

LYNNETTE M. MICHALUK

CURRICULUM VITAE

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POSITIONS

Evaluation Director, NASA Space Grant Consortium Evaluation Cohort	2024 – Present
Research Assistant Professor, Center for Excellence in STEM Education, West Virginia University	2015 – Present
Visiting Assistant Professor, Department of Psychology, Oklahoma State University	2014 – 2015
Adjunct Faculty, Department of Psychology, Oklahoma State University	2010 – 2011
Adjunct Faculty, Department of Social Sciences, Northern Oklahoma College	2009 – 2011

EDUCATION

Postdoctoral Fellow, Center for Excellence in STEM Education, West Virginia University	Fall 2015
Ph.D., Experimental/Life Span Developmental Psychology, Oklahoma State University Dissertation: <i>The effects of direction of motion, length of spatial distance, and differences in velocity on temporal interval estimates of visual stimuli.</i> Dissertation Committee: Dr. David G. Thomas, chair, Dr. Bruce J. Ackerson, Dr. John M. Chaney, and Dr. Melanie Page	2009
M.S., Experimental/Life Span Developmental Psychology, Oklahoma State University Thesis: <i>The influence of movement and predefined spatial distance on temporal perception in the kappa effect.</i>	2005
B.A., Psychology, Oakland University, Rochester, Michigan	1999

RESEARCH EXPERIENCE

Center for Excellence in STEM Education, West Virginia University	2014 – Present
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I supervise research design and conduction of statistical analyses and evaluate center research projects to develop a model of best practices in STEM education specific to local rural and underrepresented minority students. I develop and validate new assessments and adapt existing assessments. I also prepare manuscripts, NSF research reports and state data proposals, edit center manuscripts, and write grant proposals. I have prepared and contributed to the preparation of more than 94 National Science Foundation, Department of Education, National Institutes of Health, National Aeronautics and Space Administration, and foundation grant proposals to date resulting in more than \$32,380,033 in funding. I collaborate with center affiliates to write research questions and hypotheses and design appropriate research methodology and statistical analyses. I train Center faculty, STEM faculty, and STEM undergraduates in quantitative analyses, research methodology, writing, and graphic presentation of results.

Current Projects

NSF Secure and Upgrade Computer Science in Classrooms through an Ecosystem with Scalability & Sustainability (SUCCESS). This Research Practice Partnership is investigating how best to design and maintain an ecosystem of people, programs, knowledge, and resources to provide Computer Science (CS) education and related career counseling to all students in West Virginia's Raleigh County School District middle schools. School- and district-level partnership teams including teachers, principals and counselors, are using research results produced by

the project to work together to provide and iteratively improve professional development (PD) and modification of the most widely used CS curriculum in the world (specifically, Code.org's curriculum) to ensure that all middle school students in predominantly rural West Virginia have access to high quality CS education and an understanding of CS career opportunities, both of which are lacking in rural areas. In its first two academic years, the project increased the number of Raleigh County middle school students who had taken at least one CS course at one of the district's 5 middle schools from < 100 to 3,800+ (85% of students). I am the project PI and Research Scientist and conduct quantitative and qualitative data collection, coding, and analysis, and work with other senior personnel to coordinate data collection and disseminate results across sites.

NSF BCSER-IID: Undergraduate Knowledge of the Mathematics Graduate School Application Process (Knowledge-GAP). Despite calls for preparing a STEM-capable workforce that leverages the ingenuity of US women and men of all ages and backgrounds, graduate mathematics programs are overwhelmingly made up of white males. Graduate school application and admissions processes significantly negatively impact the current demographics of the STEM workforce. To increase diversity in mathematics and STEM, students from all backgrounds must have the necessary knowledge, skills, and resources to create a competitive graduate school application. The project has its roots in Lent Brown and Hackett's Social Cognitive Career Theory viewed through the lens of Ray's Theory of Racialized Organizations. Project goals include determining how to broaden participation in graduate mathematics by providing information to departments to help them support undergraduate students interested in applying to mathematics graduate programs. Surveys have been administered to over 500 mathematics undergraduate students at a dozen institutions. Knowledge-GAP is an Individual Investigator Development project for the Building Capacity in STEM Education Research solicitation and facilitates Primary Investigator Dr. Tim McEldowney's transition from mathematics to mathematics education research and has resulted in 3 mathematics education conference presentations and one invited talk to date. I am the Research Mentor; I provide training in social sciences research methods.

