

Curriculum Vitae

CHRISTINE L. BAE
Virginia Commonwealth University
School of Education
Foundations of Education

PERSONAL INFORMATION

Name: Christine Lee Bae
Office address: 1015 West Main Street, 4052 Oliver Hall
Richmond, VA 23220
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EDUCATION

Ph.D. Educational Psychology, 2012, University of Florida
Minor in Quantitative Research, Evaluation, and Methodology
M.A.E. Educational Psychology, 2010, University of Florida
B.S. Psychology, 2007, University of Florida

PROFESSIONAL APPOINTMENTS

Assistant Professor, Educational Psychology, Department of Foundations of Education, Virginia Commonwealth University, 2016 – present
Faculty Affiliate, Department of Psychology, Virginia Commonwealth University, 2016 – present
Co-Director, VCU Cognition and Learning Lab, Virginia Commonwealth University, 2017 – present
Postdoctoral Researcher, Institute for STEM Education, California State University East Bay, 2013 – 2016
Instructor, Department of Educational Psychology, University of Florida, 2011 – 2012
Laboratory Manager, Department of Educational Psychology, University of Florida, 2011 – 2012

SCHOLARSHIP

GRANT FUNDING

Note: Name changed to Bae from Lee in 2016

Funded
NSF Early CAREER, \$1,031,374 2019
Bae, C.L. (PI)

Title: *Building on diverse students' funds of knowledge to promote scientific discourse and strengthen connections to science learning in urban classrooms*

- NSF Discovery Research K12 (DR-K12), \$3,406,193 2018
Bae, C. L. (Co-PI), Hayes, K., (PI), Seitz, J. (Co-PI), & O'Connor, D. (Co-PI)
 Project: *Science Communities of Practice Partnership (SCOPP): Generating Reform Ownership for Transforming Science Teaching.*
- U.S. DOE Supporting Effective Educator Preparation (SEED), \$4,969,512 2018
Bae, C. L. (Co-PI), Dozier, T., (PI), Edmondson, E. (Co-PI), & Senechal, J. (Co-PI), Lisa Abrams (Co-PI)
 Project: *VCU SEED Project*
- VCU Presidential Research Quest (PeRQ) Fund, \$50,000 2018
Bae, C. L. (PI)
- American Psychological Association, Division 15 Early Career Research Grant, \$6,000 2017
Bae, C. L. (PI)
- VCU School of Education, Get Centered Research Grant, \$7,000 2017
Bae, C. L. (PI), Dozier, T. (Co-PI)
 Title: *Examining an Urban Teacher Residency Model: Elementary Teachers' Self-Efficacy, Instruction, and Student Learning Across Affective and Cognitive Domains*
- VCU Office of the VP for Research and Innovation Internal Research Grant, \$10,000 2017
Bae, C. L. (PI)
- California Mathematics and Science Partnership (CaMSP) Professional Development Program Cohort 12, \$3mil 2015 – 2017
Lee, C. S. (Co-PI), Seitz, J. (PI), O'Connor, D. (Co-PI), Hayes, K. N. (Co-PI)
 Title: *Science Partnership for Instructional Innovation (SPFII)*
- NSF Discovery Research K12 (DR-K12), \$1,999,747 2014 – 2017
Lee, C. S. (Co-PI), DiStDiStefano, R. (PI), DeLuc, D. (Co-PI) & Korb, M. (Co-PI)
 Title: *Next Generation Project Alliance for Science Education Toolkit (ASET)*
- California Subject Matter Project (CSMP), 2016-17, \$15,000 2016 – 2017
 Seitz, J. (PI), O'Connor, D. (Co-PI), **Lee, C. S.** (Researcher)
- California Subject Matter Project (CSMP), 2015-16, \$15,000 2015 – 2016
 Seitz, J. (PI), O'Connor, D. (Co-PI), **Lee, C. S.** (Researcher)
 Project: *Integrated Middle School Science (IMSS) Partnership*

- Western Kentucky University, Research and Creative Activities Program, 2013 – 2015
(RCAP), \$10,000
Redifer, J. (PI), **Lee, C. S.** (Co-PI)
Title: *Altering Students' Theories of Creativity to Improve Creative Problem-Solving*
- Unfunded*
NSF IGE, \$500,000
McGarvey, D. (PI), Faris, S. (Co-PI), & **Bae, C. L.** (Co-PI) 2019
Title: *Visual Literacy @ VCU*
- NSF EHR Core Research, \$99,500 2018
Chow., J.C. (PI), **Bae, C.L.** (Co-PI), Peng, P. (Co-PI)
Title: *Measures of Learning in Elementary and Middle School Mathematics & Science: A Research Synthesis*
- James S. McDonnell Foundation, \$1.2 million 2017
Bae, C.L. (PI), Edmondson, E., Hayes, K., Chow, J. C., & O'Connor, D.
Title: *Understanding Teachers-as-Learners: A Mixed Methods Study of the Relationship between Teacher Profiles, Professional Learning, and Enactment of Science Discourse in the Classroom*
- NSF Improving Undergraduate STEM Education (IUSE), \$2 million 2016 – 2018
DiStefano, R. (PI), DeLuc, D. (Co-PI), Lei, H. (Co-PI), **Lee, C. S.** (Co-PI)
Title: *Next Generation Hands-On Science Teaching (HOST)*
- IES Science Partnership Grant, \$400,000 2016 – 2017
Hayes, K. N. (PI), **Lee, C. S.** (Co-PI), O'Connor, D. (Co-PI), Seitz, J. (Co-PI)
Title: *Effective Strategies to Generate Ownership for Transforming Science Teaching and Learning (TSTL) Project: A Partnership Approach*

