# Education

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| PhD | University of Colorado, Boulder, educational foundations (anthropology). |
| AB | Bryn Mawr College, Physics, cum laude. |

# Employment

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| 2018- | G. Thomas and Martha Myers Yeager ’41 Chair in the Liberal Arts |
| 2016- | Department chair, Educational Studies, St. Mary’s College of Maryland |
| 2013- | Director of Teacher Education, St. Mary’s College of Maryland |
| 2013- | Professor of Educational Studies, St. Mary’s College of Maryland |
| 2008-2013 | Associate Professor of Educational Studies, St. Mary’s College of Maryland |
| 2002-2008 | Assistant Professor of Educational Studies, St. Mary’s College of Maryland |
| 2000-2002 | Retention and assessment specialist, University of Colorado Minority Arts and Sciences Program |
| 1996-2002 | Physics instructor, University of Colorado Minority Arts and Sciences Program |

# K12 experience

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| 1994-1995 | Lead teacher, Broad Horizons Charter School, Portales, New Mexico |
| 1987-1994 | Physics teacher, Wakefield High School, Arlington, Virginia |

# Administrative experience

Department Chair and Director of Teacher Education, Department of Educational Studies, St. Mary’s College of Maryland (2016-present)

* Provide leadership for 6 tenure line faculty, approximately 10 adjunct faculty and 2 staff members
* Guide the program through our 2017 state program approval visit
* Lead our Professional Development School partnership with our local school district
* Oversee the adoption of TK20 assessment software
* Manage the largest departmental budget at St. Mary’s College
* Mentor pre-tenure faculty
* Develop a departmental strategic plan
* Continue integrating edTPA

Director of Teacher Education, St. Mary’s College of Maryland (2013-2015)

* Led initiatives to recruit more Black, Latino, Pell-eligible and first generation college students into our teacher education program
* Developed an online admissions process
* Created a database to support assessment and program approval
* Developed an effective mentor teacher recruitment process in partnership with our local school district
* Implemented a Race to the Top-funded grant to increase the number of teachers able to teach effectively in high poverty/high minority schools

# Teaching experience

Undergraduate:

* Education in America (social foundations course focused on history, diversity, equity and educational policy)
* DeSousa-Brent leadership seminar (first year seminar in a leadership program for students from under-represented groups)
* Research Methods in Human Studies
* Senior Seminar in Human Studies
* Elementary Science Methods
* Assessment, Data-Driven Curriculum and Instruction
* Basic Physics

Graduate:

* Teacher as researcher (a 4-course, 10-credit sequence covering research methods, assessment, diversity, equity and policy, culminating in a master’s research project)
* Effective Teaching in Diverse Settings (a course designed to prepare new instructors to teach effectively in a liberal arts context)

