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CURRICULUM VITAE

Michelle Vieyra

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EDUCATION

2000 Bachelor of Science (Majors: Biology, Psychology, Sociology), Black Hills State University,
Spearfish, South Dakota. Graduated Summa Cum Laude.
2006 PhD (Biology) University of South Carolina, Columbia, South Carolina

PROFESSIONAL EXPERIENCE

2021 – present Director of the USCA Honors Program
2015- 2020 Coordinator of the USCA Critical Inquiry Program
2013-Present Associate Professor of Biology, Department of Biology and Geology, USC Aiken
2007-2013 Assistant Professor of Biology, Department of Biology and Geology, USC Aiken

CURRENT RESEARCH INTERESTS

Factors affecting nesting success in the Eastern Bluebird
Plagiarism in student scientific writing

COURSES TAUGHT AT USCA

Human Anatomy (ABIO 232)	Introductory Biology (ABIO 121)
Human Physiology (ABIO 242)	Critical Inquiry (AFCI 101)
Animal Behavior (BIOL 366)	Honors Interdisciplinary Studies (AHON 101)
Human Anatomy & Physiology I (BIOL 243)	Honors Colloquium - Processed Foods (HON 201)
Animal Nutrition (BIOL 365)	Honors Colloquium - Disease in History (HON 201)
Neurobiology (BIOL 367)	

UNIVERSITY SERVICE ACTIVITIES

2021-ongoing	Director of the USCA Honors Program
2023-present	System Faculty Leadership Committee
2023-present	First Year Experience Committee
2023-ongoing	Public Health Search Committee
2023 (spring)	Anatomy and Physiology Lecturer Search, Chair
2021-ongoing	WI Steering Committee
2020-2023	Faculty Advisory Committee, Co-chair 2022-2023
2020-2022	Academic Services Committee
2015- 2021	Faculty Advisor – Animal Health Club
2013- ongoing	Honors Steering Committee
2011- ongoing	Department of Bio and Geo Recruitment and Retention Committee. Chair 2011-2013
2011- ongoing	Department of Biology and Geology Assessment Committee
2020	Planning Taskforce – Finances Subcommittee
2017-2020	Faculty Grievance Committee
2017-2020	Campus Life Committee
2015 – 2020	Critical Inquiry Program Coordinator
2007- 2020	First-Year Experience/ CI Planning Committee, Chair 2015-2020
2013- 2016	General Education Committee, Co-Chair 2014/2015 & 2015/2016
2014-2015	Department of Biology and Geology Instructor Search Committee, Chair
2014-2015	School of Nursing Dean Search
2014-2015	Healthy 4 Life Task Force Member
2014-2015	BIS Program Assessment Subcommittee
2014- 2016	Writing Proficiency Portfolio Advisory Committee
2013-2015	Interdisciplinary Studies Advisory Committee
2011-2014	Faculty Welfare Committee. Chair 2013/2014
2011-2015	NSF C-NERVE Steering Committee, Co-director 2013/2014
2010- 2015	Judicial Procedures Advisor's Pool
2009- 2014	Savannah River Regional Science Fair Scientific Review Committee
2008- 2014	Judge for the Savannah River Regional Science and Engineering Fair. Aiken, SC.

PUBLICATIONS

*Godfrey, A., *Owens, E., *Schreiber, Q. & **Vieyra, M.** 2024. A triumph of conservation: The University of South Carolina Aiken's Bluebird Trail. Journal of the South Carolina Academy of Science (In review)

Vieyra, M. & Weaver, K. 2023. Exploring Factors Contributing to Plagiarism as Students Enter STEM Higher Education Classrooms. Issues in Science and Technology Librarianship, 102.

*Ross-Simmons, S. D., **Vieyra, M. L.**, Jain, A., & Weed, K. 2017. The Effects of Sports Related Head Impact on Balance and Neurocognitive Functions. Journal of the South Carolina Academy of Science, 15(2), 2.