NSF BCSER-IID: Effective Strategies to Recruit Underserved Students to Baccalaureate Engineering Success and Transition Programs (Recruit-BEST). Baccalaureate Engineering student Success and Transition (BEST) programs are holistic student success programs at four-year undergraduate universities that provide evidence-based, activities to enhance engineering students' academic and professional success in the transition to college to increase their retention in the engineering major. These programs struggle to attract diverse students, including women, students from underrepresented minority groups, first-generation students, low-income and rural students. This project is based on Roger's Diffusion of Innovations theoretical framework and aims to remedy this situation by examining the most effective methods for reaching underserved students and recruiting them to BEST programs through surveys and interviews of over 2000 BEST program participants and prospective participants and BEST program directors at over 100 institutions. Responses will be analyzed to study the effectiveness and alignment of different recruitment methods in use by BEST programs from the perspectives of both program directors and students. Knowledge generated about effective recruitment strategies will address challenges of low enrollment of underserved students in BEST programs, supporting the creation and continuation of student success programs. Additionally, by recruiting more engineering students from diverse backgrounds, it addresses the nation's need to diversify the engineering workforce, uplifting underserved students, their families, and their communities, to enhance the economic growth of rural areas. This recently funded project trains Primary Investigator Dr. Xinyu Zhang and supporting undergraduate and graduate students to increase their capacity to conduct rigorous STEM education research and has resulted in one engineering education conference presentation to date. I am the Social Sciences Research Mentor and provide training in social sciences research methods.

Engineering and Writing Departments, Oklahoma State University

2010 – 2015

Study Design, Survey Validation, and Written Presentation of Results I worked with the Primary Investigators to create and refine research methodology for a multi-year longitudinal National Science Foundation funded study examining effective methods for teaching critical thinking skills to undergraduate engineering students to meet program accreditation requirements. Statistically validated multiple student attitudinal surveys and scoring rubrics. I formulated formal research hypotheses and generated multiple statistical options to accurately assess research intervention outcomes. I also conducted literature reviews and prepared reports and publications for scholarly journals.

Qualitative and Quantitative Data Analysis I evaluated, cleaned, merged, and condensed multiple years of qualitative and quantitative data into manageable units based on the Primary Investigators' needs. I designed databases for optimal collection, analysis, and dissemination of data. I identified trends in large data sets, tested for and corrected violations

of statistical test assumptions, and analyzed longitudinal and cross-sectional data using descriptive and inferential statistics for time series data. Finally, I interpreted all results graphically and in written form to the Primary Investigators in the form of memos, reports, and a publication.

Developmental Research Laboratory, Oklahoma State University

2000 – 2009

I designed and administered laboratory experiments testing the perception of brief temporal intervals using programs written with Visual Basic. Also developed and validated surveys examining subjective and objective measures of the perception of time. I designed and managed datasets; collected, coded, entered, analyzed, interpreted, and presented quantitative and qualitative data in graphical and written form in reports, memos, and conference presentations. Finally, I conducted literature reviews; trained and supervised laboratory assistants and completed Institutional Review Board reports.

Laboratory of Comparative Psychology & Behavioral Biology
Oklahoma State University

2001-2009

I conducted laboratory experiments examining the effects of essential oils on learning, behavior, and mortality in honeybees (*Apis mellifera* L.) and designed and tested new apparatus for the study of learning behaviors in invertebrates. I designed and managed datasets; collected, coded, entered, analyzed, interpreted, and presented quantitative data graphically and in written form in reports, conference presentations, and journal publications. Also conducted literature reviews and trained and supervised laboratory assistants.