# Publications

### Articles in peer-reviewed journals

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| --- | --- |
| 2020 | Johnson, A. Where do women of color complete physics degrees? The Physics Teacher 58, 620-624. |
|  | Johnson, A. & Elliott, S. Culturally Relevant Pedagogy: A Model To Guide Cultural Transformation in STEM Departments. Journal of Microbiology & Biology Education, 21(1). |
|  | Johnson, A. An intersectional physics identity framework for studying physics settings. In Physics Education and Gender (pp. 53-80): Springer. |
| 2019 | [Johnson, A. A model of culturally relevant pedagogy in physics. Proceedings of Women in physics: 6th IUPAP International Conference on Women in Physics.](https://aip.scitation.org/doi/abs/10.1063/1.5110152) |
|  |  |
|  | [Meza-Montes, L., Betacchy, M., Hodari, A., Johnson, A., Buenabad, E. M., & Wade, J. (2019). Workshop report: Cultural bias and perception. Proceedings of Women in physics: 6th IUPAP International Conference on Women in Physics.](https://aip.scitation.org/doi/abs/10.1063/1.5110073) |
| 2017 | [Johnson, A., Ong, M., Ko, L., Smith, J., & Hodari, A. Can the center be the margin? Physics departments as counterspaces for women of color. The Physics Teacher 55(6), 356-360.](https://drive.google.com/open?id=1mDdDUvy7I168MzwcNdBcRVcc_3JRSOqw) |
| 2016 | [Kose, E., & Johnson, A. Women in mathematics: A nested approach. PRIMUS, 26(7), 676-693.](https://drive.google.com/open?id=1EmXXXmHg0taxv3QLbTU3FAlHTz1xB2HS) |
| 2015 | [Carlone, H., Johnson, A., & Scott, C. Agency Amidst Formidable Structures: How Girls Perform Gender in Science Class. Journal of Research in Science Teaching, 52(4), 474-488.](https://drive.google.com/open?id=1xwm8SFUM8ENHbYCeQHjx_MM12oLEIKzh) |
| 2012 | Carlone, H., & Johnson, A. Unpacking 'culture' in cultural studies of science education: cultural difference versus cultural production. Ethnography and Education, 7(2), 151-173. |
|  | Jamieson, A., Jamieson, L., & Johnson, A. Application of non-programming focused Treisman-style workshops in introductory computer science. SIGCSE 12: Proceedings of the 43rd ACM technical symposium on Computer Science Education, 271-276. |
| 2011 | Johnson, A., Brown, J., Carlone, H., & Cuevas, A. Authoring identity amidst the treacherous terrain of science: A multiracial feminist examination of the journeys of three women of color in science. Journal of Research in Science Teaching 48(4), 339-366. |
|  | Johnson, A., Muilenburg, L., Arnett, K., & Stover, L. Combating symbolic violence in public schools: Federal education policy must aim at a different target. Journal for Peace and Justice Studies 21(1), 52-69. |
|  | Johnson, A. Accomplishments and challenges for women in STEM: Implications for future research and programs. Journal of Women and Minorities in Science and Engineering 17(20), 5-10. |
| 2009 | Anderson, S., Norlock, K., & Johnson, A. The science community's moral imperative to attract women (in particular, women of color) to their disciplines. Atlantis: A Women's Studies Journal 33(2), 72-82. |
| 2007 | Johnson, A. Unintended consequences: How science professors discourage women of color. Science Education 91, 805-821. |
|  | Carlone, H. and Johnson, A. Understanding the science experiences of women of color: Science identity as an analytic lens. Journal of Research in Science Teaching 44, 1187-1218. |
|  | Johnson, A. Graduating under-represented African American, Latino, and American Indian students in science. Journal of Women and Minorities in Science and Engineering 13, 1-21. |
| 2006 | Johnson, A. Policy implications of supporting women of color in the sciences. Journal of Women, Politics, and Policy 27(3/4), 135-150. |

### Book chapters

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| --- | --- | --- |
|  | 2020 | Johnson, A. Using an intersectional physics identity framework to identify components of physics settings where women of color thrive. In A. Danielsson and A. Gonsalves, eds., Mapping Out New Terrain in Physics Education Research. |
|  | 2014 | Carlone, H., Johnson, A., & Eisenhart, M. Cultural perspectives in science education. In N. Lederman & S. Abell (Eds.), Handbook of Research on Science Education, Volume II (651-670). NY: Taylor & Francis. |
|  |  | Carlone, H., & Johnson, A. (2014). Unpacking 'culture' in cultural studies of science education: Cultural difference versus cultural production. In C. Brandt & H. Carlone (Eds.), Ethnographies of science education: Situated practices of science learning for social/political transformation. |
|  | 2012 | Johnson, A. Consequential validity and science identity research. In M. Varelas (Ed.), Identity Construction and Science Education Research: Learning, Teaching, and Being in Multiple Contexts (pp. 173-188). Rotterdam, The Netherlands: Sense Publishers. |
|  | 2009 | Keasley, A. & Johnson, A. The Minority Arts and Sciences Program: Averting the Waste of Talent. In Broadening Participation in Undergraduate Research: A Publication of the Council on Undergraduate Research, Boyd, M. & Wesemann, J., Eds. |
|  | 2006 | Johnson, A. Policy implications of supporting women of color in the sciences. In Women, Work and Poverty, H. Hartmann, Ed. NY: Haworth Press. |

### Reviews and articles in professional newsletters

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| 2014 | Kose, E., & Johnson, A. Linking "women in mathematics" and middle school girls through mentoring. Association of Women In Mathematics Newsletter, January-February. |
| 2012 | Johnson, A. Review: The mathematics of sex: How biology and society conspire to limit talented women and girls. Science Education, 96(5), 960-962. |
| 2006 | Johnson, A. Minority women in science. Association of Women in Science Magazine 35 (4), 9-11. |

### Grant activities and awards

Grants I authored or co-authored

|  |  |
| --- | --- |
| 2020 | Johnson, A. & Grossman, G. Developing teachers with culturally relevant science and math pedagogy through internships in high-poverty STEM magnet schools ($1,190,412; not funded). |
| 2019 | Johnson, A. NSF SBE-UKRI collaborative grant: Centering Women of Color in STEM: Data-Driven Opportunities for Inclusion ($103,479; 2019-22). |
| 2017 | Hodari, A. & Johnson, A. NSF IUSE grant: Centering Women of Color in STEM: Identifying and Scaling Up what Helps Women of Color Thrive ($343,289; 2017-20) |
| 2016 | Hodari, A. & Johnson, A. NSF INCLUDES grant: Can the Center Be the Margin? Mainstream Physics Departments as Counterspaces for Women of Color ($297,620; not funded) |

