KAELA S. SINGLETON, PHD

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DEGREES	EARNED
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2014 - 2020	Doctor of Philosophy Interdisciplinary Program in Neuroscience, Georgetown University
2010 - 2014	Bachelor of Science Neuroscience & Classical History and Culture, Agnes Scott College
PROFESSIONAL E	EXPERIENCE
2024 - Present	Director of Grants Management , Cure Alzheimer's Fund Supervisor: Julie Harris, PhD
2023 - Present	President (and Co-founder), Black in Neuro
2023 – 2024	Campaign Manager, Solving for Science Supervisor: Kari Fischer, PhD
2020 – 2023	Postdoctoral Fellow, Department of Cell Biology Emory University School of Medicine Mentor: Victor Faundez, MD/PhD
2020 – 2022	Adjunct Professor , Department of Biology, Agnes Scott College, Chair: Jennifer F. Larimore, PhD
2014 – 2020	Graduate Student , Department of Biology Georgetown University, Mentor: Elena Silva, PhD
2012 – 2014	Undergraduate Research Assistant, Department of Physiology, Emory University, Mentor: Gretchen N. Neigh, PhD
2013 – 2014	Undergraduate Research Assistant , Department of Biology, Agnes Scott College, Mentor: Jenifer F. Larimore, PhD
2013 – 2014	Undergraduate Research Assistant , Department Psychology, Zoo Atlanta, Mentor: Bonnie M. Perdue, PhD
Summer 2013	Vanderbilt Summer Science Academy Fellow, Department of Physiology, Vanderbilt University, Mentor: Katherine Ellacott, PhD
Summer 2012	Behavioral & Behavior Fellow, Neuroscience Institute, Georgia State University, Mentor: Michael P. Black, PhD
FUNDING	
2021 – 2023	Postdoctoral Enrichment Program (PDEP), Burrough Wellcome Fund
2020 – 2021	Fellowship in Research and Science Teaching (FIRST) NIH, NIGMS, K12GM000680
2018 – 2023	Blueprint Diversity Specialized Predoctoral to Postdoctoral Advancement in Neuroscience (D-SPAN) Award NIH, NINDS, F99NS108539 K00NS108539
2016 – 2018	Training in Neural Injury and Plasticity (NIP) Center for Neural Injury & Regeneration NIH, NINDS, 5T32NS041218
2014 – 2015	Predoctoral Training in Integrative Neuroscience (PTIN) NIH, NINDS,5T32NS041231
2012 – 2014	Enhancing Undergraduates in Neuroscience Research Fellowship (ENDURE) NIH, NINDS 8R25NS080688-03, Sub-Award SP00010548

FELLOWSHIPS, HONORS & AWARDS

2022	30 under 30 in Science (Forbes Magazine)
2022	Allison Doupe Fellowship (McKnight Endowment Fund)
2021	NIH Loan Repayment Program, Pediatric Research (NINDS)
2021	Postdoctoral Enrichment Program Fellow (Burroughs Wellcome Fund)
2020	1,000 Inspiring Black Scientist, Rising Star (Cell Mentor)
2020	Trainee Spotlight (Department of Cell Biology, Emory University School of Medicine)
2020	100 More Inspiring Black Scientists, Rising Star (Cell Press)
2020	Outstanding Young Alumna (Agnes Scott College, Alumnae Board)
2019	Nominated Karen Gale Exceptional PhD Award (Georgetown University)
2018	Nominated Zukowska & Smulson Excellence in Thesis Research Award (Georgetown University Medical Center)
2018	Biomedical Graduate Education Award (Georgetown University)
2018	Carl Storm Minority Fellowship (Gordon Research Conference)
2018	MCGSO Travel Award (Georgetown University)
2017	Neuroscience Scholars Program Professional Development Award (Society for Neuroscience)
2017	3 rd Place, Poster Presentation (Scientista Symposium)
2016	Outstanding Teaching Fellow (Georgetown University)
2016	1 st Place, Molecular Biology Poster Presentation (Georgetown University)
2014	Lillian Dale Thomas Achievement Award (Agnes Scott College)
2013	Vanderbilt Summer Science Academy Fellowship (Vanderbilt University)
2012	Behavioral Research in Advancements in Neuroscience Fellowship (Georgia State University)
2012	Center for Behavioral Neuroscience Fellowship (Agnes Scott College & Georgia State University)
2011	Achievement Scholarship (Organization for Chinese Americans & Pacific Islanders)
2010	Generating Excellence in Math and Science Fellowship (Agnes Scott College)