EVALUATION EXPERIENCE

I am currently evaluator for several STEM education projects designed to increase participation of rural and underrepresented minority students in STEM. These include:

- NASA Space Grant Consortium Evaluation Cohort (AL, DC, DE, KS, KY, LA, NV, OH, WV)
- NASA Virginia Space Grant Consortium & Partners Plant the Moon Challenge
- US Department of Education Strengthening Potomac State College by Increasing Student Engagement and Persistence Through Investing in Course Evaluation and Redesign, Academic Advising, Career Services, Diversity Programming, and Endowment Funds
- NSF S-STEM Pathways to Academic Student Success for Biology Majors (PASS)
- NSF RII Track 2 FEC: Enabling Factory to Factory (F2F) Networking for Future Manufacturing
- NSF CAREER: Leveraging Deep Learning and Big Data Spatial Detection Analytics to Increase the Value of the National Geospatial Data Infrastructure: Using 3DEP LiDAR and Historic Data for Geomorphic Mapping and Change Genomics and STEM Engagement in Appalachia
- NSF CAREER: Mycoheterotrophic Plants as Models for Evolutionary Genomics and STEM Engagement in Appalachia
- NSF CAREER: Securing the Future of Electric Field Measurements in Space Physics
- NSF CAREER: Design of Surface Modified Membranes for Recovery of Key Fertilizer Micronutrients from Wastewater
- NSF CAREER: Impact of MRI contrast agent design on nanoscale interactions with neutrophils and platelets.
- NSF Problem Solving Skills and Self-Regulated Learning in Non-Calculus Ready First Year Engineering Students

- NSF GP-IN: Appalachian Geoscience Learning Ecosystem (AGLE) and Exploring Geosciences Solutions (EGeoS) Curriculum: Empowering Appalachian Students to Address Climate Challenges.

Past Evaluation Projects

NSF GP-IMPACT: Improving Geoscience Education for Rural and First-Generation College Students through a Shared-Instruments Collaboration - Bridging the High School to Undergraduate Divide for Students in Reclamation Science and Management

PUBLICATIONS

Henderson, R., Hewagallage, D., Follmer, J., Michaluk, L., Deshler, J., Fuller, E., & Stewart, J. (2022). The mediating role of personality in the relation of gender to self-efficacy in physics and mathematics. *Physical Review: Physics Education Research*, 18, 010143. <https://journals.aps.org/prper/abstract/10.1103/PhysRevPhysEducRes.18.010143>

Miller, D., Deshler, J., McEldowney, T., Stewart, J., Fuller, E., Pascal, M., & Michaluk, L. (2021). Supporting student success and persistence in STEM with active learning approaches in Emerging Scholars Classrooms. *Frontiers in Education*, 6, 667918. <https://doi.org/10.3389/educ.2021.667918>

Stewart, J., Cochran, G. L., Henderson, R., Zabriskie, C., DeVore, S., Miller, P., Stewart, G., & Michaluk, L. (2021). Mediation effect of prior preparation on performance differences of students underrepresented in physics. *Physical Review: Physics Education Research*, 17, 010107. doi: 10.1103/PhysRevPhysEducRes.17.010107

Stewart, J., Henderson, R., Michaluk, L., Deshler, J., Fuller, E., & Rambo-Hernandez, K. (2020). Using the Social Cognitive Theory framework to chart gender differences in the developmental trajectory of STEM self-efficacy in science and engineering students. *Journal of Science Education and Technology*, 18 pgs. <https://doi.org/10.1007/s10956-020-09853-5>

Michaluk, L., Stoiko, R., Stewart, G., & Stewart, J. (2018). Beliefs and attitudes about science and mathematics in pre-service elementary teachers, STEM, and non-STEM majors in undergraduate physics courses. *Journal of Science Education and Technology*, 1- 15.

Henderson, R., Stewart, G., Stewart, J., Michaluk, L., & Traxler, A. (2017). Exploring the gender gap in the Conceptual Survey in Electricity and Magnetism. *Physical Review: Physics Education Research*, 13, 020114.

Michaluk, L. M., DeVore, S., Stewart, G. B., & Stewart, J. C. (2016). New directions in educational research, methodology, and analytical techniques. In M. d' Souza (Ed), *Teaching and learning in higher education: Emerging trends* (pp. 90-131). Anaheim, CA: United Scholars Publications.

Stewart, J. C., Devore, S., Stewart, G. B., & Michaluk, L. (2016). Behavioral self-regulation in a physics class. *Physical Review: Physics Education Research*, 12(1), 010125.

Michaluk, L. M., Martens, J., Damron, R. L., & High, K. A. (2016). Critical thinking elements of first-year engineering students. *International Journal of Engineering Education*, 32(1A), 84–99.