Grants I contributed to but was not primary author

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| 2019 | [Grossman, J. & Johnson, A. PhysTEC grant (partnership between APS and AAPT): Jump-Starting Physics Teacher Education at St. Mary's College of Maryland through Formalization of a Physics Teacher Education Program and Recruiting ($24,794; 2020-22).](https://drive.google.com/open?id=15TGkdAdOAoQUO3YtQGUOHIz-tRWSHdEI) |
|  | [Arnett, K., Johnson, A., Morris, D. & Maher, J. MSDE grant: Reimagining Internship and Professional Learning ($716,034)](https://drive.google.com/open?id=19OUkZnAMnO8g-jlzpB0Bv7Txxmi6lPxT) |
|  | [Jamieson, L., Jamieson, A., & Johnson, A. Maryland Center for Computing Education grant: Computational Thinking Preparation for Teachers ($19,049; 2019-20)](https://drive.google.com/open?id=12VPWSG7x40Zqf40wYC83JHA_del7eu9B) |
| 2017 | [Proposal from St. Mary’s College of Maryland to Establish a Clare Boothe Luce Scholars Program ($165,462; not funded)](https://drive.google.com/open?id=0Bwj-oI7VOAreWmZ4N1ZMamNDOGs) |
| 2016 | [A Proposal from St. Mary’s College of Maryland To Establish Clare Boothe Luce Undergraduate Research Awards ($260,400; not funded)](https://drive.google.com/drive/folders/0B7mTXkfxXdAJUm9vWDNsVVhvS1k) |
| 2012-13 | Project team member, TENSOR Women and Mathematics grant; Emek Kose, PI (funded) |

Grants where I was advisory board member, consultant or evaluator

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| 2017 | Advisory board member, NSF IUSE grant: STEM Transfer Pathways. (2017-20) |
| 2013-16 | External evaluator, NSF grant, Computing Beyond the Double Bind (CBDB): Women of Color in Computing Education and Careers |
| 2013-14 | PI, Maryland Race to the Top subgrant |
| 2013 | Advisory board member, NSF grant, The Percy Julian Project |
| 2011-13 | Advisory board member, NSF/REESE grant, Beyond the Double Bind: Women of Color in Science, technology, Engineering, and Mathematics |
| 2006-07 | PI, St. Mary’s College Preparing Tomorrow’s Teachers to use Technology (PT3) grant |
| 2003-06 | Evaluator, 21st Century after-school programs, Boys and Girls Club/St. Mary’s County Public Schools |
| 2002-05 | Evaluator, St. Mary’s College Preparing Tomorrow’s Teachers to use Technology (PT3) grant |

Awards

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| --- | --- |
| 2018 | Awarded the G. Thomas and Martha Myers Yeager Endowed Chair in the Liberal Arts (2018-ongoing) |
| 2008 | Norton T. Dodge Award for Scholarly and Creative Achievement by Junior Faculty |