AWARDS AND HONORS

- Outstanding Early Career Faculty University Award* (VCU, 2019)
Distinguished Junior Faculty Award (VCU School of Education, 2018)
Faculty Excellence Award (VCU School of Education, 2018)
Presentation to Publication Pipeline Award (VCU School of Education, 2018)
Faculty Scholarly Development Award (VCU School of Education, 2017)
National Association for Research in Science Teaching Early Scholar Award Nominee (2015)
I-Cubed Graduate Student Mentoring Award (National Science Foundation, 2012)
Graduate Teaching Award (University of Florida, 2012)
Student Travel Award (American Psychological Association, 2012)
Graduate Student Council Travel Award (University of Florida, 2012)
Professional Advancement Travel Award (University of Florida, 2011)
Graduate Research Assistantship (National Science Foundation, 2009 – 2012)
Graduate Teaching Assistantship (University of Florida, 2008 – 2012)

PUBLICATIONS

*Indicates student author

Refereed Publications:

- Zhang, F. * & **Bae, C. L.** (in press). Motivational factors that influence student science achievement: A systematic literature review of TIMSS studies. *International Journal of Science Education*.
- Hayes, K. N., Inouye, C., **Bae, C. L.**, & Toven-Lindsey, B. (in press). Reciprocal learning in K12 professional development: Understanding faculty instructional change. *Science Education*.
- Redifer, J. L., **Bae, C. L.**, & Zhao, Q. (in press). Self-efficacy and performance feedback: Impacts on cognitive load during creative thinking. *Learning and Instruction*.
- Bae, C. L.**, DeBusk-Lane, M. *, & Lester, A. * (2020). Engagement profiles of elementary students in urban settings. *Contemporary Educational Psychology*, 62. <https://doi.org/10.1016/j.cedpsych.2020.101880>
- Chow, J., Ekholm, E. *, & **Bae, C.** (2020). Relative Contribution of Verbal Working Memory and Attention to Child Language. *Assessment for Effective Intervention*.
- Bae, C. L.**, Hayes, K. N., & DeBusk-Lane, M. (2020). Profiles of middle school science teachers: Accounting for cognitive and motivational characteristics. *Journal of Research in Science Teaching*, 57(6), 911-942. <https://doi.org/10.1002/tea.21617>
- Hayes, K. N., **Bae, C.L.**, O'Connor, D., Seitz, J. C., (2020). Beyond funding: How organizational resources support science professional learning. *American Journal of Education*, 126(3).
- Bae, C. L.**, & Lai, M. (2020). Opportunities to Participate (OtP) in science learning and student engagement: A mixed methods study. *Journal of Educational Psychology*, 112(6), 1128-1153. <https://psycnet.apa.org/record/2019-54277-001>
- Bae, C. L.**, & DeBusk-Lane*. (2019). Engagement profiles in middle school: Implications for motivation and achievement in science. *Learning and Individual Differences*, 74.
- Bae, C. L.**, Therriault, D. J., & Redifer, J. (2019). Investigating the testing effect: Retrieval as a characteristic of effective study strategies. *Learning and Instruction*, 60, 206-214.
- Redifer, J. L., **Bae, C. L.**, & DeBusk-Lane*. (2019). Implicit Theories of Creativity, Working Memory, and Cognitive Load: Impacts on Creative Thinking Performance. *Sage Open*, 9(1), 2158244019835919.

- Bae, C. L.,** DeBusk-Lane, M.*, Hayes, K. N., & Zhang, F.* (2018). Opportunities to Participate (OtP) in Science: Examining Differences Longitudinally and Across Socioeconomically Diverse Schools. *Research in Science Education*, 1-22. <https://doi.org/10.1007/s11165-018-9797-5>.
- Sinapuelas, M., Lardy, C., Korb, M., **Bae, C. L.,** DiStefano, R. (2018). Developing a three-dimensional view of science teaching: A tool to support preservice teacher discourse. *Journal of Science Teacher Education*, 30, 101-121.
- Bae, C. L.,** & DeBusk-Lane, M. L.*. (2018). Stability of motivation belief profiles middle school science: Links to classroom goal structures and achievement. *Learning and Individual Differences*, 67, 91-104.
- Inouye, C., **Bae, C. L.,** & Hayes, K. (2017). Whiteboarding improves learning in a college biology course. *Advances in Physiology Education*, 41(3), 478-484.
- Koro-Ljungberg, M. E., Douglas, E. P., McNeill, N. J., Therriault, D., **Bae, C. L.,** & Malcom, Z. (2017). Academic problem-solving and students' identities as engineers. *Qualitative Report*, 22(2), 456-479.
- Bae, C. L.,** Hayes, K. N., Seitz, J., O'Connor, D., & DiStefano, R. (2016). A coding tool for examining the substance of teacher professional learning and change with example cases from middle school science lesson study. *Teaching and Teacher Education*, 60, 164-178.
- Bae, C. L.,** Hayes, K. N., O'Connor, D., Seitz, J. C., & DiStefano, R. (2016). The diverse forms of teacher leadership: A typology and survey tool for middle school science. *Journal of School Leadership*, 26, 907-937.
- Lee, C. S.,** Hayes, K. N., Seitz, J. C., DiStefano, R., & O'Connor, D. (2016). Examining motivational structures that differentially predict engagement and achievement in middle school science. *International Journal of Science Education*, 38(2), 192-215.
- Hayes, K. N., **Lee, C. S.,** DiStefano, R., O'Connor, D., & Seitz, J. (2016). Measuring science instructional practices: A survey tool for the age of NGSS. *Journal of Science Teacher Education*, 27(2), 137-164.
- Redifer, J. L., Therriault, D. J., **Lee, C. S.,** and Schroeder, A. (2016). Strategy instruction and the working memory-cognitive load interaction: Contributions to mathematical problem-solving. *Applied Cognitive Psychology*, 30, 420-429.
- Therriault, D. J., Redifer, J. L., **Lee, C. S.,** & Wang, Y. (2015). On Cognition, need, and action: How working memory and need for cognition influence leisure activities. *Applied Cognitive Psychology*, 29(1), 81-90.