Abramson, C. I., Wanderley, P. A., Wanderley, M. J. A., Silva, J. C. R., & Michaluk, L. M. (2007). The effect of essential oils of sweet fennel and pignut on mortality and learning in Africanized honey bees (*Apis mellifera* L.). *Neotropical Entomology*, 36, 828 – 835.

Abramson, C. I., Wilson, M. K., Singleton, J. B., Wanderley, P. A., Wanderley, M. J. A., & Michaluk, L. M. (2006). Citronella is not a repellent to Africanized honey bees (*Apis mellifera* L.) in Brazil. *Bioassay*, 1, 1 – 7.

Abramson, C. I., Singleton, J. B., Wilson, M. K., Wanderley, P. A., Ramalho, F. S., & Michaluk, L. M. (2006). The effect of an organic pesticide on mortality and learning in Africanized honey bees (*Apis mellifera* L.) in Brasil.

American Journal of Environmental Sciences, 2, 37 – 44.

Foley, A. J., Michaluk, L. M., & Thomas, D. G. (2004). The effect of pace alteration on time interval estimation. *Perceptual and Motor Skills*, 98, 291 – 298.

Abramson, C. I., Morris, W. A., Michaluk, L. M., & Squire, J. (2004). The use of antistatic foam as a shocking surface for invertebrates. *Journal of Entomological Science*, 39, 562 – 566.

FUNDING

Current

National Science Foundation. CAREER: Securing the Future of Electric Field Measurements in Space Physics. Evaluator. PI Katherine Goodrich. \$1,076,144.	2024 – 2029
National Science Foundation. CAREER: Design of Surface Modified Membranes for Recovery of Key Fertilizer Micronutrients from Wastewater. Evaluator. PI Oishi Sanyal. \$568,356.	2024 – 2029
National Science Foundation. CAREER: Impact of MRI contrast agent design on nanoscale interactions with neutrophils and platelets. Evaluator. PI Margaret Bennewitz. \$697,793.	2024 – 2029
National Science Foundation. S-STEM Pathways to Academic Student Success for Biology Majors (PASS, DUE-2221169). External Evaluator. PI Sheryl Chisholm. \$749,962.	2022 – 2028
National Science Foundation. GP-IN: Appalachian Geoscience Learning Ecosystem (AGLE) and Exploring Geosciences Solutions (EGeoS, GP-IN-2240675) Curriculum: Empowering Appalachian Students to Address Climate Challenges. Evaluator. PI Amy Hessl. \$349,970.	2024 – 2027
National Science Foundation. BCSER-IID: Effective Strategies to Recruit Underserved Students to Baccalaureate Engineering Success and Transition Programs (Recruit-BEST, EES- 2320120). Research Mentor. PI Xinyu Zhang. \$350,000.	2024 – 2026
Department of Education. Strengthening Potomac State College by Increasing Student Engagement and Persistence Through Investing in Course Evaluation and Redesign, Academic Advising, Career Services, Diversity Programming, and Endowment Funds (P031A210176). External Evaluator. PI Paul Kreider. \$1,756,677.	2021 – 2026
National Science Foundation. CAREER: Leveraging Deep Learning and Big Data Spatial Detection Analytics to Increase the Value of the National Geospatial Data Infrastructure: Using 3DEP LiDAR and Historic Data for Geomorphic Mapping and Change Genomics and STEM Engagement in Appalachia (2046059). Evaluator. PI Aaron Maxwell. \$636,778.	2021 – 2026
National Science Foundation. Pilot Data Science Class Curriculum for Middle Schools in West Virginia (SUCCESS, EHR-2031355). PI. \$181,099.	2023 – 2025
National Science Foundation. Problem Solving Skills and Self-Regulated Learning in Non-Calculus Ready First Year Engineering Students (DUE-2236126). Evaluator. PI Lizzie Santiago. \$599,000.	2023 – 2025
National Aeronautics Space Association. NASA Space Grant Plant the Moon Challenge. (80NSSC22M0308). External Evaluator. PI Mary Sandy. \$1,048,644.	2023 – 2025
National Science Foundation. BCSER-IID: Undergraduate Knowledge of the Mathematics Graduate School Application Process (Knowledge-GAP, EES- 2126018). Research Mentor. PI Tim McEldowney. \$349,287.	2022 – 2025
National Science Foundation. RII Track 2 FEC: Enabling Factory to Factory (F2F) Networking for Future Manufacturing (OIA- 2119654). External Evaluator. PI Thorsten Wuest. \$3,800,000.	2021 – 2025