# Presentations

### Invited presentations, workshops and public engagement

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| --- | --- |
| 2022 | Johnson, A., Changstrom, J. & Miller-Friedmann, J. Graduation rates of women in the US and UK. [Invited panel: Assessing and improving equity in physics learning environments]. American Association of Physics Teachers Winter Meeting.  Johnson, A., Miller-Friedmann, J. & Changstrom, J. Centering women of color in STEM: Where women from historically excluded groups do (and don’t) complete physics degrees in the US and UK. [Invited panel: Confronting Challenges of Graduate Education for Marginalized Students]. American Physics Society April Meeting. |
| 2021 | Johnson, A. & Mulvey, E. A classroom intervention to promote equity and inclusion. American Physics Society April meeting. |
|  | Johnson, A., Warrick, E. & Cheng, X. TEAM UP to support BiPOC in STEM. Teach-in at Bryn Mawr College, April. |
| 2020 | Johnson, A. Locating where women of color thrive in physics. American Association of Physics Teachers winter meeting, Orlando, Florida. |
| 2019 | [Johnson, A. I can’t really think of anything I don’t like: Locating and learning from universities where women of color are thriving in physics. G. Thomas and Martha Myers Yeager Endowed Chair in the Liberal Arts lecture, St. Mary’s College of Maryland.](https://drive.google.com/open?id=1ndhqtQUzfjRc7AcK6Na1w-DI1gQHEWcmfIL_5kb-3yM) |
|  | [Johnson, A. Creating environments where women of color thrive. American Physical Society March Meeting, Boston, MA.](https://drive.google.com/open?id=1C_WMNtl8oJKpoUfV89hSbGfxby_0rHOf) |
| 2018 | [Johnson, A. Empowering faculty and students to create inclusive climates in STEM. Georgetown University, Washington, DC](https://drive.google.com/open?id=1Bv1Scb7-rpM0aQJ59s4r6TuSVFLJbd8M) |
|  | [Johnson, A. Women in STEM. Bryn Mawr College.](https://drive.google.com/drive/folders/1HBNngnz0unmT3Fv3JU3MECdCvJgjMJEK) |
|  | Johnson, A. Member of a panel to discuss what physicists can do to create an inclusive environment in physics settings. [Conference for Undergraduate Women in Physics, RIT, January](https://sites.google.com/view/cuwip-rit/speakers). |
| 2017 | [Johnson, A. Intersectionality, culture and identity in inclusive STEM departments. Rochester Institute of Technology, Rochester, NY.](https://drive.google.com/open?id=11ApGfGBAB_0Py4FyXAmxdkmFuXmJ8YYH) |
|  | [Johnson, A. Building STEM cultures where students can thrive. Rochester Institute of Technology, Rochester, NY.](https://drive.google.com/open?id=1D4ngQX9e8qo2SWNVrwKE0Qkawv6hI3Xp) |
|  | [Johnson, A. Implicit bias and self-advocacy. 3rd Graduate Education in Physics Conference (held jointly with the American Physics Association Bridge Program conference), College Park, MD.](https://drive.google.com/open?id=1y8Yt6-V9tksAM45vg8IcUmh_P35MYBGE) |
|  | [Johnson, A. (2017) Why St. Mary’s is a surprisingly good place for women to study physics, math and computer science. St. Mary’s College of Maryland Faculty Seminar.](https://drive.google.com/drive/folders/15djXVd9D8h07mjw5w3DsShu7MrN5sEsP) |
|  | [Johnson, A. Implicit bias and self-advocacy. Workshop given at the International Conference on Women in Physics, Birmingham, UK.](https://docs.google.com/presentation/d/1P7MOI7HrZS4OYv9hKieTFPi_NTzuyt2Dyyj0PQKj180/edit#slide=id.p4) |
|  | Johnson, A. [Identity Convening Slides](https://docs.google.com/presentation/d/1AwlPPHsVpS2m4h6LrA6HvzjYg-qvvetxNeycYcFKagg/edit#slide=id.p4). Identity convening organized by [Activation Lab](http://activationlab.org/). |
| 2016 | J[ohnson, A., Hodari, A., & Ong, M. Creating counter-space: Deliberate strategies faculty can use to create environments where women of color thrive. American Association of Physics Teachers Summer Meeting, Sacramento, CA.](https://drive.google.com/open?id=1lGtO_SkZsymPHWaE28MH3KWaBVVSh2-H) |
|  | [Johnson, A. Solving tough problems: The importance of interdisciplinary collaboration. Marymount University, Arlington, VA.](https://drive.google.com/open?id=1_nMWKcH9T0AfmpOdVFai_TL-xxbmpeDb) |
|  | Johnson[, A. Broadening participation in math-intensive STEM fields: What faculty can do. Weber State University, Ogden, UT.](https://drive.google.com/open?id=1rNs5UMgVQWxmGjLhzw4CunOh5NtE4JGW) |
|  | [Johnson, A. Why so few women in STEM? And what can you do to make a difference? Weber State University, Ogden, UT](https://drive.google.com/open?id=1kKl7xkNUJ8PEdKWgO7Kj2Tv442xywjCU). |
|  | [Johnson, A. Ethnography of math-intensive STEM fields with lots of women graduates. Presentation to physics education research group, University of Maryland, College Park.](https://drive.google.com/open?id=1sdrzoFPsYf_Wm_avg5GXm7-pmInIryaT) |
|  | [Johnson, A. Inclusive physics: Recognizing intersectionality, capitalizing on difference, and helping build better learning environments for all women. Conference for Undergraduate Women in Physics, Syracuse University, Syracuse, NY.](https://drive.google.com/open?id=1slBoSRURoCgZCc4hwGYsNQf6NipyF2kA) |
|  | [Johnson, A. Building better STEM learning environments. Syracuse University, Syracuse, NY.](https://drive.google.com/open?id=1guiIxZe9ze_l_M_ksR5f4IIxpfjDBj37) |
| 2012 | Johnson, A. Seemingly fair practices which disadvantage women of color in science. Annual meeting, National Organization of Black Chemists and Chemical Engineers, Washington, DC. |
| 2011 | Johnson, A. Seemingly fair practices which disadvantage women of color in science. American Chemical Society Annual Meeting, Denver, CO. |
|  | Johnson, A. The conundrum of women scientists of color. San Francisco State University, San Francisco, CA. |
|  | Johnson, A. Why MfA works: Public education by the numbers. Math for America, New York City, NY. |
| 2012 | Johnson, A. Gender, ethnicity, and social class in STEM—social justice implications. American Psychological Association: San Diego, CA. |
| 2009 | Johnson, A. Seemingly fair practices which disadvantage women of color in science. Annual Meeting of the American Association of Physics Teachers:. Chicago, IL. |
| 2008 | Johnson, A. Getting institutional buy-in and evaluating your Emerging Scholars Program. 2008 Mathematical Association of America PREP Workshop: How to build and run a successful Emerging Scholars Program. Mathematics Association of America, Washington, DC. |
| 2007 | Johnson, A. Unintended consequences: How science professors unintentionally discourage women of color. 2007 Distinguished Speaker, Women in Science and Engineering, Duke University, Chapel Hill, NC. |
|  | Johnson, A. Getting institutional buy-in and evaluating your Emerging Scholars Program. 2007 Mathematical Association of America PREP Workshop: How to build and run a successful Emerging Scholars Program. University of Texas, Austin, TX. |

