## **Supplemental Material**

*CBE—Life Sciences Education* Creech *et al*.

## **Supplemental Materials**

Evaluating the Representation of Community Colleges in Biology Education Research Publications Following a Call to Action.

## **Contents:**

Supplemental Table 1: Definitions of categories used in characterizing CC BER papers

Supplemental Table 2: List of the 147 CC BER published between 2016-2020 in the seven journals surveyed

Supplemental Table 3: CC BER paper type categories between 2016-2020

Supplemental Table 4: CC BER paper topic categories between 2016-2020

|                           | Supplemental Table 1:  |
|---------------------------|--|
| Definitions               | of Article Type Categories Used in Characterizing CC BER Papers  |
| Article Type              | Definition   |
| Research Articles         | Papers that include original data collected by the authors and novel data analysis (CBE-LSE, 2022)   |
| Teaching Tips             | Papers that contain new teaching techniques or pedagogical<br>recommendations for practitioners without an assessment of the practices<br>described (Schinske et al., 2017)                  |
| Essays                    | Papers that describe a problem or approach of general interest to the author(s), may include a review of the work of many individuals but do not contain novel data analysis (CBE-LSE, 2022) |
| Case Studies              | Papers that describe new case studies and how to effectively implement<br>them (Schinske et al., 2017)   |
| Review Articles           | Papers that summarize current understanding based on previously published studies, but do not contain novel data analysis (Schinske et al., 2017)  |
| Letters to the<br>Editors | Papers that are directly responsive to an article published in the journal and intended to start dialog (CBE-LSE, 2022)  |
| Editorials                | Papers that act as position pieces to discuss topics of interest to the community but do not contain novel data analysis (Schinske et al., 2017)   |

|  | Lis  | Supplemental Table 2:<br>t of 147 CC BER Papers Published Between 2016-2020 in t  | he Seven J              | ournals Survey  | ved                          |                     |
|--|------|---|-------------------------|---|------------------------------|---------------------|
| Journal                                | Year | Article Citation  | Number<br>of<br>Authors | Number of<br>Community<br>College-<br>affiliated<br>Authors | Main<br>Article<br>Topic     | Article<br>Type     |
| Advances in<br>Physiology<br>Education | 2016 | McFarland, J., Wenderoth, M. P., Michael, J., Cliff, W.,<br>Wright, A., & Modell, H. (2016). A conceptual framework<br>for homeostasis: Development and validation. Advances in<br>Physiology Education, 40(2), 213–222.<br>https://doi.org/10.1152/advan.00103.2015                                  | 6                       | 1   | Curricula<br>and<br>Teaching | Essay               |
| Advances in<br>Physiology<br>Education | 2016 | McFarland, J., & Pape-Lindstrom, P. (2016). The pipeline of<br>physiology courses in community colleges: To university,<br>medical school, and beyond. Advances in Physiology<br>Education, 40(4), 473–476.<br>https://doi.org/10.1152/advan.00141.2016   | 2                       | 2   | Degrees<br>and<br>Transfer   | Research<br>Article |
| Advances in<br>Physiology<br>Education | 2017 | Michael, J., Martinkova, P., McFarland, J., Wright, A., Cliff,<br>W., Modell, H., & Wenderoth, M. P. (2017). Validating a<br>conceptual framework for the core concept of "cell-cell<br>communication." Advances in Physiology Education, 41(2),<br>260–265. https://doi.org/10.1152/advan.00100.2016 | 7                       | 1   | Other                        | Essay               |
| Advances in<br>Physiology<br>Education | 2020 | Crowther, G. J., Wessels, J., Lesser, L. M., & Breckler, J. L.<br>(2020). Is memorization the name of the game?<br>Undergraduates' perceptions of the usefulness of physiology<br>songs. Advances in Physiology Education, 44(1), 104–112.<br>https://doi.org/10.1152/advan.00112.2019                | 4                       | 1   | Degrees<br>and<br>Transfer   | Essay               |
| Advances in<br>Physiology<br>Education | 2020 | Hillyer, J. M., & Gordon, K. A. (2020). Connecting anatomy<br>and physiology concepts in an interdisciplinary high-fidelity<br>patient simulation with undergraduate nursing and allied   | 2                       | 2   | Degrees<br>and<br>Transfer   | Research<br>Article |

|  |      | health students. Advances in Physiology Education, 44(1), 113–118. https://doi.org/10.1152/advan.00212.2018   |   |   |                              |                     |
|--|------|---|---|---|------------------------------|---------------------|
| Advances in<br>Physiology<br>Education | 2020 | Judge, J. L., Cazares, V. A., Thompson, Z., & Skidmore, L.<br>A. (2020). Development of low-cost cardiac and skeletal<br>muscle laboratory activities to teach physiology concepts and<br>the scientific method. Advances in Physiology Education,<br>44(2), 181–187. https://doi.org/10.1152/advan.00149.2019  | 4 | 1 | Curricula<br>and<br>Teaching | Research<br>Article |
| Advances in<br>Physiology<br>Education | 2020 | McFarland, J. L., & Michael, J. A. (2020). Reflections on<br>core concepts for undergraduate physiology programs.<br>Advances in Physiology Education, 44(4), 626–631.<br>https://doi.org/10.1152/advan.00188.2019  | 2 | 1 | Curricula<br>and<br>Teaching | Essay               |
| Advances in<br>Physiology<br>Education | 2020 | Rogers, J., McFarland, J. L., Stanescu, C. I., Crosswhite, P.<br>L., & Crecelius, A. R. (2020). The 2019 P-MIG Student<br>Survey report and capturing the undergraduate perspective of<br>physiology programming. Advances in Physiology<br>Education, 44(4), 684–696.<br>https://doi.org/10.1152/advan.00189.2019  | 5 | 1 | Degrees<br>and<br>Transfer   | Research<br>Article |
| Advances in<br>Physiology<br>Education | 2020 | Aguilar-Roca, N., Anderson, L. C., Crecelius, A. R., French,<br>M. B., Johnson, K. M. S., McFarland, J. L., Rogers, J.,<br>Stanescu, C. I., & Wehrwein, E. A. (2020). Where do we go<br>from here: A forward-thinking vision for physiology<br>undergraduate education. Advances in Physiology Education,<br>44(4), 702–705. https://doi.org/10.1152/advan.00190.2019 | 9 | 1 | Curricula<br>and<br>Teaching | Essay               |
| Advances in<br>Physiology<br>Education | 2020 | Michael, J., & McFarland, J. (2020). Another look at the core<br>concepts of physiology: Revisions and resources. Advances<br>in Physiology Education, 44(4), 752–762.<br>https://doi.org/10.1152/advan.00114.2020  | 2 | 1 | Curricula<br>and<br>Teaching | Essay               |
| The American<br>Biology<br>Teacher     | 2016 | Wollert, D. A. (2016). Integrating fossils, natural selection & molecular genetics: A structured inquiry-based evolution lab. The American Biology Teacher, 78(2), 155–162.<br>https://doi.org/10.1525/abt.2016.78.2.155  | 1 | 1 | Curricula<br>and<br>Teaching | Research<br>Article |

