# SHELLY BELLEAU

SCHOOL OF EDUCATION University of Colorado Phone: 970.231.7567 Boulder, CO 80309-0249 e-mail: Shelly.Belleau@PEERphysics.org PROFESSIONAL PREPARATION UNIVERSITY OF DENVER - Denver, Colorado M.A. in Urban Education, GPA 4.0 June 2010 Boettcher Teaching Scholar Colorado Department of Education Teaching Certification in Secondary Science June 2009 Professional Teaching License obtained in November 2011

### UNIVERSITY OF COLORADO - Boulder, Colorado

## **B.A.** in Biochemistry with minor in Chemistry, GPA 3.64

May 2008

National Science Foundation Robert Noyce Scholar, Dean's Scholar, Hach Scholar

## PROFESSIONAL EXPERIENCE

## UNIVERSITY OF COLORADO, BOULDER

PEER Physics - Program Director and Chief Editor

2013-Present

- Lead curriculum development by responding to high school implementations and incorporating standards and research-based pedagogy
- Facilitate professional learning using parallel pedagogy
- Research outcomes from PEER Physics curriculum-driven professional learning communities
- Teach Energy and Interactions (EDUC 1580, PHYS 1580, GRTE 5030)

#### MAPLETON PUBLIC SCHOOLS

Secondary Science Teacher

2009-2013

Taught Chemistry, Physics, and Astronomy

Additional Service

- Planned the chemistry scope and sequence and wrote district chemistry assessments (Science PLC)
- Provided feedback about teacher support and coaching protocols (Danielson Framework)

### NATIONAL SCIENCE FOUNDATION MASTER TEACHING FELLOWSHIP

Streamline to Mastery, University of Colorado, Boulder, Colorado

2009-2019

- Create and implement professional development for science teachers
- Conduct and disseminate science education research

#### AMERICAN CHEMICAL SOCIETY

Working Group to Evaluate ACS Professional Development Activities

2012-2017

- Evaluated current ACS professional development activities
- Developed new professional learning materials

Task Force for the Formation of a Chemistry Teachers Association

2011-2016

- Provided direction regarding for the formation of a national chemistry teacher organization
- Assisted with writing a funding request for the creation of a chemistry teacher association

ChemMatters Magazine Policy Board

2011-2016

- Evaluated the progress and direction of the ACS high school chemistry magazine, ChemMatters
- Chair of the policy board (2013-2016)

Liaison Group on High School Chemistry Teaching

2010-2015

Provided recommendations to the Society Committee on Education (SOCED) and the ACS Division of Chemical Education on current issues in high school chemistry teaching and learning

## REFERRED PUBLICATIONS

- Martins, J., **Belleau, S.** & Otero, V. (2021). *PEER Physics:* An evidence-based framework for inclusive physics curricula, in The Physics Teacher 59, 730
- Lindsay, W., **Belleau, S.** & Otero, V. (2018). PEER Suite: a holistic approach to supporting inductive pedagogy implementation, in A. Traxler, Y. Cao, and S. Wolf (Eds.) *2018 Physics Education Research Conference Proceedings*. Washington DC.
- **Belleau, S.** & Otero, V. (2013). Scientific Practices: Equalizing Opportunities for Linguistically Diverse Students, in S. Rabelo, C. Singh, & P. Engelhardt (Eds.) *2013 Physics Education Research Conference Proceedings*. Melville, NY: AIP Press.
- **Belleau, S.** (2012). Critical Classroom Structures for Empowering Students to Participate in Science, in S. Rabelo, C. Singh, & P. Engelhardt (Eds.) *2012 Physics Education Research Conference Proceedings*. Melville, NY: AIP Press.
- **Belleau, S.**, Ross, M., & Otero, V. (2011). Implementation of Physics and Everyday Thinking in a High School Classroom: Concepts and Argumentation, in S. Rabelo, C. Singh, & P. Engelhardt (Eds.) *2011 Physics Education Research Conference Proceedings*. Melville, NY: AIP Press.