- Lee, C. S., Huggins, A. C., & Therriault, D. J. (2014). A Measure of Creativity or Intelligence? Examining Internal and External Structure Validity Evidence of the Remote Associates Test. *Psychology of Aesthetics, Creativity, and the Arts* 8(4), 446-460.
- Lee, C. S., McNeill, N., Douglas, E. P., Koro-Ljungberg, M. E., & Therriault, D. J. (2013). Indispensable resource? A phenomenological study of textbook use in engineering. *Journal of Engineering Education*. 102(2), 269-288.
- Lee, C. S., & Therriault, D. J. (2013). The cognitive underpinnings of creative thought: A latent variable analysis exploring the roles of intelligence and working memory in three creative thinking processes. *Intelligence*, 41, 306-320.
- Liu, G., Zhang, S., Zhang, J., Lee, C. S., Want, Y., & Brownell, M. (2013). Autonomous Motivation and Chinese Adolescents' Creative Thinking: The Moderating Role of Parental Involvement. *Creativity Research Journal*, 25(4), 446-456.
- Lee, C. S., Therriault, D. J., & Linderholm, (2012). On the cognitive benefits of cultural experiences: Exploring the relationship between studying abroad and creative thinking. *Applied Cognitive Psychology*, 26, 768-778.

Conference Proceedings:

- Douglas, E. P., Agdas, S., Lee, C. S., Koro-Ljungberg, M. E., & Therriault, D. J., (2015). Ambiguity during engineering problem-solving. *Frontiers in Education Conference*, El Paso, Texas.
- Douglas, E. P., Koro-Ljungberg, M., Therriault, D. J., Lee, C. S., & McNeill, N. (2012). Discourses and social worlds in engineering education: Preparing problem-solvers for engineering practice. *Proceedings of the American Society for Engineering Education*.
- Therriault, D. J., Lee, C. S., Douglas, E. P., & Koro-Ljungberg, M. E. (2011). Open-book problem-solving in engineering: An exploratory study. *American Society for Engineering Education Annual Conference*, Vancouver, British Columbia, June 2011.
- Douglas, E. P., Koro-Ljungberg, M. E., Therriault, D. J., Lee, C. S., Malcolm, Z., & McNeill, N. (2011). Work in progress: The role of working memory and epistemic beliefs on open-ended problem solving. *Frontiers in Education Conference*, Rapid City, South Dakota, 2011.
- Douglas, E. P., Koro-Ljungberg, M., Malcolm, Z. T., McNeill, N., Therriault, D. J., & Lee, C. S. (2011). Moving beyond formulas and fixations: Exploring approaches to solving open-ended engineering problems. *Proceedings of the American Society for Engineering Education Annual Conference*, Vancouver, British Columbia, June 2011.

Manuscripts under review:

Bae, C. L., Mills, D., & Zhang, F. (revise and resubmit). A systematic review of scientific discourse in urban K12 classrooms: Accounting for individual, collective, and contextual factors. *Review of Educational Research*.

Zhang, F.*, **Bae, C. L.,** & Broda, M. (revise and resubmit). Science self-concept, relatedness, and teaching quality: Examining multilevel factors that predict science achievement among grade 8 students. *International Journal of Science and Mathematics Education*.

Sjogren, A., **Bae C. L.,** Broda, M., Zumbrunn, S., & Deutch, N. (under review). Afterschool Engagement: A Mixed Methods Approach to Understanding Profiles of Youth Engagement. *Youth and Society*.

Manuscripts in progress:

Bae, C. Mills, D., Sealy, M.*, & Cabrera, L.* (in progress). Hybrid spaces that support students' engagement in science discourse.

Bae, C. L., Lai, M., & Liu, Y. (in progress). Achievement in urban elementary schools: An ecological study of engagement and student, classroom, and school predictors.

Bae, C. L., Broda, M., Mills, D. (in progress). A longitudinal examination of student engagement in urban schools: Accounting for student and classroom factors.

Toven-Lindsey, B., **Bae, C. L.,** & Hayes, K. N. (in progress). Meeting elementary science teachers' needs for autonomy, competence, and relatedness in professional learning communities.

Cabrera, L.*, Bae, C. L. (in progress). Classroom questioning and students' self-regulation: A systematic review.

Sealy, M.* & Bae, C. (in progress). Examining Black students' language and identities in science discourse: A funds of knowledge approach.

Sea, M.* & Bae, C. (in progress). Ability beliefs and motivation in college mathematics literature review.

Mills, D. C. & Bae, C. L. (in progress). Examining the influence of teacher identity on the use of scientific discourse in middle school classrooms.

Bae, C., Cabrera, L.*, Sealy, M.* & Mills, D. (in progress). Science discourse that builds on students' funds of knowledge: Development of a codebook.

Cabrera, L.*, & Bae, C. L. (in progress). A mixed methods study of students' science learning profiles in middle school: Accounting for cognitive and motivational characteristics.

BOOK CHAPTERS

Zumbrunn, S., **Bae, C. L.**, Furman, J., & Sea, M. (2020). Understanding Psychological Needs to Guide Culturally-Responsive Instruction for Students. In *Teaching motivation for student engagement* (pp.). Meyer, D., & Emery, A. (Eds.). Information Age Publishing: NY, New York.

Day, S., & **Bae, C. L.** (2019). Developing Authentic Performance Assessments in a Classroom Mini-Economy: Reflections on the Process of Design. In *Design Research in Social Studies Education: Critical Lessons from an Emerging Field* (pp. 84). Rubin, B. C., Freedman, E. B., & Kim, J. (Eds.). Routledge: NY, New York.