| The American<br>Biology<br>Teacher | 2016 | Thonney, T. (2016). Analyzing the vocabulary demands of introductory college textbooks. The American Biology Teacher, 78(5), 389–395.<br>https://doi.org/10.1525/abt.2016.78.5.389   | 1  | 1 | Curricula<br>and<br>Teaching | Research<br>Article |
|------------------------------------|------|--|----|---|------------------------------|---------------------|
| The American<br>Biology<br>Teacher | 2016 | Bryce, C. M., Baliga, V. B., De Nesnera, K. L., Fiack, D.,<br>Goetz, K., Tarjan, L. M., Wade, C. E., Yovovich, V.,<br>Baumgart, S., Bard, D. G., Ash, D., Parker, I. M., & Gilbert,<br>G. S. (2016). Exploring models in the biology classroom.<br>The American Biology Teacher, 78(1), 35–42.<br>https://doi.org/10.1525/abt.2016.78.1.35 | 13 | 1 | Curricula<br>and<br>Teaching | Research<br>Article |
| The American<br>Biology<br>Teacher | 2016 | Layton, S., & Belden, J. (2016). Engaging undergraduates in<br>the scientific process: Exploring invertebrate endocrine<br>disruption. The American Biology Teacher, 78(5), 410–416.<br>https://doi.org/10.1525/abt.2016.78.5.410  | 2  | 1 | Curricula<br>and<br>Teaching | Research<br>Article |
| The American<br>Biology<br>Teacher | 2016 | Goedhart, C. M., & McLaughlin, J. S. (2016). Student<br>scientists: Transforming the undergraduate biology lab into a<br>research experience. The American Biology Teacher, 78(6),<br>502–508. https://doi.org/10.1525/abt.2016.78.6.502   | 2  | 1 | Curricula<br>and<br>Teaching | Research<br>Article |
| The American<br>Biology<br>Teacher | 2016 | Suiter, S., Oakley, J., & Goodman, J. (2016). Prevalence of student dissection-choice policies in u. S. Schools. The American Biology Teacher, 78(7), 560–567.<br>https://doi.org/10.1525/abt.2016.78.7.560  | 3  | 1 | Curricula<br>and<br>Teaching | Research<br>Article |
| The American<br>Biology<br>Teacher | 2016 | Newman, L., Duffus, A. L. J., & Lee, C. (2016). Using the free program mega to build phylogenetic trees from molecular data. The American Biology Teacher, 78(7), 608–612. https://doi.org/10.1525/abt.2016.78.7.608   | 3  | 2 | Other                        | Research<br>Article |
| The American<br>Biology<br>Teacher | 2016 | Fisher, M. R. (2016). Wastewater treatment provides for<br>authentic inquiry-based experiences in the lab and beyond.<br>The American Biology Teacher, 78(9), 739–745.<br>https://doi.org/10.1525/abt.2016.78.9.739  | 1  | 1 | Curricula<br>and<br>Teaching | Teaching<br>Tip     |

| The American<br>Biology<br>Teacher | 2017 | Advising biology majors about career choices: Resources & information for biology instructors. (2017). The American Biology Teacher, 79(1), 14–21. https://doi.org/10.1525/abt.2017.79.1.14   | 3 | 1 | Degrees<br>and<br>Transfer   | Research<br>Article |
|------------------------------------|------|---|---|---|------------------------------|---------------------|
| The American<br>Biology<br>Teacher | 2017 | Greene, M., Pitts, W., & Dewprashad, B. (2017). Using<br>videography to study the effects of stimulants on daphnia<br>magna. The American Biology Teacher, 79(1), 35–40.<br>https://doi.org/10.1525/abt.2017.79.1.35  | 3 | 3 | Curricula<br>and<br>Teaching | Research<br>Article |
| The American<br>Biology<br>Teacher | 2017 | Presley, M. L., Gehringer, R., & Hanuscin, D. L. (2017).<br>Using natural selection concept inventories in college<br>biology classrooms to improve teaching and learning. The<br>American Biology Teacher, 79(2), 91–94.<br>https://doi.org/10.1525/abt.2017.79.2.91 | 3 | 1 | Curricula<br>and<br>Teaching | Research<br>Article |
| The American<br>Biology<br>Teacher | 2017 | Bauer, S. (2017). The impact of the chukwin mini-unit on students' understanding of natural selection. The American Biology Teacher, 79(2), 120–127.<br>https://doi.org/10.1525/abt.2017.79.2.120   | 1 | 1 | Curricula<br>and<br>Teaching | Research<br>Article |
| The American<br>Biology<br>Teacher | 2017 | Mulligan, E. A. (2017). Building zoob models to help<br>students learn about nucleic acid structure and function. The<br>American Biology Teacher, 79(4), 294–300.<br>https://doi.org/10.1525/abt.2017.79.4.294   | 1 | 1 | Curricula<br>and<br>Teaching | Teaching<br>Tip     |
| The American<br>Biology<br>Teacher | 2017 | Fisher, M. (2017). Letters to the editor. The American<br>Biology Teacher, 79(4), 255–255.<br>https://doi.org/10.1525/abt.2017.79.4.255a  | 1 | 1 | Curricula<br>and<br>Teaching | Letter to<br>Editor |
| The American<br>Biology<br>Teacher | 2017 | Fuller, K. (2017). Beyond reflection: Using eportfolios for<br>formative assessment to improve student engagement in non-<br>majors introductory science. The American Biology Teacher,<br>79(6), 442–449. https://doi.org/10.1525/abt.2017.79.6.442                  | 1 | 1 | Curricula<br>and<br>Teaching | Research<br>Article |
| The American<br>Biology<br>Teacher | 2017 | Aguilera, A., Schreier, J., & Saitow, C. (2017). Using iterative group presentations in an introductory biology course to enhance student engagement and critical thinking.   | 3 | 1 | Curricula<br>and<br>Teaching | Research<br>Article |