Vieyra, M., & Weaver, K. 2016. The prevalence and quality of source attribution in middle and high school science papers. *Issues in Science and Technology Librarianship*, 83.

*Urquiza, S., **Vieyra, M.** 2015. Assessing the Synergistic Effect of Caffeine and Sugar on Cognitive Performance in Undergraduate Students. *Journal of the South Carolina Academy of Sciences*, 13(2): Article 6.

Gilmore, J., **Vieyra, M.**, Timmerman, B., Feldon, D., & Maher, M. 2015. The relationship between undergraduate research participation and subsequent research performance of early career STEM Graduate Students. *Journal of Higher Education*, 86(6): 834-863.

*Albrecht, S., *Morris, H. & **Vieyra, M.** 2014. Dose Dependent Effects of Caffeine on Cognitive Performance and Neuronal Activation. *Journal of the South Carolina Academy of Sciences*, 11(2): 10-12.

Vieyra, M., Strickland, D. & Timmerman, B. 2013. Patterns in Plagiarism and Patchwriting in Science and Engineering Graduate Students' Research Proposals. *International Journal of Educational Integrity*, 9(1): 35-49.

Vieyra, M., *Carlson, A., Leaver, E. & Timmerman, B. 2013. Undergraduate Research: I am not sure what it is, but I don't have time to do it anyway. *Council on Undergraduate Research Quarterly*, 33(3), 27-34.

Vieyra, M. 2011. Olfactory receptor genes in terrestrial, fresh-water and sea turtles: evidence for a reduction in the number of functional genes in aquatic species. *Chelonian Conservation and Biology*, 10(2), 181-187.

Vieyra, M., Gilmore, J. & Timmerman, B. 2011. Mandatory research experiences may improve STEM retention for under-represented females. *Council on Undergraduate Research Quarterly*, 32(1), 13-19.

*Lange, K. & **Vieyra, M.** 2011. Physiological Markers of Activity-based Anorexia in Sprague Dawley Rats. *Journal of the South Carolina Academy of Science*, 9(2), 10-13.

*Hicklen, J, *Jones, D. & **Vieyra, M.** 2010. Associative learning in larval *Drosophila melanogaster*: The role of heredity in learning speed and persistence of learning into adulthood. *Journal of the South Carolina Academy of Science*, 8(1), 9-13

*Byerly, T., *Robinson, A. & **Vieyra, M.** 2010. Reliance on olfactory receptors by four species of snakes as indicated by the characterization of their olfactory receptor genes. *Journal of the South Carolina Academy of Science*, 8(1), 1-3.

*Undergraduate researchers

PRESENTATIONS/ PUBLISHED ABSTRACTS

Bockorny K, Newsome B, **Vieyra M.** June 2023. Honors and the liberal arts. COPLAC Annual Meeting, UNC Asheville, NC.

*Beard M & **Vieyra M.** March 2024. What's up with these eggs?: A closer examination of unhatched eggs in Eastern Bluebirds. South Carolina Academy of Sciences, Charleston SC.

*Riggins P & **Vieyra M.** March 2024. What affects temperature in Bluebird nest boxes? South Carolina Academy of Sciences, Charleston SC.

*Owens E, *Godfrey A, *Schreiber Q, **Vieyra M.** March 2024. The progress of the USC Aiken Bluebird Nest Box Trail. South Carolina Academy of Sciences, Charleston SC. Poster.

*Frias J & **Vieyra M.** March 2023. Eastern Bluebird Hatching Success in South Carolina. South Carolina Academy of Sciences, Charleston SC.

*Amaker S & **Vieyra** M. March 2023. Factors Affecting Eastern Bluebird Fledge Success. South Carolina Academy of Sciences, Charleston SC.

*Alarcon E & **Vieyra** M. April 2022. The effects of climate and nest box site location on Eastern Bluebird nesting success. South Carolina Academy of Sciences, Aiken SC.