### Conference presentations

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| --- | --- |
| 2021 | Johnson, A. Student accounts from an inclusive physics department. Society for Applied Anthropology 2021 Annual Meeting, Norfolk, VA |
| 2020 | Hodari, A., Johnson, A. A Tale of Two Tables: Wrestling with Belonging for Women of Color in STEM. National Association for Research on Science Teaching 2020 Annual Meeting, Portland, OR. (presented by Hodari) |
| 2019 | [Johnson, A., Young, R., & Mulvey, L. Identifying and studying universities where women of color thrive in physics, math and computer science. Paper presented at the National Association for Research on Science Teaching Annual Meeting, Baltimore, MD.](https://drive.google.com/open?id=1CLTJ_ChlCi39dZJVMZHeLJiK1KZ-wdrR) |
|  | Hodari, A., Johnson, A., Mulvey, E., Young, R., Webb, V. and Keene, A. A tale of two tables: Predominantly White STEM departments in which women of color thrive. American Educational Research Association 2019 Annual Meeting, Toronto, ON. (presented by Hodari) |
|  | [Johnson, A., Hodari, A., Young, R. and Mulvey, E. Locating and learning from universities where women of color are thriving in physics. American Educational Research Association 2019 Annual Meeting, Toronto, ON. (accepted, didn’t present)](https://drive.google.com/open?id=1tDzjyfKeH0p33Mj_9ZQYeLCSiAPMCFRg) |
| 2018 | [Johnson, A. Intersectional physics identity framework. Physics Education Research Conference 2018. Washington, DC](https://drive.google.com/open?id=1CfVCOHOt7EPLyJxFC9MvGkNn5IIEiGoG). |
|  | [Johnson, A. Intersectional physics identity framework. American Association of Physics Teachers summer meeting, 2018. Washington, DC.](https://drive.google.com/open?id=1CtKBygC_cbMVzf2JEHecN1FEh5NiggPa) |
|  | [Johnson, A. What successful institutions are doing to support women physics students of color: Qualitative findings. Paper presented at the Physics Education Research Conference, Washington, DC.](https://drive.google.com/open?id=1Ch7TH9Gk_ryokbFHOocjxMV4QEm9OGQN) |
|  | [Mulvey, L., Johnson, A., & Young, R. Identifying and Scaling Up What Helps Women of Color Thrive. Paper presented at the American Association of Physics Teachers Summer Meeting.](https://drive.google.com/open?id=1CtluLxNM4DfEvkPZ1SB51oR3CtV1PnIY) |
|  | [Mulvey, L., Johnson, A. & Young, R. (2018). Educating Women of Color in Physics: Identifying and Learning from Institutions that Graduate the Highest Rates and Numbers and Outperform Their Peers. Paper presented at the Physics Education Research Conferenc](https://drive.google.com/open?id=1Cj9m0Dd76skym5R38cEJzC1pGX3ECgd_)e |
|  | Carlone, H. and Johnson, A. Symposium: Physics education and gender: Identity as an analytic lens for research. National Association for Research on Science Teaching annual meeting. (Presented by Carlone) |
|  | [Johnson, A. Looking for Noyce proposal advice. Science Education at the Crossroads, Alta, Utah.](https://drive.google.com/open?id=1eneRsW2A25TjuC3rjDRI-HgMUWIbQ_iA) |
| 2017 | [Johnson, A. Taking interesectional insights seriously as a way to diversify physics, math and computer science. National Women’s Studies Association Annual Conference, Baltimore, MD (accepted, didn’t present)](https://drive.google.com/open?id=0B-34gMn_jpG6c2NiaXdMamVmYVU) |
|  | [Johnson, A. Increasing the number of women majoring in physics, math and computer science. American Sociological Association Annual Meeting, Montreal, QC.](https://drive.google.com/open?id=0B-34gMn_jpG6WFhZVUxsellqQzg) |
|  | [Johnson, A. Initiating and sustaining cultural change in undergraduate physics departments. Poster presented at the International Conference on Women in Physics, Birmingham, UK.](https://drive.google.com/open?id=1q7cxg9srFmbWb3Cg1T2ejVWNzkou1Ys-eab9RE8q8Ww) |
|  | [Johnson, A. A model of culturally relevant pedagogy in physics. Poster presented at the International Conference on Women in Physics, Birmingham, UK.](https://drive.google.com/open?id=0B-34gMn_jpG6NW9CWngyYUxKYjQ) |
|  | [Johnson, A. Fulfilling the promise of equal opportunity for women in physics, math and computer science. Paper presented at the American Educational Research Association Annual Meeting, San Antonio, TX.](https://drive.google.com/open?id=0B-34gMn_jpG6RGF5NWxuejNVcjA) |
|  | [Johnson, A. What does culturally relevant STEM pedagogy look like? Paper presented at the American Educational Research Association Annual Meeting, San Antonio, TX.](https://drive.google.com/open?id=0B-34gMn_jpG6M09Hci05dVd3Njg) |
