-Contained Neuroscience Curriculum for Elementary School Students

PI: Amy Hessler, DO

Alpha-Synuclein Seeding Activity from Parkinson's and Multi-System Atrophy Brain Extracts

PI: Tritia Yamasaki, MD, PhD

Multimodal Review Sessions for Undergraduate Anatomy Education

PI: Kristen Platt, PhD

Lifestyle Factors in Alzheimer's Disease Progression

PI: Gregory Jicha, MD, PhD

Chemical Markers for Oxidative Stress in Alzheimer's Disease

PI: D. Allan Butterfield, PhD

Publications

Craig G. van Horne, MD, PhD, Jorge E. Quintero, PhD, John T. Slevin, MD, MBA, Amelia Anderson-Mooney, PhD, Julie A. Gurwell, PA-C, PhD, **Andrew S. Welleford**, BS, John R. Lamm, MD, Renee P. Wagner, RN, and Greg A. Gerhardt, PhD. "Peripheral nerve grafts implanted into the substantia nigra in patients with Parkinson's disease during DBS surgery: one year follow-up of safety, feasibility, and clinical outcome." *Journal of Neurosurgery*. 2018 Feb 16:1-12

Platt, K.M., **Welleford, A.S.**, Naze, G.S. and Hatcher, A.R. "Embracing your Eureka Moments: Perspectives on Fostering Impactful and Innovative Teaching Styles." *Journal of Faculty Development*. 2017 Sep;31(3):87-94.

Sarah Förster; **Andrew S Welleford**; Judy C Triplett; Rukhsana Sultana; Brigitte Schmitz; David Allan Butterfield. "Increased O-GlcNAc levels correlate with decreased O-GlcNAcase levels in Alzheimer disease Brain." *Biochim Biophys Acta*. 2014 Sep;1842(9):1333-9. doi: 10.1016/j.bbadis.2014.05.014. Epub 2014 May 23.

Susan A. Farr; Michael L. Niehoff, Michael A. Ceddia, Kelli A. Herrlinger, Brandon J. Lewis, Shulin Feng, **Andrew Welleford**, D. Allan Butterfield, and John E. Morley. "Effect of botanical extracts containing carnosic acid or rosmarinic acid on learning and memory in SAMP8 mice." *Physiology & Behavior* 165 (2016): 328-338. doi: 10.1016/j.physbeh.2016.08.013

Oral Presentations

"RNA-seq and Histological Characterization of Human Peripheral Nerve Tissue for Use in Brain Grafts for the Treatment of Parkinson's Disease." American Society for Neural Therapy and Repair. April 28, 2018.

"Multimodal Review Sessions for Undergraduate Anatomy Education." American Association of Clinical Anatomists Annual Meeting. July 19, 2017.

"Embracing your Eureka Moments: Perspectives on Fostering Impactful and Innovative Teaching Styles." *Pedagogicon*. May 19th, 2017.

"Peripheral nerve grafts to the brain of patients with Parkinson's disease: Microscopic, biochemical, and immunohistochemical characterization." Neuroscience Departmental Seminar. March 2, 2017.

"Peripheral Nerve Autografts to the Substantia Nigra in Combination with Deep Brain Stimulation Surgery for the Treatment of Parkinson's Disease." *Anatomy and Neurobiology*

Departmental Seminar. April 28, 2016.

“Peripheral Nerve Autografts to the Substantia Nigra in Combination with Deep Brain Stimulation Surgery for the Treatment of Parkinson’s Disease.” Center for Clinical and Translational Research Fall Seminar, University of Kentucky. December 9, 2015.

“Chemical Markers for Oxidative Stress in Alzheimer’s Disease.” National Conference for Undergraduate Research. April 12, 2013.

Posters

A. S. Welleford, C. G. van Horne, J. E. Quintero, E. M. Blalock, J. A. Stanford, S. M. Shapiro, S. M. Riordan, G. A. Gerhardt. “RNA-seq and Histological Characterization of Human Peripheral Nerve Tissue Used in Brain Grafts for the Treatment of Parkinson’s Disease” University of Kentucky Center for Clinical and Translational Science Spring Conference. April 13, 2018.

Andrew S. Welleford, Craig G. van Horne, Jorge E. Quintero, Yi Ai, Greg A. Gerhardt. “Microscopic, biochemical, and immunohistochemical characterization of peripheral nerve tissue used in brain autografts for the treatment of Parkinson's disease.” American Physician-Scientist Annual Meeting, Chicago, IL. April 22, 2017

Andrew S. Welleford, Craig G. van Horne, Jorge E. Quintero, Yi Ai, Greg A. Gerhardt. “Peripheral Nerve Grafts to the Brain of Patients With Parkinson's Disease: Microscopic, Biochemical, and Immunohistochemical Characterization” University of Kentucky Center for Clinical and Translational Science Spring Conference. March 30, 2017.

Andrew S. Welleford, Craig G. van Horne, Jorge E. Quintero, Yi Ai, Greg A. Gerhardt. “Microscopic, biochemical, and immunohistochemical characterization of peripheral nerve tissue used in brain autografts for the treatment of Parkinson's disease.” Society for Neuroscience Annual Meeting, San Diego, CA. November 16, 2016

Andrew S. Welleford, Craig G. van Horne, Jorge E. Quintero, Yi Ai, Greg A. Gerhardt. “Peripheral Nerve Grafts to the Brain of Patients With Parkinson's Disease: Microscopic, Biochemical, and Immunohistochemical Characterization” University of Kentucky Center for Clinical and Translational Science Spring Conference. April 21, 2016.