*Mewborn J & **Vieyra** M. April 2022. The effects of CBD oil on symptoms of mild stress in rats. South Carolina Academy of Sciences, Aiken SC.

*Frias J, *Amaker S, *Negrete D & **Vieyra** M. April 2022. Establishing and monitoring an Eastern Bluebird nesting box trail on the University of South Carolina Aiken campus. South Carolina Academy of Sciences, Aiken SC.

*Oswald, V & M **Vieyra**. April 2021. The effects of cannabidiol oil on stress in rats. South Carolina Academy of Sciences, Presented Online.

*Hawkins, Z & M **Vieyra**. April 2020. The Effects of CBD oil on stress in college students. South Carolina Academy of Sciences, Abstract accepted – conference cancelled due to COVID.

*Hutto, B & M **Vieyra**. April 2019. The Effects of a High Fructose Diet and Omega 3s on Testosterone and Reproductive Anatomy in Rats. South Carolina Academy of Sciences, Florence, SC.

*Negrete, D & M **Vieyra**. April 2019. Effects of Fructose and Omega-3 Fatty Acids on Anxiety-like symptoms in Male Sprague-Dawley Rats. South Carolina Academy of Sciences, Florence, SC.

*Dupert, A & M **Vieyra**. April 2019. Effects of fructose and Omega-3 fatty acids on memory in rats. South Carolina Academy of Sciences, Florence, SC.

*Lott, MJ & M **Vieyra**. April 2019. Effects of fish oil supplementation on metabolic syndrome in fructose fed rats. South Carolina Academy of Sciences, Florence, SC.

Vieyra, M. September 2018. Information literacy for all: Looking back at 7 years of information literacy instruction in a required freshman course. *Georgia International Conference on Information Literacy*, Savannah GA.

*Mele, E & M **Vieyra**. April 2018. Measuring the effects of caffeine and exercise on metabolic disturbances in rats fed sucrose solutions. *South Carolina Academy of Sciences*, Clinton, SC.

*Rodgers, J & M **Vieyra**. April 2018. Effects of caffeine and sugar consumption with and without exercise on bone density and muscle mass in rats. *South Carolina Academy of Sciences*, Clinton, SC.

*Gross, M & M **Vieyra**. April 2018. Effects of caffeine, sugar, and exercise on memory and anxiety behavior in rats. *South Carolina Academy of Sciences*, Clinton, SC.

*Ross-Simmons, S & M **Vieyra**. March 2017. The Effects of Sports Related Head-Impact on Neurocognitive Functions and Balance. *South Carolina Academy of Sciences*, Conway, SC.

*Vickers, L & M **Vieyra**. March 2017. The effects of caffeine and sugar on adipose tissue accumulation, memory, and anxiety in rats. *South Carolina Academy of Sciences*, Conway, SC.

*Urquiza, S & M **Vieyra**. October 2016. Synergistic effect between caffeine and sugar on cognitive performance. *IX Encuentro Internacional de Estudiantes de Psicología*, Havana, Cuba

*Thomas C & M **Vieyra**. April 2016. The effects of monosaccharides and artificial sweeteners on bone density in Sprague-Dawley rats. *South Carolina Academy of Sciences*, Rockhill, SC.

*Jones, H & M **Vieyra**. April 2016. The effects of simple sugars and artificial sweeteners on body weight gain, adiposity, and blood glucose in rats. *South Carolina Academy of Sciences*, Rockhill, SC.

*Desmarais, B & M **Vieyra**. April 2016. The effects of natural and artificial sweeteners on anxiety and depressive symptoms in male rats. *South Carolina Academy of Sciences*, Rockhill, SC.

*Elhallaoui, M & M **Vieyra**. April 2016. The Effects of Natural and Artificial Sweeteners on the Gut Microbiome of Rats. *South Carolina Academy of Sciences*, Rockhill, SC.