|                                    |      | The American Biology Teacher, 79(6), 450–454.<br>https://doi.org/10.1525/abt.2017.79.6.450   |   |   |                              |                     |
|------------------------------------|------|--|---|---|------------------------------|---------------------|
| The American<br>Biology<br>Teacher | 2017 | Lupton, Q. (2017). Pokémon in the midst: Collecting and<br>using data from within the Pokémon Go Ecosystem to<br>facilitate ecology and Wildlife Biology Education. The<br>American Biology Teacher, 79(7), 592–593.<br>https://doi.org/10.1525/abt.2017.79.7.592  | 1 | 1 | Other                        | Essay               |
| The American<br>Biology<br>Teacher | 2017 | Bonney, K. M., & Nicholas, L. (2017). The mysterious<br>murder of christa worthington. The American Biology<br>Teacher, 79(9), 702–710.<br>https://doi.org/10.1525/abt.2017.79.9.702   | 2 | 1 | Curricula<br>and<br>Teaching | Case<br>Study       |
| The American<br>Biology<br>Teacher | 2018 | Berchiolli, B., Movahedzadeh, F., & Cherif, A. (2018).<br>Assessing student success in a project-based learning biology<br>course at a Community College. The American Biology<br>Teacher, 80(1), 6–10. https://doi.org/10.1525/abt.2018.80.1.6  | 3 | 2 | Curricula<br>and<br>Teaching | Research<br>Article |
| The American<br>Biology<br>Teacher | 2018 | Fisher, M. R. (2018). Evaluation of cost savings and<br>perceptions of an open textbook in a community college<br>science course. The American Biology Teacher, 80(6), 410–<br>415. https://doi.org/10.1525/abt.2018.80.6.410  | 1 | 1 | Curricula<br>and<br>Teaching | Research<br>Article |
| The American<br>Biology<br>Teacher | 2018 | Goetze, J. R., & Rodriguez, M. (2018). A "sweet" activity to<br>teach basic population estimation principles, community<br>diversity assessment, and mathematical reasoning to biology<br>students. The American Biology Teacher, 80(7), 522–528.<br>https://doi.org/10.1525/abt.2018.80.7.522                         | 2 | 2 | Curricula<br>and<br>Teaching | Teaching<br>Tip     |
| The American<br>Biology<br>Teacher | 2018 | Williamson, J., & Lee, C. (2018). What's behind that smile:<br>Using analogies, facial expressions, and special senses to<br>demonstrate the interactions between body systems in<br>anatomy and physiology lab classes. The American Biology<br>Teacher, 80(9), 661–667.<br>https://doi.org/10.1525/abt.2018.80.9.661 | 2 | 2 | Curricula<br>and<br>Teaching | Teaching<br>Tip     |

| The American<br>Biology<br>Teacher | 2019 | Duffus, A. L. J. (2019). An emerging amphibian infection as<br>a model for teaching phylogenetic reconstruction. The<br>American Biology Teacher, 81(1), 32–39.<br>https://doi.org/10.1525/abt.2019.81.1.32  | 1 | 1 | Curricula<br>and<br>Teaching | Teaching<br>Tip     |
|------------------------------------|------|--|---|---|------------------------------|---------------------|
| The American<br>Biology<br>Teacher | 2019 | Liang, J., & Zaitsev, I. V. (2019). Chronic fatigue syndrome<br>& other difficulties: Introducing a modern scientific<br>controversy to a biology classroom. The American Biology<br>Teacher, 81(6), 387–394.<br>https://doi.org/10.1525/abt.2019.81.6.387 | 2 | 2 | Curricula<br>and<br>Teaching | Case<br>Study       |
| The American<br>Biology<br>Teacher | 2019 | Karpakakunjaram, V., & Jenkins, K. (2019). "I was told<br>there would be no math involved." The American Biology<br>Teacher, 81(7), 465–465.<br>https://doi.org/10.1525/abt.2019.81.7.465  | 2 | 1 | Curricula<br>and<br>Teaching | Editorial           |
| The American<br>Biology<br>Teacher | 2020 | Gusky, S. B. (2020). Tackling old issues with new approaches. The American Biology Teacher, 82(1), 1–1. https://doi.org/10.1525/abt.2020.82.1.1  | 1 | 1 | Curricula<br>and<br>Teaching | Essay               |
| The American<br>Biology<br>Teacher | 2020 | Wibking, K. (2020). Gas exchange gamified: Teaching<br>respiration physiology with a novel board game. The<br>American Biology Teacher, 82(3), 175–177.<br>https://doi.org/10.1525/abt.2020.82.3.175   | 1 | 1 | Curricula<br>and<br>Teaching | Teaching<br>Tip     |
| The American<br>Biology<br>Teacher | 2020 | Petersen, J., & Chan, P. (2020). A college–high school<br>collaboration to support authentic microbiology research.<br>The American Biology Teacher, 82(4), 201–208.<br>https://doi.org/10.1525/abt.2020.82.4.201  | 2 | 1 | Curricula<br>and<br>Teaching | Research<br>Article |
| The American<br>Biology<br>Teacher | 2020 | Quiroz, T., & Tisdale, C. W. (2020). Committed citizens can<br>change the world & help teach citizenship. The American<br>Biology Teacher, 82(5), 277–277.<br>https://doi.org/10.1525/abt.2020.82.5.277  | 2 | 2 | Other                        | Essay               |
| The American<br>Biology<br>Teacher | 2020 | Wollert, D. (2020). The fascinating & controversial new science of crispr. The American Biology Teacher, 82(5), 279–288. https://doi.org/10.1525/abt.2020.82.5.279   | 1 | 1 | Other                        | Research<br>Article |