PUBLICATIONS

Singleton, **KS**, Silva-Rodriguez, P, Cunningham, DD, Silva, EM. Xenopus Sox11 Partner Proteins and Functional Domains in Neurogenesis. Genes **2024**. [Link]

Zlatic SA, Werner E, Surapaneni V, Lee CE, Gokhale A, **Singleton KS**, Duong D, Crocker A, Gentile K, Middleton F, Dalloul JM, Liu WL, Patgirl A, Tarquinio D, Carpemter R, Faundez V. Systemic Metabolic and Mitochondrial Defects in Retty Syndrome Models. Human Molecular Genetics **2023** [Link]

Wynne M*, Lane AR*, **Singleton KS*** Zlatic S, Gokhale A, Werner E, Duong D, Kwong J, Crocker A, Faundez V. Heterogeneous Expression of Nuclear Encoded Mitochondrial Genes Distinguishes Inhibitory and Excitatory Neurons. eNeuro **2021** [Link] *authors contributed equally

Singleton KS, Murray DRK, Dukes AJ, Richardson LNS. A year in review: are DEI initiatives fixing systemic barriers? Neuron, NeroView **2021**. Invited Editorial [Link]

Singleton KS, Faundez VF. Robustness and Innovation Along the Endocytic Route: Lessons from Darkness. Journal Cell Biology. **2021**. [Link]

Singleton KS, Tesfaye R, Dominguez E, Dukes A. An Open Letter to past, current and future mentors of Black neuroscientist. Nature Reviews Neuroscience. **2020**. [Link] Invited Editorial

Lee CE, **Singleton KS**, Wallin M, Faundez VF. Rare Genetic Diseases, Nature's Experiment on Human Development. iScience **2020**. [Link]

Larimore J, Zlatic SA, Arnold M, **Singleton KS**, Cross R, Rudolph H, Bruegge MV, Sweetman A, Garza C, Whisnant E and Faundez V. Dysbindin Deficiency Modifies the Expression of GABA Neuron and Ion Permeation Transcripts in the Developing Hippocampus. *Front. Genet.* **2017** [Link]

Rudolph H., Cross RD., Segura L, **Singleton KS**., Larimore, J. Neuronal Endosomal Trafficking: One of the common molecular Pathways Disrupted in Autism Spectrum Disorders and Schizophrenia. Journal of Neurology and Psychology. **2016**. [Link]

Arnold M*, **Singleton KS***, Cross RD*, Chapleau D, Mullin AP, Rolle I, Moore C, Theibert A, Pozzo-Miller L, Faundez V, Larimore J. The Endosome Localized AGAP1 Modulates Spine Morphology Downstream of the Neurodevelopmental Disorder Factor Dysbindin. *Frontiers in Cellular Neuroscience*. **2016**. [Link] *Authors contributed equally

Kalidindi A, Kelly SD, **Singleton KS**, Guzman D, Merrill L, Willard SL, Shively CA, Neigh GN. Reduced marker of vascularization in the anterior hippocampus in a female monkey model of depression. *Physiol Behav.* **2016.** [Link]

Larimore J, Zlatic SA, Gokhale A, Tornieri K, **Singleton KS**, Mullin AP, Tang J, Talbot K, Faundez V. Mutations in the BLOC-1 Subunits Dysbindin and Muted Generate Divergent and Dosage-Dependent Phenotypes. *J Biol Chem.* **2014.** [Link]

INVITED SEMINARS

From bench to non-profits: Neuroscience PhD as a tool for Success, Georgia State University, Women Lead Organization, 2023

Systems Biology and -omics Approaches to Neurodevelopmental Disorders, University of Georgia, Department of Biology, 2022

Keynote, Systems Biology: a holistic approach to early career training and neurodevelopment disorders, Fralin Biomedical Research Institute at Virginia Tech, 2022

Cellular and Molecular Mechanisms in Neural Development and Neurodevelopmental disorders. Middlebury College, Program in Neuroscience, 2021

Keynote, A Systems Biology Approach to professional development and neurodevelopmental disorders, Georgetown University, Medical Center Graduate Student Organization Student Research Day, 2021