|  | [Johnson, A. How physics, math and computer science professors at a liberal arts college created a culture where women thrive. Paper presented at the Society for Applied Anthropology, Santa Fe, NM.](https://drive.google.com/open?id=1YQC9MIrMxq_09dsRM7MLatqf6EsydBqU) |
| 2016 | [Ko, L., Johnson, A., Ong, M., Hodari, A., & Smith, J. Can the center be the margin? Exploring STEM departments as counterspaces for women of color. Paper presented at the Eastern Sociological Society Annual Meeting, Boston, MA.](https://drive.google.com/open?id=1CWW7AZrPB3hIZ11AJlIRgOmBYfgmSCyH) |
| 2015 | [Johnson, A. Creating attractive, female-friendly physics departments: What faculty can do. Chesapeake Section: American Association of Physics Teachers, St. Mary's City, MD.](https://drive.google.com/open?id=1CtT1dMOQcXEvciyISpzYlJRCIQ9i1BBP) |
|  | [Johnson, A. Vexing questions about gender, race, and underrepresentation. Science Education at the Crossroads, Cleveland, OH.](https://drive.google.com/open?id=1o5ftRn6nNk_J-BGuneqmVhe-tndkuG10) |
| 2014 | [Johnson, A. Doing right by under-represented students: I have a bunch of data, what should I do with it? Science Education at the Crossroads, Portland, OR.](https://drive.google.com/open?id=1m7yeRXEmxwFELZkgBVy9ns9ZQwwNW2zC) |
|  | [Carlone, H., and Johnson, A. Learning science at the intersections of race, class, and gender: A longitudinal study of girls negotiating what it means to “be scientific.” International Conference on the Learning Sciences, Boulder, CO.](https://drive.google.com/open?id=18MPrZuN1kcZ7q0nQO8eqh0TQ5_rZ_RfyarKkrMLnI9Y) |
| 2012 | Johnson, A. Authoring identity amidst the treacherous terrain of physics. Physics Education Research Conference, Philadelphia, PA. |
|  | Johnson, A. Steps Toward Realizing the Full Power of Concepts. Science Education at the Crossroads, Providence, RI. |
|  | Carlone, H., & Johnson, A. Intersections of race, class, and gender: Longitudinal case studies of girls of color negotiating what it means to "be scientific”. National Association for Research on Science Teaching 2012 Annual Meeting, Indianapolis, IN. |
|  | Carlone, H. & Johnson, A. P/power as an Analytic Lens: Uses of Time and Space in Two Diverse Elementary Science Classrooms. American Educational Research Association 2012 Annual Meeting, Vancouver, BC. |
|  | Johnson, A., & Carlone, H. Unpacking “culture” in cultural studies of science education: Cultural difference vs. cultural production. National Association for Research on Science Teaching 2012 Annual Meeting, Indianapolis, IN. |
|  | Gormally, C., Johnson, A. & Brown, J. The Roles of Epistemology and Positionality in Teaching Assistants' Development of Inquiry Teaching Practices. National Association for Research on Science Teaching 2012, Indianapolis, IN. |
| 2011 | Johnson, A. k-12 science identity performance and long-term persistence in science: Connecting identity to social justice. American Educational Research Association, New Orleans, LA. |
| 2010 | Johnson, A. Identity, validity, methodology and social justice. American Educational Research Association, Denver, CO. |
| 2009 | Johnson, A. Increasing participation of people of color and White women in STEM by changing classrooms, not students. Science at the Crossroads, Portland, OR. |
|  | Carlone, H., Enfield, M., & Johnson, A. C., co-chairs Symposium on culturally relevant science teaching and learning, American Educational Research Association. San Diego, CA |
|  | Carlone, H., Enfield, M., Johnson, A., & Haun-Frank, J. What you might expect and what you may have never considered to be culturally relevant science: Lessons learned from a multi-site ethnography, American Educational Research Association. San Diego, CA. |
| 2008 | Johnson, A. The post-tenure path towards social justice in science education, Science at the Crossroads. Alta, UT. |
|  | Johnson, A., Anderson, S., Norlock, K., Socha, K., & Coughlin, L. Why our students stay: Strategies for retention and teaching of women of color in STEM disciplines, National Association for Research on Science Teaching. Baltimore, MD. |
|  | Johnson, A. The motivation and perseverance of women science students of color, National Association for Research on Science Teaching. Baltimore, MD. |
|  | Johnson, A., Brown, J., & Madrid, A. Persisting without recognition: Modeling the science identities of women of color, American Educational Research Association. New York City, NY. |