CONFERENCE PRESENTATIONS

Bae, C. L., Mills, D. C. *, Zhang, F. *, Sealy, M. *, Venning, C. *, & Cabrera, L. * (accepted). A systematic review of scientific discourse in K12 urban classrooms: The role of individual, collective, and contextual factors. *American Educational Research Association, 2021.*

Bae, C. L., Mills, D. C., * & Sealy, M. * (accepted). Taking a situative perspective on engagement in urban science middle schools: A mixed methods study. *American Educational Research Association, 2021.8.24)*

Zhang F. *, & **Bae, C.L.** (accepted as *Division C Outstanding Graduate Student Research Poster*). Opportunities-to-learn and motivation in science: Examining person and context factors that predict science achievement among grade 8 students. *American Educational Research Association, 2021.*

Cabrera, L. *, & **Bae, C. L.** (accepted). A mixed methods study of students' science learning profiles in middle school: Accounting for cognitive and motivational characteristics. *American Educational Research Association, 2021.*

Bae, C. L., Hayes, K. H., DeBusk-Lane, M. * (accepted). Profiles of middle school science teachers: Accounting for cognitive and motivational characteristics. *AERA, San Francisco, CA, 2020.*

DeBusk-Lane, M. *, **Bae, C. L.**, & Lester, A. M. * (accepted). Student engagement in urban elementary schools: A variable and person-centered approach. *AERA, San Francisco, CA, 2020.*

Hayes, K. N., Inouye, C., **Bae, C. L.**, Toven-Lindsey, B.(accepted). Student engagement in urban elementary schools: A variable and person-centered approach. *AERA, San Francisco, CA, 2020.*

Hayes, K. N., **Bae, C. L.**, & Bajo, R.(accepted). Motivating teachers for instructional reform: Balancing tensions between prescriptiveness and responsiveness. *AERA, San Francisco, CA, 2020.*

- Hayes, K. N., Preminger, L., **Bae, C. L.**, & Toven-Lindsey, B., O'Connor, D., & Seitz, J. (accepted). Conceptualizing teacher learning in an organizational context: A study of elementary science professional development. *AERA*, San Francisco, CA, 2020.
- Bae, C. L.**, Mills, D., Matewos, A., & Zhang, F. (2019). Examining Methodologies used to Capture Complex Phenomena related to Motivation and STEM Learning in Classrooms. *SCIPIE*, Savannah, GA, October, 2019.
- Furman, J., Zumbunn, S., & **Bae, C. L.** (2019). Motivation of Students in Juvenile Detention: A Brief Review of Motivation Frameworks With At-Risk Adolescents. *SCIPIE*, Savannah, GA, October, 2019.
- Bae, C. L.**, Redifer, J. L., & Rivera, C. (2019). Examining the Role of Students' Individual Differences in Retrieval-Based Learning. *EARLI*, Aachen, Germany, August 2019.
- Zhang, F., & **Bae, C. L.** (2019). A Systematic Literature Review of TIMSS Studies: Motivational Factors that Influence Science Achievement among 4th and 8th Grade Students. *AERA*, Toronto, CA, April 2019.
- Bae, C. L.**, Zhang, F., Sea, M., DeBusk-Lane, M., & Hayes, K. (2019). Opportunities to Participate in Science: Examining Differences Longitudinally and Across Socioeconomically Diverse Schools. *AERA*, Toronto, CA, April 2019.
- Bae, C. L.**, & DeBusk-Lane, M. (2018). Profiles of Motivation in Middle School Science: Links to Classroom Structures and Achievement. *American Psychological Association, Division 15*, San Francisco, CA, August 2018.
- Bae, C. L.**, Hayes, K. N., & Dabney, K. (2018). The Role of Student Characteristics and Classroom Learning Opportunities in Science Achievement: A Multilevel Approach. Paper for the *American Educational Research Association* (AERA), New York, April 2018.
- Bae, C. L.**, DeBusk-Lane, M., & Hayes, K. N. (2018). Student Engagement and Opportunities to Participate in Science Practices Across Socioeconomically Diverse Schools. Paper for the *American Educational Research Association* (AERA), New York, April 2018.
- Dabney, K. P., Sonnert, G., **Bae, C. L.**, & Sadler, P. M. (2018). STEM Experiences and Computer Science Career Interest. Paper for the *American Educational Research Association* (AERA), New York, April 2018.
- Hayes, K. N., Preminger, L., Tran, V., & **Bae, C. L.** (2018). The Relationship Between Professional Development and Teacher Retention: A Mixed Methods Study. Paper for the *American Educational Research Association* (AERA), New York, April 2018.