*Kaiser, A.J. & **Vieyra**, M. April 2015. The effects of stress, sugar and exercise on depression and hippocampal neurogenesis in rats. *South Carolina Academy of Sciences*, Greenville, SC.

*Morris, H. & **Vieyra**, M. April 2015. The dose dependent effects of caffeine on cognitive performance and neuronal activation. *South Carolina Academy of Sciences*, Greenville, SC.

*Urquiza, S. & **Vieyra**, M. April 2015. Synergistic effect between caffeine and sugar on cognitive performance. *South Carolina Academy of Sciences*, Greenville, SC.

*Kaiser, AJ & M Vieyra. March 2015. The effects of stress, sugar and exercise on depression and hippocampal neurogenesis in rats. *Synapse Conference*, Asheville, NC.

*Morris, H & M Vieyra. March 2015. The dose dependent effects of caffeine on cognitive performance and neuronal activation. *Synapse Conference*, Asheville, NC.

*Urquiza, S & M Vieyra. March 2015. Synergistic effect between caffeine and sugar on cognitive performance. *Synapse Conference*, Asheville, NC.

*Thomas, C. & **Vieyra**, M. April 2015. The effects of chronic stress, exercise and sugar consumption on body weight and fat percentage in rats. *South Carolina Academy of Sciences*, Greenville, SC.

*Marshall, B. & **Vieyra**, M. April 2014. The effects of sugar consumption on body fat and fasting glucose levels in rats. *South Carolina Academy of Sciences*, Charleston, SC.

*Roberts, R. & **Vieyra**, M. April 2014. The effects of a high sucrose diet on cognition in rats. *South Carolina Academy of Sciences*, Charleston, SC.

*Lee, J. & **Vieyra**, M. April 2014. The effects of a high sugar diet on stress in rats. *South Carolina Academy of Sciences*, Charleston, SC.

Vieyra, M. & *Cheeks, B. 2013. Managing instructor expectations: What college science freshmen know about appropriate sources, citation and academic integrity. *Georgia International Conference on Information Literacy*, Savannah, GA.

*Cheeks, B. & M **Vieyra**. 2013. How Well Do Science Freshman Understand Source Citation? *South Carolina Academy of Sciences*, Columbia, SC.

*Albrecht, S., *Morris, H. & **Vieyra**, M. 2013. Dose Dependent Effects of Caffeine on Cognitive Performance and Neuronal Activation: An fNIR Study. *South Carolina Academy of Sciences*, Columbia, SC.

Vieyra, M. & *Cheeks, B. 2013. Setting them up for Failure? The Prevalence of Source Citation Errors in High School Science Reports. *Student Success in Writing Conference*, Savannah, GA.

Vieyra, M., *Carlson, A. & Gilmore, J. 2012. Involving underrepresented groups in undergraduate research: A case for required participation. *Society for Integrated and Comparative Biology Annual Meeting*, Charleston, SC.

Strickland, D. & **Vieyra**, M. 2012. Patchwriting as Pedagogical Opportunity for Remediating Inappropriate Source Text Use. *4th Annual Conference on Higher Education Pedagogy*, Charlottesville, VA.

Strickland, D. & **Vieyra**, M. 2012. Patchwriting Their Way to Perfection: Students' Use of Adapted Text to Address Plagiarism. *American Educational Research Association*, Vancouver, British Columbia.

Vieyra, M., Strickland, D., & Timmerman, B. 2012. The incidence and nature of plagiarism in graduate student research proposals. *11th International Writing Across the Curriculum Conference*, Savannah, GA.

*Cheeks, B. & **Vieyra**, M. 2012. Determining the prevalence of the improper use of citations and sources at regional science fairs. *South Carolina Academy of Sciences*, Aiken, SC

*Stoffko, R., *Pinkney, N. & **Vieyra**, M. 2011. The effects of sucrose, high fructose corn syrup and exercise on markers of obesity and heart disease in rats. *Bulletin of the South Carolina Academy of Science*, Orangeburg, SC.