Andrew S. Welleford, Craig G. van Horne, Jorge E. Quintero, John T. Slevin, Julie A. Gurwell, Greg A. Gerhardt. “Peripheral Nerve Autografts to the Substantia Nigra in Combination with Deep Brain Stimulation Surgery for the Treatment of Parkinson’s Disease.” AOA Student Research Day Symposium, Student Poster Session, University of Kentucky. February 4, 2016.

Keith Albrektson, Sarah Tarrant, Amanda Pursell, Dasha Kenlan, **Andrew Welleford** and Gregory Jicha. “An inverted U-shaped dose-response curve for aerobic exercise intensity associated with improved cognitive function in an elderly, community-dwelling cohort.” American Academy of Neurology Annual Meeting. April 23, 2015.

Dasha Kenlan, Sarah Tarrant, Amanda Pursell, **Andrew Welleford**, Keith Albrektson and Gregory Jicha. “Refined sugar intake is associated with lower cognitive performance across the cognitive

continuum but is not associated with preclinical cognitive decline in intact elderly subjects.” American Academy of Neurology Annual Meeting. April 23, 2015.

Andrew S. Welleford, Sarah D. Tarrant, Erin L. Abner, Keith R. Albrektson, Dasha E. Kenlan, Amanda B. Pursell, Andrew S. Welleford, Gregory A. Jicha. “Self-Report of Bio-Psycho-Social Function in Elders as a Predictor for Mild Cognitive Impairment.” AOA/MD/PhD Student Research Symposium, University of Kentucky. February 3, 2015.

Teaching Experience

Graduate Certificate in Anatomical Sciences Instruction

Graduate Certificate in Neuroscience Instruction

University of Kentucky, Anticipated 2018

Graduate Teaching Assistant for “Anatomy and Physiology for Pre-Nursing”

University of Kentucky Department of Neuroscience, Fall 2015-Present

Neuroscience Elementary K-2 Curriculum Design Group

University of Kentucky Chapter of Student Interest Group in Neurology, 2017-Present

Graduate Teaching Assistant for “Graduate Advanced Neuroscience”

University of Kentucky Department of Neuroscience, Fall 2017

Private Tutor for Organic Chemistry and Physics

Spring 2012, Summer 2012

ChemExcel Peer Leader

University of Kentucky Department of Chemistry, Fall 2009-Fall 2011

Lectures

Anatomy and Physiology I and II for Pre-Nursing

Pancreas

Adrenal

Thyroid

Blood

Neurons

Joints I and II

Graduate Advanced Neuroscience

Neurotransmitter Systems: Glutamate and GABA

Physician Assistant and Physical Therapist Gross Anatomy

Cranial Contents: Meninges and Vasculature

Abdominal Vasculature

Medical Neuroscience

Sensory Receptors

Extra-Curricular Activities

Student Interest Group in Neurology

Co-President, 2014-2015

Member, 2013-2015

Ultrasound Interest Group

Volunteer for Castlefest Ultrasound convention, 2014 and 2015

Member, 2013-2015

ChefMed

Co-President, 2014-2015

Member, 2013-2015

Service Experience

University of Kentucky Bicycle Advisory Committee

Member, 2014-Present

University of Kentucky MD-PhD Program Retreat Planning Committee

Member, 2015-2017

Mentorship Experience

Medical Student Mentor for Anatomy Mentor Program

University of Kentucky College of Medicine, Fall 2014

Big Sib/Little Sib Program

University of Kentucky College of Medicine, Fall 2014-2015

Professional Development

Conferences Attended:

American Society for Stereotactic and Functional Neurosurgery, Denver, CO - 2018

American Society for Neural Therapy and Repair, Clearwater, FL - 2018

Society for Neuroscience Annual Meeting, Washington, DC - 2017

American Association of Clinical Anatomists Annual Meeting, Minneapolis, MN - 2017

Pedagogicon, Richmond, KY - 2017

American Physician-Scientist Annual Meeting, Chicago, IL - 2017

Center for Clinical and Translational Research Meeting, Lexington, KY - 2017

International Neurogastronomy Symposium, Lexington, KY - 2016

Society for Neuroscience Annual Meeting, San Diego, CA - 2016

UK KNI Clinical-Translational Research Symposium - 2016

Center for Clinical and Translational Research Meeting, Lexington, KY - 2016

International Neurogastronomy Symposium, Lexington, KY - 2015

Society for Neuroscience Annual Meeting, Chicago, IL - 2015

National Conference for Undergraduate Research, La Crosse, WI - 2013

Workshops Attended

Designing Multimedia Instruction to Maximize Learning - Sep 12, 2017

Documenting Your Teaching Activities: Assembling a Teaching Portfolio - Oct 10, 2017

Professional Affiliations

Society for Neuroscience - 2015-present

American Physician-Scientist Association - 2017-Present

Hobbies, Interests, and Activities

Cooking, food science, rock climbing, yoga, cycling, trail running, and gardening

Placed in top three of age class in the following events:

UK Health and Wellness 5k – 2016

Susan B. Cox Tri for Sight, Triathlon – 2015

Susan B. Cox Tri for Sight, Duathlon – 2014

Ride Marshall for UK Tour de Art, a downtown bike tour of public art, 2015-Present

Founding organizer and member of Anatomy Club, a 12-member inter-professional series of workshops that fostered dialogue between medical students, yoga instructors, physical therapists, massage therapists, and other health and wellness professionals.