| The American<br>Biology<br>Teacher  | 2020 | Wollert, D. (2020). Wet & dry lab activities to introduce<br>students to crispr-based gene editing. The American Biology<br>Teacher, 82(5), 315–322.<br>https://doi.org/10.1525/abt.2020.82.5.315   | 1  | 1 | Curricula<br>and<br>Teaching | Research<br>Article |
|-------------------------------------|------|---|----|---|------------------------------|---------------------|
| The American<br>Biology<br>Teacher  | 2020 | Pandemic lessons: Building empathy & community. (2020).<br>The American Biology Teacher, 82(6), 369–369.<br>https://doi.org/10.1525/abt.2020.82.6.369   | 1  | 1 | Other                        | Editorial           |
| The American<br>Biology<br>Teacher  | 2020 | Wolf, A. (2020). A model curriculum for flipping an allied<br>health microbiology course. The American Biology Teacher,<br>82(9), 633–637. https://doi.org/10.1525/abt.2020.82.9.633  | 1  | 1 | Curricula<br>and<br>Teaching | Teaching<br>Tip     |
| Anatomical<br>Sciences<br>Education | 2018 | Verenna, A. A., Noble, K. A., Pearson, H. E., & Miller, S. M. (2018). Role of comprehension on performance at higher levels of Bloom's taxonomy: Findings from assessments of healthcare professional students. Anatomical sciences education, 11(5), 433–444. https://doi.org/10.1002/ase.1768 | 4  | 1 | Curricula<br>and<br>Teaching | Research<br>Article |
| BioScience                          | 2016 | Shortlidge, E. E., Bangera, G., & Brownell, S. E. (2016).<br>Faculty perspectives on developing and teaching course-<br>based undergraduate research experiences. BioScience,<br>66(1), 54–62. https://doi.org/10.1093/biosci/biv167  | 3  | 1 | Curricula<br>and<br>Teaching | Research<br>Article |
| CBE—Life<br>Sciences<br>Education   | 2016 | Kenyon, K. L., Onorato, M. E., Gottesman, A. J., Hoque, J.,<br>& Hoskins, S. G. (2016). Testing CREATE at community<br>colleges: An examination of faculty perspectives and diverse<br>student gains. CBE—Life Sciences Education, 15(1), ar8.  | 5  | 0 | Curricula<br>and<br>Teaching | Research<br>Article |
| CBE—Life<br>Sciences<br>Education   | 2016 | Elgin, S. C., Bangera, G., Decatur, S. M., Dolan, E. L.,<br>Guertin, L., Newstetter, W. C., & Labov, J. B. (2016).<br>Insights from a convocation: integrating discovery-based<br>research into the undergraduate curriculum. CBE—Life<br>Sciences Education, 15(2), fe2.                       | 12 | 1 | Curricula<br>and<br>Teaching | Essay               |
| CBE—Life<br>Sciences<br>Education   | 2016 | Barnes, M. E., & Brownell, S. E. (2016). Practices and perspectives of college instructors on addressing religious  | 2  | 0 | Curricula<br>and<br>Teaching | Research<br>Article |

|                                   |      | beliefs when teaching evolution. CBE—Life Sciences Education, 15(2), ar18.  |   |   |                              |                     |
|-----------------------------------|------|---|---|---|------------------------------|---------------------|
| CBE—Life<br>Sciences<br>Education | 2016 | Schinske, J. N., Perkins, H., Snyder, A., & Wyer, M. (2016).<br>Scientist spotlight homework assignments shift students'<br>stereotypes of scientists and enhance science identity in a<br>diverse introductory science class. CBE—Life Sciences<br>Education, 15(3), ar47. | 4 | 2 | Equity<br>and<br>Diversity   | Research<br>Article |
| CBE—Life<br>Sciences<br>Education | 2016 | Morales, D. X., Grineski, S. E., & Collins, T. W. (2016).<br>Influences on faculty willingness to mentor undergraduate<br>students from another university as part of an<br>interinstitutional research training program. CBE—Life<br>Sciences Education, 15(3), ar35.      | 3 | 0 | Equity<br>and<br>Diversity   | Research<br>Article |
| CBE—Life<br>Sciences<br>Education | 2016 | Prunuske, A., Wilson, J., Walls, M., Marrin, H., & Clarke, B.<br>(2016). Efforts at broadening participation in the sciences:<br>An examination of the mentoring experiences of students<br>from underrepresented groups. CBE—Life Sciences<br>Education, 15(3), ar26.      | 5 | 0 | Equity<br>and<br>Diversity   | Research<br>Article |
| CBE—Life<br>Sciences<br>Education | 2016 | Remich, R., Naffziger-Hirsch, M. E., Gazley, J. L., &<br>McGee, R. (2016). Scientific growth and identity<br>development during a postbaccalaureate program: Results<br>from a multisite qualitative study. CBE—Life Sciences<br>Education, 15(3), ar25.                    | 4 | 1 | Degrees<br>and<br>Transfer   | Research<br>Article |
| CBE—Life<br>Sciences<br>Education | 2016 | Varty, A. K. (2016). Options for online undergraduate<br>courses in biology at American colleges and universities.<br>CBE—Life Sciences Education, 15(4), ar58.   | 1 | 1 | Degrees<br>and<br>Transfer   | Research<br>Article |
| CBE—Life<br>Sciences<br>Education | 2016 | Beck, C. W., & Blumer, L. S. (2016). Alternative realities:<br>Faculty and student perceptions of instructional practices in<br>laboratory courses. CBE—Life Sciences Education, 15(4),<br>ar52.  | 2 | 0 | Curricula<br>and<br>Teaching | Research<br>Article |

| CBE—Life<br>Sciences<br>Education | 2016 | Brancaccio-Taras, L., Pape-Lindstrom, P., Peteroy-Kelly, M.,<br>Aguirre, K., Awong-Taylor, J., Balser, T., & Zhao, J.<br>(2016). The PULSE Vision & Change Rubrics, Version 1.0:<br>A valid and equitable tool to measure transformation of life<br>sciences departments at all institution types. CBE—Life<br>Sciences Education, 15(4), ar60. | 16 | 2  | Curricula<br>and<br>Teaching | Research<br>Article |
|-----------------------------------|------|---|----|----|------------------------------|---------------------|
| CBE—Life<br>Sciences<br>Education | 2016 | Brickman, P., Gormally, C., & Martella, A. M. (2016).<br>Making the grade: Using instructional feedback and<br>evaluation to inspire evidence-based teaching. CBE—Life<br>Sciences Education, 15(4), ar75.  | 3  | 0  | Curricula<br>and<br>Teaching | Research<br>Article |
| CBE—Life<br>Sciences<br>Education | 2017 | Bissonnette, S. A., Combs, E. D., Nagami, P. H., Byers, V.,<br>Fernandez, J., Le, D., & Tanner, K. D. (2017). Using the<br>biology card sorting task to measure changes in conceptual<br>expertise during postsecondary biology education. CBE—<br>Life Sciences Education, 16(1), ar14.  | 10 | 1  | Curricula<br>and<br>Teaching | Research<br>Article |
| CBE—Life<br>Sciences<br>Education | 2017 | <ul><li>Schinske, J. N., Balke, V. L., Bangera, M. G., Bonney, K.</li><li>M., Brownell, S. E., Carter, R. S., &amp; Corwin, L. A. (2017).</li><li>Broadening participation in biology education research:</li><li>Engaging community college students and faculty.</li></ul>  | 23 | 13 | Equity<br>and<br>Diversity   | Research<br>Article |
| CBE—Life<br>Sciences<br>Education | 2017 | Ballen, C. J., Blum, J. E., Brownell, S., Hebert, S., Hewlett, J., Klein, J. R., & Cotner, S. (2017). A call to develop course-based undergraduate research experiences (CUREs) for nonmajors courses.  | 12 | 1  | Equity<br>and<br>Diversity   | Essay               |
| CBE—Life<br>Sciences<br>Education | 2017 | Martinková, P., Drabinová, A., Liaw, Y. L., Sanders, E. A.,<br>McFarland, J. L., & Price, R. M. (2017). Checking equity:<br>Why differential item functioning analysis should be a<br>routine part of developing conceptual assessments. CBE—<br>Life Sciences Education, 16(2), rm2.   | 6  | 1  | Equity<br>and<br>Diversity   | Research<br>Article |
| CBE—Life<br>Sciences<br>Education | 2017 | McFarland, J. L., Price, R. M., Wenderoth, M. P.,<br>Martinková, P., Cliff, W., Michael, J., & Wright, A.<br>(2017). Development and validation of the homeostasis  | 8  | 1  | Curricula<br>and<br>Teaching | Research<br>Article |