## PRESENTATIONS, WORKSHOPS, AND PLENARY PRESENTATIONS

- **Belleau, S.** (2022). Inclusivity through Evidence in High School Physics, Presented at the National Science Teachers Association Regional Conference, Chicago, IL July 23, 2022
- **Belleau, S.** & Quinty, E. (2022). Inclusivity through Evidence, Self-advocacy through Disciplinary Practices, Presented at the Regional AAPT Conference, Virtual, April 9, 2022
- **Belleau, S.** & Quinty, E. (2021). Teaching Waves with PEER Physics Open Source Resources for General Physics, Presented at the Regional AAPT Conference, Virtual, April 10, 2021
- Otero, V., **Belleau**, S. & Quinty, E. (2020). Supporting Teachers in Their Instruction and in Meeting Longer-Term Professional Goals with the PEER Physics Suite, Presented at the 2020 PhysTEC Conference, Denver, CO, February 29-March 1, 2020.
- **Belleau, S.** (2018). Three Dimensional Assessment in High School Physics, Presented at the summer meeting of the American Association of Physics Teachers, Washington, DC, July 28-August 1, 2018.
- Otero, V. & **Belleau, S.** (2018). PEER Suite: Transforming Courses, Engaging Teachers, and Assessing Multiple Dimensions, Presented at the summer meeting of the American Association of Physics Teachers, Washington, DC, July 28-August 1, 2018.
- Gmurczyk, M., **Belleau, S**., Keil, J., Bridle, C., & Stober, R. (2016). Energy in Chemistry: A Macroscopic View, American Chemical Society sponsored workshop presented at the National Science Teachers Association Regional Conference, Portland, OR, November 11, 2016.
- Gmurczyk, M., **Belleau**, S., Keil, J., Bridle, C., & Stober, R. (2016). A Particulate View, American Chemical Society sponsored workshop presented at the National Science Teachers Association Regional Conference, Portland, OR, November 11, 2016.
- Gmurczyk, M., **Belleau, S.**, Keil, J., Bridle, C., & Stober, R. (2016). Energy in Chemistry: An Atomic View, American Chemical Society sponsored workshop presented at the National Science Teachers Association Regional Conference, Portland, OR, November 11, 2016.
- **Belleau, S.** (2016). Student Positioning in an Inquiry-based Physics Content and Methods Course, Presented at the summer meeting of the American Association of Physics Teachers, Sacramento, CA, July 16-20, 2016.
- **Belleau, S, & Quinty, E.** (2016). Noyce Scholar and MTF Experiences in Teacher Research Teams, Presented at the summer meeting of the American Association of Physics Teachers, Sacramento, CA, July 16-20, 2016.
- **Belleau, S.** (2015). Student Interactions and Substantive Contributions in Whole Class Consensus Discussions, Invited presentation at the winter meeting of the American Association of Physics Teachers, San Diego, CA, January 3-6, 2015.
- Andrew, J., **Belleau**, S., Tinnesand, M., & Gmurczyk, M. (2014). Energy in Chemistry: A Macroscopic View, American Chemical Society sponsored workshop presented at the National Science Teachers Association Regional Conference, Long Beach, CA, December 4-6, 2014.
- Andrew, J., **Belleau, S**., Tinnesand, M., & Gmurczyk, M. (2014). Energy in Chemistry: A Particulate View, American Chemical Society sponsored workshop presented at the National Science Teachers Association Regional Conference, Long Beach, CA, December 4-6, 2014.