Systems Biology approach to neurodevelopmental disorders. University of Massachusetts Lowell, Biology Department 2021

Systems Biology approach to cellular and molecular phenotypes in neurodevelopmental disorders Oberlin College, Neuroscience Department, 2021

Understanding Copper Regulation in Pediatric Neurodegeneration. Wellesley College, Neuroscience Department, 2021

Mitochondria Dynamics & Metabolic Mapping of Menkes Disease. Department of Genome Sciences. University of Washington, 2021

Systems Biology Approach to Neuron Formation. UC San Diego, Graduate Diversity and Science Lecture Series, 2021

Distinguished Lecture, Control of Neuron Formation in Neurodevelopmental & Neurodegenerative Disorders. Bay Path University 2021

Understanding Copper Regulation in Neurodegeneration. Morehouse College, Department of Biology, 2021

Mitophagy in Menkes Disease. University of Washington, Department of Biology, 2021

Menkes Disease: Mediating Copper Homeostasis in the developing brain. Georgia State University Neuroscience Institute, 2021

Defining Neuronal and Professional Identity using systems biology and principles of Equity Diversity and Inclusion. Department of Biological Sciences at Columbia University, 2020

Mitochondria Integrity & Localization in Menkes disease. Tulane University, BRAIN Institute, 2020

Molecular Signals & Cellular Events in Neural Development. University of Oregon, Department of Biology, 2020

Mismatched Sox: Sox11 Regulation and Function across species. Emory University, Cell Biology, 2018

Knocking your Sox off: Disruption of Sox11 function in embryogenesis. Agnes Scott College, Department of Biology, 2018

CONFERENCE PRESENTATIONS

Poster Presentation, Mitochondria Integrity and Localization in Menkes Disease. Burroughs Wellcome Fund Symposium, 2021

Selected Talk, Downstream Targets of Sox11 in Neural Development. Gordon Research Seminar Neural Development, 2018

Poster Presentation, Downstream Targets of Sox11 in Neural Development. Gordon Research Conference Neural Development, 2018

Selected Talk, Nanosymposium, Cross Species function and regulation of Sox11 in neural development. Society for Neuroscience; Nanosymposium #448: Neuronal Differentiation Mechanisms, Abstract #5813, 2017

Poster Presentation, Pairing your Sox: Cross species function of Sox11 in neural development. Scientista Symposium, 2017

Selected Talk, Pairing your Sox: Cross species function of Sox11 in neural development. Mid-Atlantic Society for Developmental Biology, Nanosymosium 2017

Poster Presentation, Function and Post-Translational Modifications of Sox11 in neural development. Society for Neuroscience DCMA Chapter Symposium, 2017

Poster Presentation, Post-transcriptional Regulation of Sox11 in Neural Development. Diversity Poster Session, Society for Neuroscience, 2017

Poster Presentation, Matching your Sox: Cross species functional analysis of Sox11 during Neural Development. Mid-Atlantic Society for Developmental Biology, 2016

Invited Seminar, Sox11 aids Differentiation in Multiple Systems. National Institute of Health, Zebrafish Frog Integrative Group, 2016

Selected Talk, Pairing your Sox: Regulation of Sox11 in Neurodevelopment. Georgetown University Student Research Day, 2016

Poster Presentation, The Role of Endosomal Trafficking in Rett Syndrome. Agnes Scott College Spring Annual Research Symposium, 2014

Oral Presentation, The Tragic Medical Woman: A manipulation of Greek ideals and medical concepts by Euripides. Agnes Scott College, Spring Annual Research Symposium, 2014

Poster Presentation, Self-Groom and Resting Behavior: The Effects of Weather on Red Kangaroos. Agnes Scott College Spring Annual Research Symposium, 2014

Oral Presentation, Reduced Vascularization of Anterior Hippocampus in a Female Monkey Model of Depression. BP-ENDURE Symposium, 2014

Poster Presentation, Expression of HIV-1 causes depressive-like behaviors and decreased cell proliferation in the dentate gyrus of adolescent female rats. BP-ENDURE Symposium, 2014

Oral Presentation, The Susceptibility of Tragic Women to Eros: A Commentary on Hippocratic Definition. Agnes Scott College, Spring Annual Research Symposium, 2013