|                                   |      | concept inventory. CBE—Life Sciences Education, 16(2), ar35.   |    |   |                              |                     |
|-----------------------------------|------|--|----|---|------------------------------|---------------------|
| CBE—Life<br>Sciences<br>Education | 2017 | Andrews, S. E., Runyon, C., & Aikens, M. L. (2017). The math–biology values instrument: Development of a tool to measure life science majors' task values of using math in the context of biology. CBE—Life Sciences Education, 16(3), ar45.   | 3  | 0 | Curricula<br>and<br>Teaching | Research<br>Article |
| CBE—Life<br>Sciences<br>Education | 2017 | Ashley, M., Cooper, K. M., Cala, J. M., & Brownell, S. E.<br>(2017). Building better bridges into STEM: A synthesis of 25<br>years of literature on STEM summer bridge programs.<br>CBE—Life Sciences Education, 16(4), es3.   | 4  | 0 | Curricula<br>and<br>Teaching | Review              |
| CBE—Life<br>Sciences<br>Education | 2018 | Schnoes, A. M., Caliendo, A., Morand, J., Dillinger, T.,<br>Naffziger-Hirsch, M., Moses, B., & O'Brien, T. C. (2018).<br>Internship experiences contribute to confident career decision<br>making for doctoral students in the life sciences. CBE—Life<br>Sciences Education, 17(1), ar16.                                 | 11 | 1 | Curricula<br>and<br>Teaching | Research<br>Article |
| CBE—Life<br>Sciences<br>Education | 2018 | Pape-Lindstrom, P., Eddy, S., & Freeman, S. (2018).<br>Reading quizzes improve exam scores for community<br>college students. CBE—Life Sciences Education, 17(2),<br>ar21.   | 3  | 1 | Curricula<br>and<br>Teaching | Research<br>Article |
| CBE—Life<br>Sciences<br>Education | 2018 | Corwin, L. A., Runyon, C. R., Ghanem, E., Sandy, M.,<br>Clark, G., Palmer, G. C., & Dolan, E. L. (2018). Effects of<br>discovery, iteration, and collaboration in laboratory courses<br>on undergraduates' research career intentions fully mediated<br>by student ownership. CBE—Life Sciences Education, 17(2),<br>ar20. | 9  | 0 | Curricula<br>and<br>Teaching | Research<br>Article |
| CBE—Life<br>Sciences<br>Education | 2018 | Summers, M. M., Couch, B. A., Knight, J. K., Brownell, S. E., Crowe, A. J., Semsar, K., & Smith, M. K. (2018).<br>EcoEvo-MAPS: An ecology and evolution assessment for introductory through advanced undergraduates. CBE—Life Sciences Education, 17(2), ar18.   | 8  | 0 | Curricula<br>and<br>Teaching | Research<br>Article |

| CBE—Life<br>Sciences<br>Education | 2018 | Martinez, L. R., Boucaud, D. W., Casadevall, A., & August,<br>A. (2018). Factors contributing to the success of NIH-<br>designated underrepresented minorities in academic and<br>nonacademic research positions. CBE—Life Sciences<br>Education, 17(2), ar32.  | 4  | 0 | Equity<br>and<br>Diversity   | Research<br>Article |
|-----------------------------------|------|---|----|---|------------------------------|---------------------|
| CBE—Life<br>Sciences<br>Education | 2018 | Hewlett, J. A. (2018). Broadening participation in<br>undergraduate research experiences (UREs): The expanding<br>role of the community college. CBE—Life Sciences<br>Education, 17(3), es9.  | 1  | 1 | Equity<br>and<br>Diversity   | Essay               |
| CBE—Life<br>Sciences<br>Education | 2018 | Thompson, C., Sanchez, J., Smith, M., Costello, J.,<br>Madabushi, A., Schuh-Nuhfer, N., & Rivers, D. (2018).<br>Improving undergraduate life science education for the<br>biosciences workforce: overcoming the disconnect between<br>educators and industry. CBE—Life Sciences Education,<br>17(3), es12.                        | 11 | 3 | Degrees<br>and<br>Transfer   | Research<br>Article |
| CBE—Life<br>Sciences<br>Education | 2018 | Kerr, J. Q., Hess, D. J., Smith, C. M., & Hadfield, M. G.<br>(2018). Recognizing and reducing barriers to science and<br>math education and STEM careers for Native Hawaiians and<br>Pacific Islanders. CBE—Life Sciences Education, 17(4),<br>mr1.   | 4  | 2 | Equity<br>and<br>Diversity   | Essay               |
| CBE—Life<br>Sciences<br>Education | 2018 | Hanauer, D. I., Nicholes, J., Liao, F. Y., Beasley, A., &<br>Henter, H. (2018). Short-term research experience (SRE) in<br>the traditional lab: Qualitative and quantitative data on<br>outcomes. CBE—Life Sciences Education, 17(4), ar64.   | 5  | 0 | Curricula<br>and<br>Teaching | Research<br>Article |
| CBE—Life<br>Sciences<br>Education | 2018 | Hester, S. D., Nadler, M., Katcher, J., Elfring, L. K., Dykstra,<br>E., Rezende, L. F., & Bolger, M. S. (2018). Authentic<br>Inquiry through Modeling in Biology (AIM-Bio): An<br>introductory laboratory curriculum that increases<br>undergraduates' scientific agency and skills. CBE—Life<br>Sciences Education, 17(4), ar63. | 7  | 1 | Curricula<br>and<br>Teaching | Research<br>Article |