*Pinkney, N., *Stoffko, R. & **Vieyra**, M. 2011. The role of exercise in decreasing the characteristics of obesity associated with a diet rich in sugar. *Bulletin of the South Carolina Academy of Science*, Orangeburg, SC.

Vieyra, M., *Carlson, A. & Gilmore, J. 2011. Required undergraduate research experiences as a mechanism for improving retention of under-represented groups in science. *American Association of Colleges and Universities; Engaged STEM Learning: From Promising to Pervasive Practices Conference*, Miami, FL.

Gilmore, J., **Vieyra**, M. & Timmerman, B. 2011. The Impact of Undergraduate Research Experience on a Performance-based Measure of STEM Graduate Students' Research Skills. *American Educational Research Association*, New Orleans, LA.

*Byerly, T. & **Vieyra**, M. 2010. Reliance on olfactory receptors by four species of snakes as indicated by the characterization of their olfactory receptor genes. *Bulletin of the South Carolina Academy of Science*, Charleston, SC.

*Lange, K. & **Vieyra**, M. 2010. Physiological Markers of Activity-based Anorexia in Rats. *Bulletin of the South Carolina Academy of Science*, Charleston, SC.

*Irons, J. & **Vieyra**, M. 2009. A bioinformatic approach to the identification of olfactory receptors genes in *Taeniopygia guttata*. *Bulletin of the South Carolina Academy of Science*, Columbia, SC.

*Robinson, A. & **Vieyra**, M. 2009. Identification and characterization of olfactory receptor genes in four species of South Carolina snake. *Bulletin of the South Carolina Academy of Science*, Columbia, SC.

*Freiler, C. & **Vieyra**, M. 2009. Phylogenetic analysis of olfactory receptor genes in four species of South Carolina snake. *Bulletin of the South Carolina Academy of Science*, Columbia, SC.

*Undergraduate researchers

FUNDED GRANTS (Including Student Grants)

The effects of CBD oil on stress in rats. USC Research Foundation Mini-Grant. August 2020 – May 2021. Amount \$800. Vieyra, PI, V. Oswald Co-PI

The effects of CBD oil on stress in undergraduate students. USC Research Foundation Mini-Grant. August 2019 – May 2020. Amount \$800. Vieyra, PI, Z. Hawkins Co-PI

Establishment of a Shared USCA Histological Research Facility. USC Research Foundation. ASPIRE III. Period: June 2019-Aug 2020. Amount \$51,000. V. Shervette PI, A DeLaurier, MK Mills, M Vieyra Co-PIs.

Wireless Physiological Sensors to Explore the Pathophysiology and the Effects of Innovative Treatments for Traumatic Stress, Head Injuries and Emotional Dysregulation in Military Veterans, Student Athletes and Adults with ADHD: Out of the Laboratory and into the Field. USC Research Foundation. ASPIRE III. Period: June 2018-Aug 2019. Amount \$67,607. A. Ellison PI, M. Elzy, L. Swain, M. Vieyra, B. Parr, A. Hatchett, A. Roach Co-PIs.

Effects of Omega-3 Fatty Acids and Fructose on Symptoms of Metabolic Syndrome, Androgen Production, and Behavior in Sprague-Dawley Rats. INBRE Extension Grant. August 2018- May 2019. Amount \$5000. Vieyra, PI, A. Dupert, B. Hutto, J. Lott, D. Negrette Co-PIs.

The effects of protein consumption and exercise on health and behavior in rats. USC Research Foundation Mini-Grant. August 2017 – May 2018. Amount \$1000. Vieyra, PI, M. Gross, E. Mele & J. Rodgers Co-PIs

The effects of caffeine and high sucrose diet on adipose tissue accumulation, memory, and anxiety. INBRE Extension Grant. August 2016- May 2017. Amount \$2950. Vieyra, PI, L. Vickers Co-PI

The advancement of neuroscience research involving interdisciplinary collaborations to investigate cognition and brain function using electroencephalogram (EEG) at University of South Carolina Aiken. USC Research Foundation. ASPIRE III. Period: June 2014-Aug 2015. Amount \$99,956. L. Swain PI, M. Vieyra, K. Weed, B. Parr, J. Stafford, A. Ellison Co-PIs.