- DeBusk-Lane, M., Gnilka, P., **Bae, C. L.**, Suleyman, A., & Fye, H. (2018). Counselor Burnout Inventory: Factor Structure and Measurement Invariance across U.S. and Turkish Professional School Counselors. Paper for the *American Educational Research Association* (AERA), New York, April 2018.
- Bae, C. L.** (2018). A Multilevel Analysis of Classroom Learning Opportunities and Engagement in Middle School Science. *American Psychological Association, Division 15*, San Francisco, CA, August 2018.
- Bae, C. L.**, Serang, S., & Dozier, T. (2018). Examining the Effects of an Urban Teacher Residency Program on Students' Math and Reading Achievement: Evidence from Classroom-Based and Benchmark Measures. Paper presentation at the *Consortium for Research on Educational Assessment and Teaching Effectiveness* (CREATE), Williamsburg, VA, October 2018.
- Bae, C. L.**, & DeBusk-Lane, M. (2017). Engaging Students in Science: Measurement Invariance of Science Practices across Middle School Grades and Socioeconomic Subgroups. Paper presentation at *The Society for Research on Educational Effectiveness* (SREE), Washington DC, March 2017.
- Bae, C. L.**, Inouye, C., & Hayes, K. N. (2017). Active retrieval and peer discourse strategy: Whiteboarding increases deeper understanding in college biology course. Paper presentation at the *American Educational Research Association* (AERA), San Antonio, Texas, April 2017.
- Day, S., & **Bae, C. L.** (2017). Creating authentic tasks using the C3 framework in a classroom mini-economy. Paper presentation at the *College and University Faculty Assembly for Social Studies Education*, San Francisco, CA, November 2017.
- Lardy, C., Korb, M. DiStefano, R., **Bae, C.L.** (2017). Developing a Three-Dimensional View of Science Teaching: A Tool for Facilitating Preservice Teacher Learning Paper presented at the *National Association for Research in Science Teaching*, San Antonio, Texas, April 2017.
- Bae, C. L.**, DeBusk-Lane, M. *, & Hayes, K. N. (2017). Student Engagement in Middle School Science: Findings across Socioeconomic Subgroups. Paper presentation at the *American Psychological Association, Division 15*, Washington DC, August 2017.
- Bae, C. L.**, Therriault, D. J., & Redifer, J. L. (2017). Examining the Comparative Effectiveness of Retrieval-Based Study Strategies among College Students. Paper presentation at the *American Psychological Association, Division 15*, Washington DC, August 2017.
- Bae, C. L.**, Therriault, D. J., & Redifer, J. L. (2017). The Added Benefit of Coupling Study Strategies with Retrieval Practice. Poster presentation at the *Association for Psychological Science*, May 2017.

- Bae, C. L., & Chow, J. C.** (2017). Elementary Mathematics and Science Learning: Definitions and a Cognitive Framework. Poster presentation at the *Association for Psychological Science*, May 2017.
- Redifer, J. L., **Bae, C. L.**, & DeBusk-Lane, M.* (2017). Cognitive Load Mediates the Relationship Between Implicit Beliefs and Creative Thinking Scores. Poster presentation at the *Association for Psychological Science*, May 2017.
- Hayes, K. N., **Bae, C. L.**, DiStefano, R., Seitz, J., & O'Connor, D. (2017). Developing capacity for urban science education reform: The role of resource chains and constellations. Roundtable presented at the *American Educational Research Association* (AERA), Washington DC, April 2017.
- Lee, C. S.**, Hayes, K. N., Seitz, J. C., DiStefano, R., & O'Connor, D. (2016). Examining Students' Motivational Structures that Differentially Predict Engagement and Achievement in Middle School Science. *American Educational Research Association* (AERA), Washington DC, April 2016.
- Inouye, C., **Lee, C. S.**, & Hayes, K. N. (2016). Whiteboarding Draws Upon Multiple Learning Processes to Increase Performance in a College Biology Course. *American Educational Research Association* (AERA), Washington DC, April 2016.
- Lee, C. S.**, Hayes, K. N., O'Connor, D., Seitz, J. C., & DiStefano, R. (2016). A survey tool for assessing distinct types of teacher leadership. Paper presented at the *American Educational Research Association* (AERA), Washington DC, April 2016.
- Lee, C. S.**, Hayes, K. N., O'Connor, D., Newman, A., Seitz, J. C., & DiStefano, R. (2016). Student Ideas In Middle School Science: Attending to Partial Understandings Regarding Science Phenomena. Paper presented at the *National Association for Research in Science Teaching*, Baltimore, MA, April 2016.
- Hayes, K., & **Bae, C. L.** (2016). An Organizational Capacity Framework: Supporting Educational Reform in Complex Contexts. Paper. University Council for Educational Administration, Detroit, November, 2016.
- DiStefano, R., **Lee, C.S.**, Lardy, C., LeDuc, D., & Korb, M. (2016). Developing Rubrics to Support Teachers' Understanding of the NGSS: An Improvement Science Approach. Paper presented at the *American Educational Research Association* (AERA), Washington DC, April 2016.
- Lardy, C., **Lee, C. S.**, DiStefano, R., Korb, M., and LeDuc, D. (2016). Next Gen TARSC: Developing Tools to Support Teacher Learning and Application of NGSS. Paper presented at the *Association for Science Teacher Education* (ASTE) International Meeting, Reno, NV.

- Hayes, K. N., **Lee, C. S.**, DiStefano, R., Seitz, J., & O'Connor, D. (2016). Financial and Structural Resources Pivotal To Urban Science Education Reform: Resource Chains And Constellations. Paper presented at the *National Association for Research in Science Teaching*, Baltimore, MA, April 2016.
- Inouye, C., Hayes, K. N., **Lee, C. S.**, Seitz, J., O'Connor, D., & DiStefano, R. (2016). Reciprocal Learning in Science Professional Development: Faculty Shift their Practice. Paper presented at the *National Association for Research in Science Teaching*, Baltimore, MA, April 2016.
- Lee, C. S.**, Hayes, K. N., DiStefano, R., Seitz, J., & O'Connor, D. (2015). Examining Conditions to Support Lesson Study as a Vehicle for Integrating NGSS in Science Classrooms. Poster presented at the 2015 *National Association for Research in Science Teaching Annual Conference*, Chicago, IL.
- Lee, C. S.**, Hayes, K. N., Seitz, J. C., O'Connor, D., & DiStefano, R. (2015). Integrating NGSS Science Practices in Middle School Science Classrooms: Examining the Process of Two Lesson Study Teams. Round table presented at the *American Educational Research Association (AERA)*, Chicago IL, April 2015.
- Hayes, K. N., **Lee, C. S.**, Dozier, S., O'Connor, D., Seitz, J., & DiStefano, R. (2015). Measuring Science Instructional Practice: A Survey Tool for the Age of NGSS. Poster presented at the *2015 National Association for Research in Science Teaching*, Chicago, IL.
- Redifer, J. L. & **Lee, C. S.** (2015). Believing that creativity cannot be improved hurts creative performance and increases cognitive load. Presented at the *Annual Meeting of the Association for Psychological Science*, New York, NY.
- Lee, C. S.**, Hedman, R., Hayes, K. N., O'Connor, D., Seitz, J., & DiStefano, R. (2015). Teachers Grappling with NGSS and Common Core: Empirically Examining Lesson Study Teams. Paper presented at the *National Association for Research in Science Teaching Annual Conference*, Chicago, IL, April 2015.
- Lee, C. S.**, O'Connor, D., Hayes, K. N., Seitz, J. C., & DiStefano, R. (2015). The Diverse Forms of Teacher Leadership: Examining Priorities, Skills, and Roles of Teacher Leaders in Middle School Science. Paper presented at the *American Educational Research Association (AERA)*, Chicago IL, April 2015.
- Lee, C. S.**, Huggins, A. C., & Therriault, D. J. (2014). What does the Remote Associates Test Measure? A CTT and IRT Approach to Examining a Creativity Test. Paper presented at the *American Psychological Association 122nd Annual Convention*, Division 10, Washington DC, August, 2014.
- Lee, C. S.**, Seitz, J., DiStefano, R., & O'Connor, D. (2014). Middle School Science Professional Development Linked to Increases in Teachers' Content Knowledge and