National Science Foundation. CAREER: Mycoheterotrophic Plants as Models for Evolutionary Genomics and STEM Engagement in Appalachia (DEB-2044259). Evaluator. PI Craig Barret. \$808,805.	2021 – 2025
National Science Foundation. Secure and Upgrade Computer Science in Classrooms through an Ecosystem with Scalability & Sustainability (SUCCESS, EHR-2031355). PI & Researcher. \$1,000,000.	2021 – 2025
National Science Foundation. Breaking the Cycle: Preparing West Virginia's Rural, First Generation College Goers for the Careers of the Future through Computational Physics (CPHYS), a Track 2 Design and Development Project, (DUE-1833694). Research Design and Evaluation. PI John Stewart. \$1,000,000.	2019 – 2024
National Science Foundation. Louis Stokes Alliance for Minority Participation STEM Pathways and Research Alliance: KY-WV, (HRD-1826763). Site Research Study Co-PI. Site PI David Miller. \$3,500,000.	2018 – 2024
Past	
National Science Foundation. NSF INCLUDES Alliance: First2 STEM Success Alliance, (HRD-1834569). Research Methods and Statistical Analyses and Graduate Student Mentor. PI Gay Stewart. \$796,101.	2018 – 2023
National Science Foundation. GP-IMPACT: Improving Geoscience Education for Rural and First-Generation College Students through a Shared-Instruments Collaboration - Bridging the High School to Undergraduate Divide for Students in Reclamation Science and Management (ICER-1911347). Statistical and Qualitative Analysis and Internal Evaluator. PI Louis McDonald. \$306,036.	2019 – 2023
National Science Foundation. Adapting the Next Generation: Physical Science and Everyday Thinking Curriculum for a Lecture-Laboratory Format (DUE-1611738). Research Methods, Rubric Development, and Statistician. PI Gay Stewart. \$211,399.	2016 – 2022
National Science Foundation. STEM-R: Modeling STEM Retention and Departure across Physics, Mathematics, and Engineering, (DGE-1561517). Internal Evaluator. PI John Stewart. \$299,993.	2016 – 2019
National Science Foundation. Critical Thinking Enhancement through Paired English Composition and Engineering Courses. (DUE-0737514). Statistical Analyst. PI Karen High. \$150,000.	2008 – 2012

GRANTSMANSHIP DEVELOPMENT & TRAINING

Write Winning Grant Proposals. Proposal Development Seminar, Dr. John Robertson, West Virginia University, Morgantown, WV, June 2016.

Posing Questions and Proposing Research: The Proposal Review Process at NSF, Dr. Saylor Breckenridge, West Virginia University, Morgantown, WV, April 2016.

NSF Improving Undergraduate STEM Education (IUSE) Proposal Development Workshop, Dr. Kevin Lee, West Virginia University, Morgantown, WV, December 2015.

PROFESSIONAL DEVELOPMENT

Data Management and Organization. Webinar presented by the West Virginia University Library Research Webinar Series, October 2022.

Enhancing the Security and Integrity of America's Research Enterprise. Webinar presented by the White House Office of Science and Technology Policy, October 2020.

NSEC Webinar on Center Evaluation. Webinar presented by the Network of STEM Education Centers, August 2020.

Excellence: A Critical Examination of Accountability. Webinar presented by the evaluative partner of the Howard Hughes Medical Institute (HHMI) Inclusive Excellence Initiative, sponsored by American Association of Colleges & Universities, May 2019.

Proven Strategies to Prepare Students for CS Careers. STEM connector Town Hall Webinar sponsored by STEM connector, August 2017.

Rigorous Data Collection & Analysis. Webinar presented by Nature.com webcasts. Sponsored by Gilman, June 2017.

Automated Machine Learning in Action. Webinar sponsored by DataRobot, May 2017.

Envisioning the Data Science Discipline: The Undergraduate Perspective. Webinar sponsored by The National Academies of Science, Engineering, & Medicine, April 2017.

The Difference that Makes a Difference: Transforming Southern Connecticut State University with Cognitive Analytics. Webinar sponsored by IBM Analytics, April 2017.

Roundtable on Data Science Post-Secondary Education I & II. Webinars sponsored by the Committee on Applied and Theoretical Statistics (CATS), March and May 2017.