Poster Presentation, The effects of acute and repeated cocaine administration on Procambrius clarkia. Diversity in Neuroscience Poster Session and Faculty for Undergraduate Neuroscience Research, 2012

TEACHING EXPERIENCE

2021 – 2022	Guest Lecturer, Icahn School of Medicine at Mount Sinani <u>Lectures:</u> Effective Science Communication, Science online: Mobilizing community via social media platforms
2020 – 2022	Adjunct Professor, Agnes Scott College, Department of Biology <u>Courses:</u> Integrative Biology Lab, Foundations in Neuroscience, Diseases of the Nervous System
2016 – 2017	Teaching Fellow , Georgetown University, Biology Department. <u>Course:</u> Foundations in Neural Development
2015 – 2017	Instructor , Georgetown University, Neuroscience Department, Graduate student course in the fundamentals of neuroscience. <u>Topics:</u> Neural Development, Spinal Cord and Brain Stem Anatomy, Autonomic and Homeostatic Control
2014 – 2016	Guest Lecturer , Georgetown University, Foundations in Developmental Neuroscience, Biology Department. <u>Lectures:</u> Neurogenesis, Synaptogenesis, Mechanisms of Neurodevelopmental Disorders

WORKSHOPS AND CERTIFICATES

Antiracist Pedagogy Across the Curriculum (St. Cloud State University), Building Antiracist Labs (Emory Office of Postdoctoral Education)

MANUSCRIPT REVIEWER

eNeuro, Journal of Neuroscience

SERVICE AND LEADERSHIP

2022	Speaker, "What does DEI mean to you?" Emory University, Biochemistry, Cell, and
	Developmental Biology Professional Development Workshop
2022	Speaker, PATHS Panel, LGBT+ in STEAM
2022	Panelist, "Black Queer Town Hall in STEMH" University of Iowa and UPenn
2022	Panelist, "Fix the Gap" 500 Women Scientist
2022	Panelist, "STEM Career Development Workshop" University of Vermont
2022	Speaker, "How to find a mentor" Building up the Nerve Podcast
2022	Committee Member, Society for Neuroscience Trainee Advisory Committee
2022	Panelist, "Out in STEM" Rockefeller University
2021	Speaker, "Transitioning to PostDoc," Grad Chat Podcast
2021	Speaker, "Creating Inclusive Environments in Neuroscience" Neurology and
2021	Neurosurgery Special Interest Group
2021	Panelist, "LGBTQ+ in Academia," My Fave Queer Chemist Podcast
2021	Panelist, "Career Perspectives in STEM," Neuroscience Program, Emory University
2021	Speaker, "Reflecting on Diversity, Equity & Inclusion," Neuroscience Program,
2021	Emory University
2021	Panelist, "Women in Neuroscience," UT Neuroscience Department and Dell Medical
2021	Neurology Department
2021	Panelist, "Diversity, Equity & Inclusion Panel," Georgia State University,
ZUZ I	Neuroscience Institute Retreat
2021	Speaker , "Crafting your Grad School Applications Workshop," Harvard University,
2021	McLean Mental Health Research Summer Program
2021	Speaker, "STEM Talks: Bold Conversations & The Importance of Representation in
	STEM" Society for Neuroscience