Inquiry-Based Teaching Practices. Poster presented at the *Association for Psychological Science 27th Annual Convention*, San Francisco, CA, May 2014.

Lee, C. S., Seitz, J., DiStefano, R., & O'Connor, D. (2014). Development of Inquiry-Based Science Lessons: A Video Analysis of Two Middle School Science Lesson Study Teams. Poster presented at the *Association for Psychological Science 27th Annual Convention*, San Francisco, CA, May 2014.

Redifer, J.L. & **Lee, C. S.** (2014). Creative self-efficacy and creativity beliefs influence cognitive load during creative thinking tasks. Presented at the Annual Meeting of the *Association for Psychological Science*, San Francisco, CA, May 2014.

Redifer, J.L. & **Lee, C. S.** (2014). Creativity beliefs and performance feedback influence creative problem-solving performance. Presented at the Annual Meeting of the *American Psychological Association*, Washington, D.C., August 2014.

Lee, C. S., Therriault, D.J., & Redifer, J.L. (2013). Theories of creativity: Changing students' beliefs about creativity as a fixed or malleable ability. Presented at the *Annual Meeting of the American Psychological Association*, Honolulu, HI, August, 2014.

Therriault, D. J., **Lee, C. S.,** & Schelble, J. S. (2013). Testing the testing effect: Retrieval, Test-generation, self-correction, and testing linked to increased future recall. Poster presented at the *Association for Psychological Science 25th Annual Convention*, poster presentation, Washington DC, May 2013.

Lee, C. S., Therriault, D. J. (2013). A latent variable analysis exploring the role of intelligence and working memory in creative problem-solving processes. Poster presented at the *American Educational Research Association Annual Meeting 2013*, San Francisco, CA, April 2013.

Lee, C. S., Curtis, R., & O'Connor, D. (2013). Outcomes of Scaling and Sustaining Science Lesson Study. Presented at the *Lesson Study Conference*, Sacramento, CA, May, 2013.

Koro-Ljungberg, M. E., Douglas, E. P., McNeill, N. J., **Lee, C. S.,** & Therriault, D. J. (2012). How can discourse analysis offer insights into students' problem solving processes? Panel speaker at the *Eighth International Congress of Qualitative Inquiry*. Urbana-Champaign, IL, May 2012.

Lee, C. S. (2012, November). Qualifying Exams and the Dissertation Process. Panel speaker at the *University of Florida Student Alliance of Graduates in Education Annual Event*, Gainesville, FL.

Schelble, J., Therriault, D. J., **Lee, C. S.,** & Wang, Y. (2012). Working Memory Capacity and the Need for Cognition: Factors Relating to College Students' *Choice* of Leisure Activities. *American Psychological Association 120th Annual Convention*, Division 15, Orlando, FL, August, 2012.

Lee, C. S., Therriault, D. J., Fischler, I. S., Wafai, A. A., Williamson, J., & Heilman, K. M. (2012). The Role of Intelligence and Personality on Creative Thinking, Behaviors, and Achievements. Paper presented at the *American Psychological Association 122nd Annual Convention*, Division 10, Orlando, FL, August, 2012.

Lee, C. S., & Koro-Ljungberg, M. E. (2012). “Breaking Methodological Boundaries: Creativity in Qualitative Research Designs”, Paper presented at *The Qualitative Report’s 3rd Annual Conference*, Fort Lauderdale, FL, January 2012.

Workshops and Professional Development:

Bae, C., Mills, D., Cabrera, L., & Sealy, M. (2020). Science discourse: Building on students’ funds of knowledge. Two day professional development presented at VCU, August 2020, Richmond, VA.

DiStefano, R., Lee, C. S., and Lardy, C. (2015). Helping Beginning & Emerging NGSS Practitioners Unpack NGSS through Structured Dialogue. Workshop presented at *CSUEB NGSS/CCSS Conference* April 2015, Hayward, CA.

Lee, C. S., & O’Connor, D. (2015). NGSS Practices – Taking it to the Classroom. Presented at the *5th Annual STEAM Colloquium*, 2015, San Ramon, CA.

Lee, C. S., & O’Connor, D. (2014). Common Core for Science: Integrating Literacy in Science Classrooms. Presented at the *2nd Annual California STEM Symposium*, 2014, San Diego, CA.

O’Connor, D., & Lee, C. S. (2013). Scaling and Sustaining Middle School Science Lesson Study in San Francisco Bay. Presented at the *1st Annual California STEM Symposium*, 2013.