When Your Big Data Seems Too Small. Webinar presented by the Databases and Foundations in Computer Science Graduate Certificate Program, Stanford University, March 2017.

Applying the WWC Standards to Postsecondary Research. Webinar sponsored by Institute of Education Sciences (IES), March 2016.

Measuring Student Learning with the Engineering Design Process Portfolio Scoring Rubric (EDPPSR). Webinar sponsored by the NSF-funded Technical Evaluation Assistance in Mathematics and Science (TEAMS) project (DRL#1238120), February 2016.

Developing Indicators for Undergraduate STEM Education. Webinar sponsored by The National Academies of Sciences, Engineering, and Medicine, February 2016.

PRESENTATIONS

Zhang, X., Wang, L., Michaluk, L., Hensel, R., Perez, I., Hammond, C., Bush, I., Cao, R., & Ralston, T. (2023). Work in Progress: Investigation of Recruitment Communication Channels and Student Awareness of an Engineering Bridge Program via Cross-Disciplinary Collaboration. Paper presented at the Annual ASEE First-Year Engineering Experience (FYEE) Conference, July 30-August 1.

Christman, E., McDonald, L.M., Carver, J.S., Licvov-Channell, V., Stewart, G., & Michaluk, L. (2023). Integrating Portable X-ray Fluorescence (pXRF) into Undergraduate Courses, Including Teacher Prep! American Association of Physics Teachers Summer Meeting, July 15-19, Sacramento, CA. <https://aapt-wm.secure-platform.com/a/solicitations/55/sessiongallery/1601>

Michaluk, L., Lu, M., Stewart, G., & Pauley, R. (2023). Work in Progress: Update on the Impact of Secure and Upgrade Computer Science in Classrooms through an Ecosystem with Scalability & Sustainability (SUCCESS). Paper presented at the American Society for Engineering Education Annual Conference, June 25-28.

McEldowney, T., Lightcap, Z., Maldonado, D., Deshler, D. & Michaluk, L. (2023). Knowledge-GAP: The Impact of Mentoring on the Graduate School Application Process. Talk Presented at Critical Issues in Mathematics Education Annual Conference, March 24.

Miller, P., Stewart, G., & Michaluk L. (2022). Student Resilience: Advantages of a Hybrid Next Gen PET Adaptation. Summer American Association for Physics Teachers Meeting, July 9 -13.

Naz, A., Lu, M., Michaluk, L., Stewart, G., & Pauley, R. (2022). Work in Progress: Secure and Upgrade Computer Science in Classrooms through an Ecosystem with Scalability & Sustainability (SUCCESS). Paper presented at the American Society for Engineering Education Annual Conference, June 25.

Michaluk, L., Glenn, M., Williams, F., Miller, D., Henderson, R., Stewart, J., & Stewart, G. (2021). LSAMP Scholar's academic motivation, STEM self-efficacy and other non-cognitive factors important to STEM interest and success. Louis Stokes Midwest Regional Center of Excellence (LSMRCE) Annual Conference, October 23.

Miller, D., Deshler, J., McEldowney, T., Stewart, J., Fuller, E., Pascal, M., & Michaluk, L. (2021). Supporting student success and persistence in STEM with active learning approaches in Emerging Scholars Classrooms. Louis Stokes Midwest Regional Center of Excellence (LSMRCE) Annual Conference, October 24.

Michaluk, L. (2021). Broadening Participation in STEM: A WVU Center for Excellence in STEM Education Update. NASA WVSGC/ NASA WV EPSCoR 2021 Fall Board of Directors Meeting, October 15-16.

Stewart, G., Miller, P., Michaluk, L., Koenig, K., & Henderson, R. (2021). Creating an instrument to assess NGSS Planning and Carrying Out Investigations. American Association for the Advancement of Science Improving Undergraduate STEM Education Initiative, June 29, Virtual.

Henderson, R., Koenig, K., Michaluk, L., Miller, P., Luna, M., & Stewart, G. (2021). Developing an instrument to assess the Next Generation Science Standard Practice Planning and Carrying out Investigations in preservice STEM teachers. Winter American Association of Physics Teachers Meeting. January 9 – 12, Virtual.