| 2007 | Anderson, S., Johnson, A. and Norlock, K. Varieties of moral injustice: Women of color in science education. Society for Women in Philosophy, Nottingham, UK. |
|  | Anderson, S., Johnson, A. and Norlock, K. The science community’s moral imperative to attract women (in particular, women of color) to their disciplines.  Versions of this article were presented at:  National Women’s Studies Association, St. Charles, IL.  Gender and Education Association International Conference, Dublin, Ireland  Educating Women/Women's Education:  In the Post-Secondary Context, Mount St. Vincent University, Halifax, NS |
| 2006 | Johnson, A. Teaching pre-service teachers to use data-driven curriculum and instruction Society for Information Technology and Teacher Education International Conference, Orlando, FL. |
|  | Johnson, A., Harle, A. & Arnett, K. Reconceptualizing the role of the PDS in a new MAT program. PDS in Action: Impacting Student Achievement and Teacher Retention Through Improved Teaching and Learning, Maryland Professional Development School Network PDS Conference, Baltimore, MD. |
| 2005 | Johnson, A. and Keasley, A. Averting the waste of talent: Raising graduation rates of high-achieving students of color through an academic enrichment program. Association for Institutional Research, San Diego, CA. |
|  | Johnson, A. and Johnson, B. Teachers Who Participated in a PT3-Funded Technology Initiative Make More Use of Technology Two and Three Years Later. Society for Information Technology and Teacher Education International Conference, Phoenix, AZ. |
| 2004 | Johnson, A. and Johnson, B. Does technology education by a teacher education program change the way graduates of the program teach? World Conference on E-Learning in Corporate, Healthcare, Government, and Higher Education, Washington, DC. |
|  | Johnson, A. and Johnson, B. Does technology teacher education result in more technology use in PDS schools? Maryland Professional Development School Network Research Conference, Towson, MD. |
|  | Johnson, A. Holding on to science majors of color. National Association for Research in Science Teaching, Vancouver, BC. |
|  | Stover, L. and Johnson, A. Integrating the Maryland Teacher Technology Standards into teacher education programs: A case study of process and product. Society for Information Technology and Teacher Education, Atlanta, GA. |
| 2003 | Johnson, A. (Policy implications of supporting women of color in the sciences. Institute for Women’s Policy Research Conference, Washington, DC. |
|  | Johnson, A. What do teachers actually do with their technology training? Beyond teacher training and into the classroom. Society for Information Technology and Teacher Education 2003, Albuquerque, NM |
| 2002 | Johnson, A. Unintended alienation: Women of color in science. American Educational Research Association, New Orleans, LA. |
|  | Johnson, A. Science student identity formation among high-achieving women of color. National Association for Research on Science Teaching, New Orleans, LA. |
| 1999 | Helms, J. and Johnson, A. Constructing identities against and within the gendered discourses of science and teaching. American Educational Research Association, Montreal, QC. |
|  | Johnson, A. The Lakota world view and modern physics. American Academy of Religion, Colorado Springs, CO. |
| 1998 | Johnson, A. Sex, love, science and the homoerotic: How gendered constructions of science work to marginalize women scientists. New Mexico Women’s Studies Association, Las Cruces, NM. |
|  | Johnson, A. Defying stereotypes: Six generations of education among Hispanic women in New Mexico. New Mexico Women’s Studies Association, Las Cruces, NM. |
|  | Helms, J. and Johnson, A. Is a passion for science enough? A case study of how gendered factors can work to inhibit the success of promising women scientists. National Association for Research on Science Teaching; San Diego, CA |
|  | Diggs, G., Johnson, A., Boylan, H. and Taylor, G. After Hopwood: The implementation of a minority support program in the post-affirmative action era. American Educational Research Association; San Diego, CA. |
| 1997 | Taylor, G., Johnson, A., Diggs, G. and Boylan, H. Race matters: Evaluating a minority honors program for university students. American Evaluation Association; San Diego, CA. |
|  | Johnson, A. Hispanic women and education in northern New Mexico. AERA Research on Women in Education conference; Ames, IA. |
|  | Helms, J. and Johnson, A. Ingrid’s story: How life got in the way of an aspiring woman scientist. AERA Research on Women in Education conference; Ames, IA. |