Lee, C. S. & O’Connor, D.M. (2013). Integrating Common Core and NGSS: Building Leadership Capacity to Transform Science Teaching and Learning. Presented at the *California Science Teachers Association Convention* 2013, Palm Springs, CA, October 2013.

Lee, C. S. & Vu, A. (2013). Lesson Study as a Vehicle to Integrate NGSS in Middle School Classrooms. Presented at the *California Science Teachers Association Convention* 2013, Palm Springs, CA, October 2013.

RESEARCH EXPERIENCES

Research Assistant
University of Florida
NSF Engineering Education Project

2009 – 2012

Examined the roles of domain knowledge, epistemic beliefs, and cognitive abilities in undergraduate engineering problem-solving.

Internal Evaluation Research Assistant 2012
University of Florida
NSF Innovation through Institutional Integration (I-Cubed) Training Grant
Interviewed deans, faculty, and graduate students regarding STEM and Social, Educational, and Behavioral programs in the university.

Graduate Research Assistant 2008 – 2011
University of Florida
College of Education, Cognitive Psychology Laboratory
Examined the roles of working memory, strategy acquisition, and creative cognition on problem-solving and learning processes.

TEACHING AND ADVISING

COURSES TAUGHT

Virginia Commonwealth University

EDUS 720, Doctoral seminar in Motivation and Learning
EDUS 712, Doctoral seminar in Mixed Methods Research
EDUS 720, Doctoral seminar in Cognition and Learning in Schools
EDUS 620, Doctoral seminar in Human Development in Education
EDUS 617, Advanced Educational Psychology for Postsecondary Teachers
EDUS 304, Introduction to Educational Psychology
EDUS 301, Human Development and Learning
PSYC 494, Undergraduate Research Internship

California State University East Bay

PSYC 4800, Human Learning and Cognition Laboratory, 2015 – 2016

University of Florida

EDF 3110, Human Growth and Development throughout the Lifespan, 2008 – 2012
EDF 3115, Child Development for Inclusive Education, 2009 – 2010

DISSERTATION COMMITTEES

Chair

Fa Zhang, Educational Psychology, Foundations of Education
Marquita Sea, Educational Psychology, Foundations of Education
Lauren Cabrera, Educational Psychology, Foundations of Education
Martinique Sealy, Educational Psychology, Foundations of Education

Committee Member

Ashlee Lester, Educational Psychology, 2019, Foundations of Education

Morgan DeBusk-Lane, Educational Psychology, 2019, Foundations of Education
Jennifer Underwood, Counseling Education, 2019, Counseling and Special Education
Eric Ekholm, Educational Psychology, 2018, Foundations of Education
Drew Baker, Educational Psychology, 2017, Foundations of Education
Savannah Love, Educational Psychology, 2018, Foundations of Education
Melinda VanDevelder, Educational Leadership, 2018, Educational Leadership
Anita Crowder, Educational Psychology, 2018, Foundations of Education

PROFESSIONAL SERVICE

NATIONAL SERVICE

Editorial Board

Journal of Educational Psychology (Editorial Board)
Contemporary Educational Psychology (Editorial Board)
Educational Psychology (Consulting Editor)

Ad Hoc Reviews

Learning and Instruction, Journal of Research in Science Teaching, Psychological Bulletin, Frontiers (editorial board), *Journal of Applied Research in Memory and Cognition, Behavior Research Methods, Journal of Cognitive Psychology, Education and Administration Quarterly, , Thinking and Reasoning, Psychology of Aesthetics, Creativity, and the Arts, Journal of School Leadership, Journal of Creative Behavior, American Journal of Psychology, Educational Psychology Review, Scientometrics, SAGEOpen, Journal of Engineering Education, Educational Researcher, Science Education*

Grant Reviews

Institute of Education Sciences Grant Review Panelist 2020
Postsecondary and Adult Education

National Science Foundation (NSF) Grant Review Panelist 2016 – present
Directorate for Social, Behavioral, and Economic (SBE) Sciences,
Research Experiences for Undergraduates (REU)

Directorate for Social, Behavioral, and Economic (SBE) Sciences,
Postdoctoral Research Fellowships (SPRF)

Directorate for Education and Human Resources (EHR)
Discovery Research K12 (DRK12)

Florida Department of Education Bureau of Family and Community Outreach, 21st Century Community Learning Centers Program, Gainesville, FL

Book Review

SAGE Publications 2012

National Conference Chair/Panelist

AERA DivC Graduate Student Committee, Co-Chair	2019-21
APA Div15 Early Career Researchers Committee, Co-Chair	2019-21
AERA DivC Chair	2018
APA Div15 Panelist	2017
NARST Chair	2015

Research Mentor

American Psychological Association Division 15	2017 – present
Association for Psychological Science	2013 – 2014

National Conference Proposal Reviews

American Educational Research Association	2012 – present
American Psychological Association	2012 – present
National Association for Research in Science Teaching	2013 – 2016
Association for Psychological Science	2012 – 2014

UNIVERSITY SERVICE

Faculty Senate, <i>Representative</i>	2019-2020
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School of Education

MERC Postdoc Search Committee, <i>Member</i>	2020
SOE FACR and Salary Savings Committee, <i>Member</i>	2020
SOE Faculty Organization, <i>Delegate</i>	2020
SOE Director of Finance Committee, <i>Member</i>	2019
SOE Scholarship Committee, <i>Member</i>	2016 – present
Recruitment Specialist Search Committee, <i>Chair</i>	2017
SOE Budget Committee, <i>Member</i>	2017 – present
Richmond Teacher Residency Program, <i>Assessor</i>	2017 – present
Associate Dean of Research and Faculty Development Search Committee, <i>Member</i>	2018
Diversity, Equity, and Inclusion Committee, <i>Faculty Mentor</i>	2018
MERC Evaluation Specialist Search Committee, <i>Member</i>	2018