Williams, F., Capilouto, E., Parker, J., Javed, K., Miller, D., Michaluk, L., Cloud, V., Wilson, J., Sims, D., Cooley, M., Torres, R., Jones, V., Payne, H., & McGruder, C. (2019). Kentucky – West Virginia Louis Stokes Alliance for Minority Participation Workshop. Louis Stokes Midwest Regional Center of Excellence Conference, October 25 – 27, Indianapolis, IN.

Miller, P., Koenig, K., Michaluk, L., Luna, M., Goldberg, F., & Stewart, G. (2018). Planning and Carrying Out Investigations in the Next Generation Physical Science and Everyday Thinking curriculum. Poster presented at the 2018 Annual PhysTEC Conference, College Park, MD.

Henderson, R., DeVore, S., Michaluk, L., & Stewart, J. (2017). Situated self-efficacy in introductory physics students. Paper presented at the 2017 American Physical Society Annual Meeting, Washington, DC.

Henderson, R., Stewart, J., Devore, S., & Michaluk, L. (2017). Longitudinal physics self-efficacy in introductory STEM students. Poster presented at the 2017 Annual Summer Meeting, Cincinnati, OH.

Henderson, R., Stewart, J., Michaluk, L., & Murphy, C. (2017, April). The role of personality and self-efficacy in achievement in science classes. Paper presented at the 2017 American Educational Research Association Conference, San Antonio, TX.

DeVore, S., Henderson, R., Michaluk, L., & Stewart, J. (2016, July). Differentiated self-efficacy within Physics, Science, Mathematics, and Engineering. Poster presented at the 2016 Annual Physics Education Research Conference, Sacramento, CA.

- Henderson, R., DeVore, S., Michaluk, L., Zabriskie, C., & Stewart, J. (2016, March). Situated self-efficacy in introductory physics students. Poster presented at the American Association of Physics Teachers 2016 Winter Meeting, New Orleans, LA.
- Michaluk, L. M., Thomas, D. G., Moses, A., Bryant, A., & Sethman, G. L. (2006, May). The influence of direction and mode of movement on the kappa effect. Poster presented at the 18th Annual Convention of the Association for Psychological Science, NY.
- Michaluk, L. M., Sethman, G. L., Thomas, D. G., & Zephier, R. H. (2005, May). Movement reverses the influence of visual stimuli on temporal perception in the kappa effect. Poster presented at the 17th Annual Convention of the American Psychological Society, Los Angeles, CA.
- Thomas, D. G., Anderson, J., Bryant, A., Michaluk, L. M., & Mills, J. (2005, May). Auditory stimuli influence spatially defined temporal judgments. Poster presented at the 17th Annual Convention of the American Psychological Society, Los Angeles, CA.
- Zephier, R. H., Michaluk, L. M., & Thomas, D. G. (2005, April). Piaget's theories of the development of the perception of space and time in children. Poster presented at the Oklahoma Psychological Society Spring Research Conference, Edmond, OK.
- Van de Griend, P. J., Michaluk, L. M., & Thomas, D. G. (2004, May). Clock speed affects time estimation but not internal tempo or heart rate. Poster presented at the American Psychological Society 16th Annual Convention, Chicago, IL.
- Michaluk, L. M., & Thomas, D. G. (2004, April). Neural mechanisms and the perception of time. Paper presented at the Oklahoma Psychological Society Spring Research Conference, Oklahoma City, OK.
- Lack, C. W., Morales, B. L., Haala, K. A., Michaluk, L. M., & Abramson, C. I. (2003, November). Interactive materials for the teaching of history and systems of psychology. Poster presented at the annual meeting of the Southwestern Teachers of Psychology, Seguin, TX.
- Allen, R. J., Michaluk, L. M., Dicken, V., Avendaño, K., & Thomas, D. G. (2003, April). Perceptions and conceptions of time in two populations. Poster presented at the Southwestern Psychological Association 49th Annual Convention, New Orleans, LA.
- Michaluk, L. M., Dicken, V., Allen, R. J., Zephier, R. H., Avendaño, K., & Thomas, D. G. (2003, April). The modern psychological impact of Newton's theory of time. Poster presented at the Southwestern Psychological Association 49th Annual Convention, New Orleans, LA.
- Foley, A. J., Thomas, D. G., & Michaluk, L. M. (2002, April). The effect of pace alteration on time interval estimation. Poster presented at the Southwestern Psychological Association 48th Annual Convention, Corpus Christi, TX.
- Bartgis, J., Michaluk, L. M., Grant, F., Moore, J., Avendaño, K., & Thomas, D. G. (2002, April). The development of response inhibition in early childhood. Poster presented at the Southwestern Psychological Association 48th Annual Convention, Corpus Christi, TX.
- Morris, A., Michaluk, L. M., Squire, J., & Abramson, C. I. (2002, April). The use of anti-static foam as a surface for aversive conditioning in invertebrates. Paper presented at the Oklahoma Psychological Society Spring Research Conference, Oklahoma City, OK.
- Michaluk, L. M., & Bartgis, J. (2001, April). The dopamine theory and alternative therapies for ADHD. Paper presented at the Oklahoma Psychological Society Spring Research Conference, Oklahoma City, OK.