| CBE—Life<br>Sciences<br>Education | 2018 | Thompson, J. J., & Jensen-Ryan, D. (2018). Becoming a "science person": Faculty recognition and the development of cultural capital in the context of undergraduate biology research. CBE—Life Sciences Education, 17(4), ar62.  | 2  | 0 | Equity<br>and<br>Diversity   | Research<br>Article |
|-----------------------------------|------|--|----|---|------------------------------|---------------------|
| CBE—Life<br>Sciences<br>Education | 2019 | Couch, B. A., Wright, C. D., Freeman, S., Knight, J. K.,<br>Semsar, K., Smith, M. K., & Brownell, S. E. (2019).<br>GenBio-MAPS: A programmatic assessment to measure<br>student understanding of vision and change core concepts<br>across general biology programs. CBE—Life Sciences<br>Education, 18(1), ar1.     | 10 | 0 | Curricula<br>and<br>Teaching | Research<br>Article |
| CBE—Life<br>Sciences<br>Education | 2019 | Blumer, L. S., & Beck, C. W. (2019). Laboratory courses<br>with guided-inquiry modules improve scientific reasoning<br>and experimental design skills for the least-prepared<br>undergraduate students. CBE—Life Sciences Education,<br>18(1), ar2.  | 2  | 0 | Curricula<br>and<br>Teaching | Research<br>Article |
| CBE—Life<br>Sciences<br>Education | 2019 | Diaz-Martinez, L. A., Fisher, G. R., Esparza, D., Bhatt, J. M.,<br>D'Arcy, C. E., Apodaca, J., & Olimpo, J. T. (2019).<br>Recommendations for effective integration of ethics and<br>responsible conduct of research (E/RCR) education into<br>course-based undergraduate research experiences: A meeting<br>report. | 18 | 1 | Curricula<br>and<br>Teaching | Essay               |
| CBE—Life<br>Sciences<br>Education | 2019 | Nerio, R., Webber, A., MacLachlan, E., Lopatto, D., &<br>Caplan, A. J. (2019). One-year research experience for<br>associate's degree students impacts graduation, STEM<br>retention, and transfer patterns. CBE—Life Sciences<br>Education, 18(2), ar25.  | 5  | 0 | Degrees<br>and<br>Transfer   | Research<br>Article |
| CBE—Life<br>Sciences<br>Education | 2019 | Vander Waal Mills, K. E., Gucinski, M., & Vander Waal, K. (2019). Implementation of open textbooks in community and technical college biology courses: The good, the bad, and the data. CBE—Life Sciences Education, 18(3), ar44.  | 3  | 2 | Curricula<br>and<br>Teaching | Research<br>Article |

| CBE—Life<br>Sciences<br>Education | 2019 | Harrison, C. D., Nguyen, T. A., Seidel, S. B., Escobedo, A. M., Hartman, C., Lam, K., & Tanner, K. D. (2019).<br>Investigating instructor talk in novel contexts: Widespread<br>use, unexpected categories, and an emergent sampling<br>strategy. CBE—Life Sciences Education, 18(3), ar47. | 77 | 22 | Curricula<br>and<br>Teaching | Research<br>Article |
|-----------------------------------|------|---|----|----|------------------------------|---------------------|
| CBE—Life<br>Sciences<br>Education | 2019 | Corwin, L. A., Kiser, S., LoRe, S. M., Miller, J. M., &<br>Aikens, M. L. (2019). Community college instructors'<br>perceptions of constraints and affordances related to teaching<br>quantitative biology skills and concepts. CBE—Life<br>Sciences Education, 18(4), ar64.                 | 5  | 2  | Curricula<br>and<br>Teaching | Research<br>Article |
| CBE—Life<br>Sciences<br>Education | 2020 | Dolan, E. L., Borrero, M., Callis-Duehl, K., Musgrove, M.<br>M. C., de Lima, J., Ero-Tolliver, I., & Suarez, N. A.<br>(2020). Undergraduate biology education research Gordon<br>research conference: A meeting report. CBE—Life Sciences<br>Education, 19(2), mr1.                         | 22 | 1  | Curricula<br>and<br>Teaching | Research<br>Article |
| CBE—Life<br>Sciences<br>Education | 2020 | Branchaw, J. L., Pape-Lindstrom, P. A., Tanner, K. D.,<br>Bissonnette, S. A., Cary, T. L., Couch, B. A., & Brownell,<br>S. E. (2020). Resources for teaching and assessing the vision<br>and change biology core concepts. CBE—Life Sciences<br>Education, 19(2), es1.                      | 15 | 1  | Curricula<br>and<br>Teaching | Essay               |
| CBE—Life<br>Sciences<br>Education | 2020 | Petersen, C. I., Baepler, P., Beitz, A., Ching, P., Gorman, K. S., Neudauer, C. L., & Wingert, D. (2020). The tyranny of content: "Content coverage" as a barrier to evidence-based teaching approaches and ways to overcome it. CBE—Life Sciences Education, 19(2), ar17.                  | 9  | 1  | Curricula<br>and<br>Teaching | Essay               |
| CBE—Life<br>Sciences<br>Education | 2020 | Clement, L., Dorman, J. B., & McGee, R. (2020). The<br>academic career readiness assessment: clarifying hiring and<br>training expectations for future biomedical life sciences<br>faculty. CBE—Life Sciences Education, 19(2), ar22.   | 3  | 0  | Curricula<br>and<br>Teaching | Research<br>Article |