DEPARTMENT SERVICE

Foundations Budget Committee, <i>Member</i>	2017 – present
EDPS Faculty Search Committee, <i>Co-Chair</i>	2018
EDPS Track Coordinator	2019

PROFESSIONAL AND ACADEMIC AFFILIATIONS

American Psychological Association (APA)	2011 – present
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Division 15 (Educational Psychology)

American Educational Research Association (AERA) 2011 – present
Division C (Learning and Instruction)

National Association for Research in Science Teaching (NARST) 2013 – 2016

Association for Psychological Science (APS) 2011 – 2017

Society for Research on Educational Effectiveness (SREE) 2016

GUEST LECTURES, REPORTS, AND OTHER PUBLICATIONS FOR THE PUBLIC

Dissemination of Research Findings, “Keeping Kids Interest in STEM Can Lead to Later Success”, (December, 2019), <https://anovicejournalist.com/kids-and-stem>

VCU School of Education Annual Research Colloquium, **Bae, C. L.** (2018, April). *Student Engagement and Opportunities to Participate in Science Practices.*

VCU School of Education Brown Bag Presenter, **Bae, C. L.** (2016, December). *Learning in Middle School and University Science Classrooms.*

VCU MPlus Group Presenter, **Bae, C. L.** (2016, September). *Testing Measurement Invariance across Middle School Grades and Socioeconomic Status Groups for Middle School Science.*

Webinar Presenter, Distefano, R., **Bae, C. L.**, DeLuc, D., Korb, M., Lardy, C., Sinapuelas, M. (2016, December). *Next Gen ASET 3-Dimensional Science Teacher Preparation: Supporting Faculty in Reforming their Courses. Part 2: Networked Improvement Communities.* WestEd online webinar.

Webinar Presenter, Distefano, R., **Bae, C. L.**, DeLuc, D., Korb, M., Lardy, C., Sinapuelas, M. (2016, October). *Next Gen ASET 3-Dimensional Science Teacher Preparation: Supporting Faculty in Reforming their Courses. Part 1: The Next Gen Alliance for Science Education Toolkit (ASET Toolkit).* WestEd online webinar.

Invited Speaker, **Lee, C. S.**, O’Connor, D., & Hayes, K. (2014). *A Professional Development Model for Improving Science Education.* Presented at California State University East Bay, Hayward, CA.

Invited Speaker, **Lee, C. S.** (2014). *How to Write a Curriculum Vitae for Graduate School.* Presented at California State University East Bay, Hayward, CA.

Dissemination of Research Findings, *Journal of Engineering Education Selects in American Society for Engineering Education PRISM*, **Lee, C. S.**, McNeill, N. J., Douglas, E. P., Koro-Ljungbert, M. E., & Therriault, D. J. (2013). Indispensable Resource? Phenomenology of

Textbook Use in Engineering Problem Solving, September, 2013. <http://www.asee-prism.org/jee-selects/>

Invited Speaker, **Lee, C. S.** (2013, October). *Exploring the Relationships among Intelligence, Working Memory, and Three Types of Creative Thinking Using Latent Variable Analysis*. Presented at University of California Riverside, Riverside, CA.

Volunteer, *Citizen Schools* Extended Learning Apprenticeship Teacher, 2014. Prepared and co-taught science lessons at Elmhurst Community Preparatory School, Oakland CA.

Dissemination of Research Findings, *Association for Psychological Science Student Caucus Undergraduate Update*, **Lee, C. S.** (2013). “Be More than Just a ‘Good Student’: Exploring Creative Ways for Successful Learning”.
http://www.psychologicalscience.org/index.php/members/apssc/undergraduate_update/undergraduate-update-summer-2013/be-more-than-just-a-good-student-exploring-creative-ways-for-successful-learning

Dissemination of Research Findings, *Creativity Post* Columnist, **Lee, C. S.**, 2012. “Can You Become Smarter? Students Who Say ‘Yes’ Act More Intelligently”, September 26, 2012.
http://www.creativitypost.com/education/can_you_become_smarter_students_who_say_yes_act_more_intelligently

Dissemination of Research Findings, *Creativity Post* Columnist, **Lee, C. S.**, 2012. “How to Draw Inspiration in the ‘Publish or Perish’ Field of Academia”. August 13, 2012.
http://www.creativitypost.com/education/how_to_draw_inspiration_in_the_publish_or_perish_field_of_academia

Dissemination of Research Findings, *Pacific Standard*, “To Boost Creativity, Study Abroad”, August 6, 2012. <http://www.psmag.com/books-and-culture/to-boost-creativity-study-abroad-43897>

University of Florida, College of Education, 2012. Provided one-on-one tutoring and mentorship to service teachers, Gainesville FL.

Mentor, 2012. *Association for Psychological Science Student Caucus*.

Invited Speaker, **Lee, C. S.**, & Therriault, D. J. (2012, October). *On the Cognitive Benefits of Cultural Experiences: Exploring the Relationship between Studying Abroad and Creativity*. Presented at the University of Florida International Center, Gainesville, FL.

Invited Speaker, **Lee, C. S.** (2012, March). *Phenomenological Analysis: Discovering the Essence of Lived Experiences*. Presented at the University of Florida Department of Research Evaluation and Methodology for a Seminar in Qualitative Data Analysis, Gainesville, FL.

Invited Speaker, **Lee, C. S.** (2012, March). *Exploring the Relationships among Intelligence, Personality, Creative Thinking, and Creative Behaviors*. Presented at the University of Florida Center for Neuropsychological Studies (CfNS), Gainesville, FL.

CERTIFICATIONS AND SKILLS

Proficient with SPSS, MPLUS, and Dedoose

Experienced with HLM and R

International Teaching English as a Foreign Language (TEFL) Certificate

Conversational in Korean and French