INVITED TALKS AND WORKSHOPS

Observational Research Workshop: An Overview of the Goals and Processes Involved in Participant Observation and Practical and Ethical Steps involved in Collecting and Recording Observational Data. UK-KY LSAMP Retreat, June 14-15, 2018.

STEM-R: Modeling STEM Retention and Departure across Physics, Mathematics, and Engineering. Seminar in Engineering and Science Education, Department of Engineering, Clemson University. October 2015.

Preparing for the Job Market: What to do Now. Department of Psychology, Oklahoma State University. October 2013.

TEACHING INTERESTS

I am prepared to teach courses in Introductory Psychology, Statistics, Experimental Design and Methodology, Developmental Psychology, Neuropsychology, Social Psychology, Human Sexuality, Psychology of Women, and Conflict Resolution. I am interested in teaching Sensation and Perception, Learning and Behavior, and History of Psychology.

Teaching Experience

Courses Offered at Oklahoma State University 2004 – 2015

Conflict Resolution (undergraduate)
 Psychology of Women (undergraduate)
 Experimental Psychology Laboratory (undergraduate)
 Introduction to Psychology (undergraduate)
 Quantitative Methods I (undergraduate)
 Quantitative Methods II Laboratory (graduate)
 Quantitative Methods I Laboratory (graduate)
 Quantitative Methods I & II Laboratory (undergraduate)
 Social Psychology (undergraduate)
 Speech Communication (undergraduate)

Courses Offered at Northern Oklahoma College 2009 – 2011

Developmental Psychology (undergraduate)
 Social Psychology (undergraduate)
 Introduction to Psychology (undergraduate)

PROFESSIONAL EXPERIENCE

West Virginia University Office of Human Research Protections IRB Submitter Advisory Committee 2022– Present

West Virginia University Office of Human Research Protections Faculty Advisory Committee 2021– Present

Ad hoc reviewer, *Current Psychology*, *International Journal of Engineering Education*, *Journal of Science Education and Technology*, *International Journal of STEM Education* 2015 – Present

Reviewer, National Science Foundation Grant Submissions 2021

Reviewer, WVU Internal Grant Submissions 2016

Graduate Student Teaching and Research Awards, Oklahoma State University 2014, 2015

Graduate Student Peer Review Exchange (founder) – Oklahoma State University 2004 –2009

Statistics Tutor – Oklahoma State University 2006 – 2008

Academic Tutor – Academic Enhancement Center, Oklahoma State University 2004 – 2006

VOLUNTEER EXPERIENCE

Grants

Contributed to preparation of the \$1M KY-WV LSAMP Bridge to the Doctorate Program proposal with PI Fara Williams. Funded. 2019

Contributed to preparation of AWESOME: Academy on Web-development, Engineering and Science Optimized with Multicultural Education Summer Camp proposal sponsored by West Virginia's Health Sciences & Technology Academy with PI Afrin Naz. Funded but canceled due to pandemic. 2019

Contributed to preparation of a \$1,055 McDonald's Community Grant allowing a West Virginia teacher to start a WeDo Legos Club for students in grades 1 – 4 in 2017. Funded. 2017

Prepared a \$2,917 West Virginia Governor's STEM mini grant to replace computers lost in local floods for the purpose of starting a coding club for high school students. Funded. 2017

HONORS AND AWARDS

Dean's Academic Scholarship Award, Oklahoma State University 2001 – 2003

B.A., Magna Cum Laude 1999