# Student publications and presentations

### Publications

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| 2020 | [Young, R. Parenting and Physics: How to Support Physics Students who are Raising Children. The Physics Teacher 58(6).](https://aapt.scitation.org/toc/pte/58/6?size=all&) |

### Presentations

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| 2019 | [Young, R. Parenting and Physics: Supporting undergraduate physics students who are Raising Children. Poster presented at the National Association for Research on Science Teaching Annual Meeting, Baltimore, MD.](https://drive.google.com/open?id=1KfKvOAQkMZXB6G_rZd8p9W_MrUN2KYeW) |
| 2018 | [Young, R. Supporting Undergraduate Physics Students who are the Guardians of a Minor. Paper presented at the Physics Education Research Conference, Washington, DC.](https://drive.google.com/open?id=1Cn2iDw2yIkvjJ6rmAkdinc7IKZEXqem8) |

# Service

### To the profession

Editorial board member, Journal of Research in Science Teaching

Editorial board member, Science Education

Reviewer:

Physical Review Physics Education Research

Journal of Research in Science Teaching

Science Education

CBE-Life Sciences Education

The Physics Teacher

Journal of Peace and Justice Studies

Journal of Women and Minorities in Science and Engineering

Studies in Science Education

Equity and Excellence in Education

Tenure and promotion file, South Dakota State University

Dissertation, McGill University

Dissertation proposal, University of Georgia

### Community Service

2019-20: Member, St. Mary’s County Public Schools Educational Equity Task Force

### University committees

Campus Budget Committee

St. Mary’s College Strategic Planning Steering Committee (invited by the president)

Selection Committee for the Norton T. Dodge Award for Scholarly and Creative Achievement by a Junior Faculty Member

New Faculty Seminar Advisory Board

Faculty Senate

Faculty Issues Committee

College Evaluation Committee

Search committee member: Department of Institutional Research; Department of Chemistry; Department of Mathematics; Office of Instructional Technology; Department of Physics

Advisory committee, DeSousa-Brent Scholars Program

Calculus Emerging Scholars ad hoc committee

Minority Advisory Committee

SMCM representative, Southern Maryland STEM Advisory Board

### Department committees

Department evaluation committee

Search committee member: Department chair, various tenure-track and visiting positions

Coordinating committee, Human Studies major

# References

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| Colleague references: Lois Stover  Dean, School of Education and Human Services  Marymount University  2807 N. Glebe Road  Arlington, VA  22207-4299  Work: (703) 284-3329  Cell: (301) 481-0870  lois.stover@marymount.edu  Lin Muilenburg  2982 Cinnamon Bay Circle  Naples, FL 34119  410-474-4323  Linm@me.com  Katy Arnett  Educational Studies  St. Mary’s College of Maryland  47645 College Drive  St. Mary’s City, MD 20686  Work: (240) 895-4451  Cell: (410) 446-6200  [kearnett@smcm.edu](mailto:kearnett@smcm.edu)  Josh Grossman  Physics  St. Mary’s College of Maryland  47645 College Drive  St. Mary’s City, MD 20686  Cell: (240) 561-0342  Jmgrossman@smcm.edu | Research references: Heidi Carlone  Professor and Katherine Johnson Chair of Science Education  Department of teaching and learning  Peabody college of education and human development  Vanderbilt University  [Heidi.carlone@vanderbilt.edu](mailto:Heidi.carlone@vanderbilt.edu)  (336) 587-7319  John Settlage  Professor, Science Teacher Education  University of Connecticut Neag School of Education  249 Glenbrook Road, Unit 3033 Charles B. Gentry Building Storrs, CT 06269-3064  860-486-1151  John.settlage@uconn.edu  Mia Ong  Senior Research Scientist  TERC  2067 Massachusetts Avenue  Cambridge, MA 02140  617-873-9678  maria\_ong@terc.edu School system partnership reference: Jeff Maher  Chief Strategic Officer  St. Mary’s County Public Schools  301.475.5511 ext. 32133  jamaher@smcps.org |

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