The Effect of Monosaccharides and Artificial Sweeteners on Bone Density in Sprague-Dawley Rats. Magellan Scholar Award. August 2015 – May 2016. Amount \$1290. Vieyra, PI, C. Thomas Co-PI

The Effect of Monosaccharides and Artificial Sweeteners on Bone Density in Sprague-Dawley Rats. USC Research Foundation Mini-Grant. August 2015 – May 2016. Amount \$1000. Vieyra, PI, C. Thomas Co-PI

The Effects of Exercise, High-Sugar Diet, and Chronic Stress on Depressive Symptoms, BDNF and Cortical Density. USC Research Foundation Mini-Grant. Period: January 2015 – May 2015. Amount \$1000. Vieyra, PI, A. Kaiser Co-PI

The Effects of Exercise, High-Sugar Diet, and Chronic Stress on Depressive Symptoms, BDNF and Cortical Density. USCA Connections Grant. Period: August 2014 – December 2014. Amount \$500. Vieyra, PI, A. Kaiser Co-PI

Synergistic effect between caffeine and sucrose on cognitive performance and neuronal activation. USC Research Foundation. Magellan Scholar Award. Period: January 2015 – May 2015. Amount \$2692. Vieyra, PI, S. Urquiza Co-PI

Getting Everyone Involved: Identifying the Obstacles to Participation of Minorities in Undergraduate Research Experiences. USC Research Foundation. ASPIRE I. Period: June 2013-Aug 2014. Amount \$11,340. Vieyra, PI

Dose dependent effects of caffeine on cognitive performance and neuronal activation. USC Research Foundation. Magellan Scholar Award. Period: January 2014- December 2014. Amount: \$2500. Vieyra, PI, H. Morris, Co-PI.

The Effects of Diet and Maternal Obesity on Four Dimensions of Health in Rats . USC Research Foundation. Magellan Scholar Award. Period: January 1, 2013-December 31, 2013. Amount: \$9000. Vieyra, PI. W. Koger, J. Lee, B. Marshall & R. Roberts Co-PIs.

Everything I Know about Plagiarism I Learned in High School: College Freshmen Perceptions of the Proper Use of Citations and Sources. USC Research Foundation. Magellan Scholar Award. Period: August 2012- May 2013. Amount: \$3000. Vieyra, PI, B. Cheeks Co-PI.

Diet and Obesity in Rats: The Effects of Sucrose, High Fructose Corn Syrup and Exercise on Increases in Weight, Body Fat Composition, Triglycerides and Blood Glucose Levels. USC Research Foundation Magellan Scholar Award. Period: January 2011-May 2011. Amount: \$1888. Vieyra, PI, R. Stoffko, Co-PI

NSF CCLI: C-NERVE 2.0: Research Experiences in Cognitive, Social, Affective, and Behavioral Neuroscience. Period: August 2011- May 2014. Amount: \$136,000. Senior Personnel, Steering Committee Member.

Characterization of Olfactory Receptor Genes in Copperhead Snakes to Determine their Reliance on Olfactory Receptors for Odor Detection. USC Research Foundation Magellan Scholar Award. Period: May 2009-May 2010. Amount: \$2305. Vieyra, PI, T. Byerly, Co-PI

Identification and Analysis of Olfactory Receptor Genes in King Snakes to Determine Whether Snakes Use Olfactory Receptors to Detect Odors. USC Research Foundation Magellan Scholar Award. Period: May 2008-May 2009. Amount: \$2370. Vieyra, PI, R. Robinson, Co-PI

HONORS/ AWARDS

2016 Received USCA University Service Award

2012 Received the USCA Excellence in Teaching Award