2021	Panelist, "Personal Experiences, Intersectionality, and Call to Action" University of Amsterdam
2021	Speaker, International Diversity Network's "Intersectionality within the LGBTQ+ Community" Series
2021	Speaker, "Science Night Keynote, Upper School Assembly Series" Germantown Friends School
2021	Panel, "Real Careers Have Curves" Columbia University
2021	Panel, "Growing Up in Science" University of Rochester [Link]
2021	Panel, "Current State of Diversity & Inclusion in Postdoctoral Population" National Postdoctoral Association [Link]
2021	Panel, "Mentors & Mocktails" Howard University's Out in Stem
2021	Panel, Black In Neuroscience: Advocating for yourself and others, Georgia State
2021	Neuroscience Diversity, Equity and Inclusion Committee
2021	Organizer , "Re-envisioning Postdoctoral Training in Neuroscience" National Academies of Sciences, Engineering, and Medicine's Action Collaborative
2021	on Neuroscience Training [Link]
2021	Speaker, "Building your Scientific Brand"
2021	Georgia State University, Neuroscience Institute.
2021	Speaker , "Effective Scientific Communication on Social Media" Icahn School of Medicine at Mt. Sinai, Friedman Brain Institute.
2021	Council Member, Atlanta Chapter of Society for Neuroscience. [Link]
2020	Panel, "Queer, Trans, Black, Indigenous, People of Color in STEM"
2020	Panel, "Queer and Trans in Neuro" NeuroMatch Conference [Link]
2020	Consultant, Diversity, Equity, and Inclusion Georgia State University
2020	Consultant, Diversity, Equity, and Inclusion Max Planck Institute
2020	Co-Founder & President-Elect Black In Neuro [Link]
2020	Member , National Academies of Sciences, Engineering, and Medicine's Action Collaborative on Neuroscience Training: Developing a Nimble and Versatile Workforce. [Link]
2020	Speaker, "Using Neuroscience to Foster a Sense of Belonging in STEM"
	International Society for Optics and Photonics.
2020	Panel, Agnes Scott College's Alumnae Career Panel
2020	Panel, National Academy of Science Engineering & Medicine "Workshop & Discussion on Racial Justice, Diversity, Equity, and Inclusion in Neuroscience." [Link]
2020	Panel , BlackInNeuro's "Grad Journey: Making the Most of Your Degree Experience Panel." [Link]
2019	Panel, "Pathways and Perspectives on Being a Researcher." NINDS Society for Neuroscience
2017 – 2019	Writer , Georgetown University's Career Catalyst. <u>Topics:</u> Receiving Strong letters of recommendation, choosing a PhD Program, succeeding in Graduate School, Crafting a Strong CV. [<u>Link</u>]
2017	Panel , Enhancing Neuroscience Diverse in Undergraduate Research Experience "Succeeding in Graduate School Panel", NINDS
2016	Panel, "Creating Balance: Women in Science and Technology" Washington DC International School
2016 – 2020	Member, Student Advisory Committee,
2014 – 2020	Interdisciplinary Program in Neuroscience Judge, Georgetown University's Junior Science & Humanities Symposium
2014 – 2020	Volunteer, Georgetown University's Brain Awareness Week
2014 – 2020	Peer Mentor, Interdisciplinary Program in Neuroscience
2013	Panel, Discovering Undergraduate Training Experiences Panel

2022	Orlando Science Center's SCOPE Magazine "Paving the Way for Diversity in STEM" [Link]
2023	Podcast Interview, Her Royal Science Podcast "Identity" [Link]
2022	GO Magazine "100 Women We Love" [Link]
2022	Forbes Magazine "30 under 30: Science"
2021	National Geographic TV "LGBTQIA+ Innovators in Science" [Link]
2021	Real Scientists "#BlackInNeuro Week 2021: Dr Kaela Singleton hosts Real Scientists" [Link]
2021	MedPage Today , by Amanda D'Ambrosio "#BlackInNeuro: How a Hashtag Forged Community for Black Scientists" [Link]
2021	Nature Medicine , by Rodrigo Pérez Ortega "Black scientists gather to form communities and boost diversity in science" [Link]
2021	Neuro Central, "Womxn to Watch Series" [Link]
2021	Young Scientists' Journal, "LGBTQ Spotlight" [Link Forthcoming]
2021	With a Science Degree, "Understanding Career Options" [Link]
2021	Chemical & Engineering News, "Pandemic Stress: The toll it's taking on students" [Link]
2020	Cell Mentor, "1,000 Inspiring Black Scientists" [Link]
2020	Society for Neuroscience's Neuronline , "Advice for Navigating Academia as a Black Woman" [Link]
2020	Scientist on the Subway Profile by Briana Chen. [Link]
2020	Nature Careers by Kendall Powell. "How LGBT+ scientists would like to be included and welcomed in STEM workplaces" [Link]
2020	Insider Higher ED by Colleen Flaherty. "Female academics saw their own experiences with #manterrupting in this week's vice presidential debate [Link]
2020	Trainee Spotlight by Emory University's Department of Cell Biology. [Link]
2020	Cell Press's "100 More Inspiring Black Scientists"[Link]
2020	Forbes by Nicole Fisher. "New #BlackInNeuro Campaign Connects Bright Minds from Around The World." [Link]
2020	The Onxy Agnes Scott College "Outstanding Young Alumna Spotlight." [Link]
2018	Student Spotlight Georgetown's Biomedical Gradute Education. [Link]