| CBE—Life<br>Sciences<br>Education | 2020 | Genné-Bacon, E. A., Wilks, J., & Bascom-Slack, C. (2020).<br>Uncovering factors influencing instructors' decision process<br>when considering implementation of a course-based research<br>experience. CBE—Life Sciences Education, 19(2), ar13.  | 3  | 0 | Curricula<br>and<br>Teaching | Research<br>Article |
|-----------------------------------|------|---|----|---|------------------------------|---------------------|
| CBE—Life<br>Sciences<br>Education | 2020 | Downing, V. R., Cooper, K. M., Cala, J. M., Gin, L. E., &<br>Brownell, S. E. (2020). Fear of negative evaluation and<br>student anxiety in community college active-learning science<br>courses. CBE—Life Sciences Education, 19(2), ar20.  | 5  | 1 | Equity<br>and<br>Diversity   | Research<br>Article |
| CBE—Life<br>Sciences<br>Education | 2020 | Scott, E. E., Wenderoth, M. P., & Doherty, J. H. (2020).<br>Design-based research: a methodology to extend and enrich<br>biology education research. CBE—Life Sciences Education,<br>19(2), es11.   | 3  | 0 | Curricula<br>and<br>Teaching | Essay               |
| CBE—Life<br>Sciences<br>Education | 2020 | Cooper, K. M., Auerbach, A. J. J., Bader, J. D., Beadles-<br>Bohling, A. S., Brashears, J. A., Cline, E., & Brownell, S.<br>E. (2020). Fourteen recommendations to create a more<br>inclusive environment for LGBTQ+ individuals in academic<br>biology. CBE—Life Sciences Education, 19(3), es6. | 26 | 1 | Equity<br>and<br>Diversity   | Essay               |
| CBE—Life<br>Sciences<br>Education | 2020 | Thompson, S. K., Hebert, S., Berk, S., Brunelli, R., Creech,<br>C., Drake, A. G., & Ballen, C. J. (2020). A call for data-<br>driven networks to address equity in the context of<br>undergraduate biology. CBE—Life Sciences Education,<br>19(4), mr2.   | 15 | 1 | Equity<br>and<br>Diversity   | Research<br>Article |
| CBE—Life<br>Sciences<br>Education | 2020 | Jensen-Ryan, D., Murren, C. J., Rutter, M. T., & Thompson,<br>J. J. (2020). Advancing science while training<br>undergraduates: recommendations from a collaborative<br>biology research network. CBE—Life Sciences Education,<br>19(4), es13.  | 4  | 1 | Curricula<br>and<br>Teaching | Essay               |
| CBE—Life<br>Sciences<br>Education | 2020 | Clemmons, A. W., Timbrook, J., Herron, J. C., & Crowe, A. J. (2020). BioSkills Guide: Development and national validation of a tool for interpreting the Vision and Change  | 4  | 0 | Curricula<br>and<br>Teaching | Research<br>Article |

|  |      | core competencies. CBE—Life Sciences Education, 19(4), ar53.   |   |   |                              |                     |
|--|------|--|---|---|------------------------------|---------------------|
| CBE—Life<br>Sciences<br>Education            | 2020 | Driessen, E. P., Knight, J. K., Smith, M. K., & Ballen, C. J.<br>(2020). Demystifying the meaning of active learning in<br>postsecondary biology education. CBE—Life Sciences<br>Education, 19(4), ar52.   | 4 | 0 | Curricula<br>and<br>Teaching | Research<br>Article |
| Journal of<br>College<br>Science<br>Teaching | 2016 | Gonzalez, B. (2016) Time for Action: Vision and Change<br>Implementation in an Online Biology Course at a<br>Community College. Journal of College Science Teaching,<br>vol. 45, no. 4   | 1 | 1 | Curricula<br>and<br>Teaching | Research<br>Article |
| Journal of<br>College<br>Science<br>Teaching | 2016 | Tanski, A., Bobick, S., Mosley-Turner, K., & Garofalo, G.<br>(2016) The Impact of the Clinical Social Worker in a<br>Community College Biotech Program: A Cohort Study.<br>Journal of College Science Teaching, vol. 45, no. 6                     | 4 | 4 | Equity<br>and<br>Diversity   | Research<br>Article |
| Journal of<br>College<br>Science<br>Teaching | 2016 | Herried, C. F., Prud'homme-Genereux, A., Schiller, N. A.,<br>Herreid, K. F., & Wright, C. (2016). Case Study: What<br>Makes a Good Case, Revisited: The Survey Monkey Tells<br>All. Journal of College Science Teaching, 46(1).                    | 5 | 0 | Curricula<br>and<br>Teaching | Research<br>Article |
| Journal of<br>College<br>Science<br>Teaching | 2016 | Ellerton, S., Carmona, N., & Tsimounis, A. (2016)<br>"Increasing science knowledge among high-risk student<br>populations through a community college honors/service-<br>learning program." Journal of College Science Teaching, vol.<br>46, no. 2 | 3 | 3 | Curricula<br>and<br>Teaching | Research<br>Article |
| Journal of<br>College<br>Science<br>Teaching | 2017 | Keller, C. (2017) Using formative assessment to improve<br>microscope skills among Urban community college General<br>Biology I lab students. Journal of College Science Teaching,<br>vol. 46, no. 3   | 1 | 1 | Curricula<br>and<br>Teaching | Research<br>Article |
| Journal of<br>College<br>Science<br>Teaching | 2017 | Tuthill, M., & Berestecky, J. (2017) Integrating<br>undergraduate research at two-year colleges. Journal of<br>College Science Teaching, vol. 46, no. 4  | 2 | 2 | Curricula<br>and<br>Teaching | Research<br>Article |

| Journal of<br>College<br>Science<br>Teaching | 2017 | Marrero, M., Riccio, J., Ben-Jacob, M., Canger, A., & Maliti,<br>C. (2017) A Crash Course in Undergraduate Research.<br>Journal of College Science Teaching, vol. 46, no. 5  | 5 | 1 | Equity<br>and<br>Diversity   | Teaching<br>Tip     |
|--|------|--|---|---|------------------------------|---------------------|
| Journal of<br>College<br>Science<br>Teaching | 2017 | Bennett, S., & Wenk Gotwals, A. (2017) Construction with<br>scaffolds: helping community college students build<br>explanations. Journal of College Science Teaching, vol. 46,<br>no. 6  | 2 | 0 | Curricula<br>and<br>Teaching | Research<br>Article |
| Journal of<br>College<br>Science<br>Teaching | 2017 | Lysne, S., & Miller, B. (2017) A comparison of long-term<br>knowledge retention between two teaching approaches.<br>Journal of College Science Teaching, vol. 46, no. 6  | 2 | 1 | Curricula<br>and<br>Teaching | Research<br>Article |
| Journal of<br>College<br>Science<br>Teaching | 2017 | Tawde, M., Boccio, D., & Kolack, K. (2017) Resolving<br>misconceptions through student reflections. Journal of<br>College Science Teaching, vol. 47, no. 1   | 3 | 3 | Curricula<br>and<br>Teaching | Research<br>Article |
| Journal of<br>College<br>Science<br>Teaching | 2017 | McLaughlin, J., Favre, D., Weinstein, S., & Goedhart, C.<br>(2017) The impact of a four-step laboratory pedagogical<br>framework on biology students' perceptions of laboratory<br>skills, knowledge, and interest in research. Journal of College<br>Science Teaching, vol. 47, no. 1 | 4 | 1 | Curricula<br>and<br>Teaching | Research<br>Article |
| Journal of<br>College<br>Science<br>Teaching | 2018 | Baze, C. & Gray, R. (2018) Modeling Tiktaalik: Using a<br>Model-Based Inquiry Approach to Engage Community<br>College Students in the Practices of Science During an<br>Evolution Unit. Journal of College Science Teaching, vol.<br>47, no. 4   | 2 | 1 | Curricula<br>and<br>Teaching | Research<br>Article |
| Journal of<br>College<br>Science<br>Teaching | 2018 | Page, R., Espinosa, J., Mares, C., Del Pilar, J., & Shelton,<br>GR. (2018) Point of View: The Curvy Road to Student<br>Success in Underserved Populations. Journal of College<br>Science Teaching, vol. 47, no. 5  | 5 | 1 | Curricula<br>and<br>Teaching | Essay               |