- Andrew, J., **Belleau**, S., Tinnesand, M., & Gmurczyk, M. (2014). Energy in Chemistry: An Atomic View, American Chemical Society sponsored workshop presented at the National Science Teachers Association Regional Conference, Long Beach, CA, December 4-6, 2014.
- Andrew, J., Bloom, B., **Belleau, S**., Bridle, C., Puttie, A. Talanquer, V., Tinnesand, M., & Gmurczyk, M. (2014). Energy in Chemistry: From the Macroscopic through the Particulate to the Atomic Levels, American Chemical Society sponsored workshop presented at the Biennial Conference on Chemical Education, Grand Valley, MI, August 3-7, 2014.
- **Belleau, S.**, (2014). Gaining a voice in local and national education policy issues through collaborative relationships. In Debbie Herrington (Presider), High School Teaching as a Profession. Invited Symposium presented at the Biennial Conference on Chemical Education, Grand Valley, MI, August 3-7, 2014.
- **Belleau, S.** & Knapp, E.(2014). Teacher Research and Professional Development: Streamline to Mastery, Presented at the Regional AAPT Conference, Boulder, CO, April 4, 2014
- **Belleau, S,** Knapp, E., & Ross, M. (2013) Addressing the NGSS with Classroom Scientific Induction, Presented at the Regional NSTA Conference, Denver, CO, December 13, 2013
- **Belleau, S.** (2013). Inductive Reasoning: Equalizing Opportunities for Linguistically Diverse Students, Presented at the bi-annual meeting of the American Association of Physics Teachers, Portland, OR, July 13-17, 2013.
- **Belleau, S.** & Otero, V. (2013). Scientific Practices: Equalizing Opportunities for Linguistically Diverse Students. Presented at the 5<sup>th</sup> Annual Symposium on STEM Education, Boulder, CO, September 23, 2013.
- Otero, V., **Belleau, S.** & Baber, A. (2013) History of Rewards for Faculty Participation in LA Programs, Invited Plenary at the 5th Annual International Learning Assistant Workshop, Boulder, CO, October 11, 2013
- **Belleau, S.** & Levine, J. (2013). Teacher Perspective: The need for a national association for teachers of chemistry, Invited Presentation at the ACS National Meeting, Indianapolis, IN, September 6, 2013
- Ross, M., & **Belleau**, S. (2012). Challenging Traditional Assumptions of High School Science through the Physics and Everyday Thinking Curriculum, Presented at the bi-annual meeting of the American Association of Physics Teachers, Philadelphia, PA, July 28-August 1, 2012.
- Samuels, N., **Belleau**, S., Sabella, M., Corbo, J., Dounas-Frazer, D., Zaniewski, A. & Van Duzor, A. (2012). Cultural Influences on Physics Teaching: Identifying Factors, Implementing Change. Invited Symposium presented at the Physics Education Research Conference, Philadelphia, PA, August 1-2, 2012.
- Sherman, S., Dykstra, S., Quinty, E., Severance, S., **Belleau, S.**, Ross, M., Van Dusen, B., & Otero, V. (2011). Streamline to Mastery: Teacher Driven Professional Development Program. Presented at the bi-annual meeting of the American Association of Physics Teachers, Omaha, NE, August 1-5, 2011.
- **Belleau, S.**, Severance, S., Dykstra, S., Quinty, E. (2011). Inquiry Science Instruction. Presented at the Robert Noyce Western Regional Conference, Costa Mesa, CA, March 25-27, 2011.
- Severance, S., **Belleau, S.**, Dykstra, S., Quinty, E. (2011). Streamline to Mastery: Teacher Driven Professional Development Program. Presented at the Robert Noyce Western Regional Conference, Costa Mesa, CA, March 25-27, 2011.
- **Stachurski, S**. & Otero, V. (2010). Essential Components of Student-Centered Physics Curriculua, presented at the annual Noyce PI Conference, Arlington, VA.
- Otero, V. & **Stachurski**, S. (2010). Experiential Learning Model for STEM Education, Faculty Development, and Teacher Preparation, presented at the annual Noyce PI Conference, Arlington, VA.
- **Stachurski, S** (2010). Beyond Content: An analysis of student growth in their attitudes toward learning science and scientific thinking within an inquiry physics classroom, presented at the Boettcher Teaching Symposium, Thornton, CO, May 22, 2010.
- Otero, V., **Stachurski, S**., Lyman, V. (2010). Urban Teachers' Views of the Colorado Learning Assistant Program, presented at the Spring Colloquium Series, University of Colorado, Boulder.
- Otero, V., Finkelstein, N., **Stachurski, S**., & Lyman, V. (2009). Introduction to the Colorado Learning Assistant Program, presented at the annual conference of the Physics Teacher's Education Coalition, Washington, D.C.
- Otero, V., **Stachurski, S**., & Finkelstein, N. (2008). The Learning Assistant/Noyce Fellowship Teacher Preparation Program, presented at the annually Noyce PI Conference, Arlington, VA.