| Journal of<br>College<br>Science<br>Teaching | 2018 | Pergams, O., Jake-Matthews, C., & Mohanty, L. (2018) A<br>Combined Read-Aloud Think-Aloud Strategy Improves<br>Student Learning Experiences in College-Level Biology<br>Courses. Journal of College Science Teaching, vol. 47, no. 5   | 3 | 2 | Curricula<br>and<br>Teaching | Research<br>Article |
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| Journal of<br>College<br>Science<br>Teaching | 2018 | McLaughlin, S., & Petersen, J. (2018) Hands-On Mini-Case<br>Studies Promote Integration of Microbiological Concepts.<br>Journal of College Science Teaching, vol. 47, no. 6  | 2 | 2 | Curricula<br>and<br>Teaching | Case<br>Study       |
| Journal of<br>College<br>Science<br>Teaching | 2018 | Keller, C., Hendrix, T., Xu, N., Porter-Morgan, H., &<br>Brashears, A. (2018) A Foundation for STEM Success: A<br>Simple and Successful Microscope Intervention in a General<br>Biology Course at an Urban Community College. Journal of<br>College Science Teaching, vol. 48, no. 1 | 5 | 5 | Curricula<br>and<br>Teaching | Research<br>Article |
| Journal of<br>College<br>Science<br>Teaching | 2018 | Mraz-Craig, J., Daniel, K., Bucklin, C., Mishra, C., Ali, L.,<br>& Clase, K. (2018) Student Identities in Authentic Course-<br>Based Undergraduate Research Experience. Journal of<br>College Science Teaching, vol. 48, no. 1   | 6 | 1 | Equity<br>and<br>Diversity   | Research<br>Article |
| Journal of<br>College<br>Science<br>Teaching | 2018 | Reinbold, S. (2018) Critical Thinking Assessment of<br>Students in Nonmajors Biology Classes with Corn or Fly<br>Genetics Laboratory Studies. Journal of College Science<br>Teaching, vol. 48, no. 2   | 1 | 1 | Curricula<br>and<br>Teaching | Research<br>Article |
| Journal of<br>College<br>Science<br>Teaching | 2019 | Tamari, F., & Ho, I. S. (2019). Guided Inquiry-Based<br>Activities Positively Impact Learning in Community College<br>Courses. Journal of College Science Teaching, vol. 48, no. 4   | 2 | 2 | Curricula<br>and<br>Teaching | Research<br>Article |
| Journal of<br>College<br>Science<br>Teaching | 2019 | De Leone, C., Price, E., Sabella, M., & Van Duzor, A. (2019)<br>Developing and Sustaining Faculty-Driven, Curriculum-<br>Centered Partnerships Between Two-Year Colleges and<br>Four-Year Institutions. Journal of College Science Teaching,<br>vol. 48, no. 6                       | 4 | 0 | Degrees<br>and<br>Transfer   | Teaching<br>Tip     |

| Journal of<br>College<br>Science<br>Teaching           | 2019 | Nenortas, A., & Fields, L. (2019). Editorial: Two-Year<br>Colleges (TYCs) are Essential in Science Education<br>Research and TYC faculty and Students Should Get<br>Involved. Journal of College Science Teaching, vol. 49, no. 1            | 2 | 2 | Equity<br>and<br>Diversity   | Editorial           |
|--|------|--|---|---|------------------------------|---------------------|
| Journal of<br>College<br>Science<br>Teaching           | 2020 | Farshad, T., Dawson, M., & Shun Ho, I. (2020). Nonideal<br>Placement of Nonmajors in Biology Major and Allied Health<br>Courses Results in Poor Performance and Higher Attrition<br>Rates. Journal of College Science Teaching, vol 49, no 4 | 3 | 3 | Curricula<br>and<br>Teaching | Research<br>Article |
| Journal of<br>College<br>Science<br>Teaching           | 2020 | Scott, F., Pape-Lindstrom, P., Casper, A., & Eddy, S. (2020).<br>Community College Students Rise to the Challenge<br>Meeting the Time Demands of Highly Structured Courses.<br>Journal of College Science Teaching, vol 49, no 5             | 4 | 1 | Equity<br>and<br>Diversity   | Research<br>Article |
| Journal of<br>College<br>Science<br>Teaching           | 2020 | Long, M., Cottrell-Yongye, A., & Huynh, T. (2020).<br>Backward Redesign of a Nonmajors' Biology Course at a<br>Two-Year Technical College. Journal of College Science<br>Teaching, vol 49, no 6  | 3 | 2 | Curricula<br>and<br>Teaching | Research<br>Article |
| Journal of<br>College<br>Science<br>Teaching           | 2020 | Fisher, R., Cole, D., Oh, Y., & Vemu, S. (2020). Identifying<br>Differences in Learning Strategies by Demographics and<br>Course Grade in a Community College Context. Journal of<br>College Science Teaching, vol 50, no1                   | 4 | 2 | Curricula<br>and<br>Teaching | Research<br>Article |
| Journal of<br>Microbiology<br>and Biology<br>Education | 2016 | Van Vliet, K., & Moore, C. (2016). Citizen science<br>initiatives: Engaging the public and demystifying science.<br>Journal of Microbiology & Biology Education, 17(1), 13–16.<br>https://doi.org/10.1128/jmbe.v17i1.1019                    | 2 | 2 | Curricula<br>and<br>Teaching | Teaching<br>Tip     |
| Journal of<br>Microbiology<br>and Biology<br>Education | 2016 | Scheifele, L. Z., & Burkett, T. (2016). The first three years of<br>a community lab: Lessons learned and ways forward. Journal<br>of Microbiology & Biology Education, 17(1), 81–85.<br>https://doi.org/10.1128/jmbe.v17i1.1013              | 2 | 1 | Curricula<br>and<br>Teaching | Essay               |
| Journal of<br>Microbiology                             | 2016 | Kridelbaugh, Donna M. "The Use of Online Citizen-Science<br>Projects to Provide Experiential Learning Opportunities for<br>Nonmajor Science Students." Journal of Microbiology &   | 1 | 1 | Curricula<br>and<br>Teaching | Teaching<br>Tip     |

| and Biology<br>Education                               |      | Biology Education, vol. 17, no. 1, 1 Mar. 2016, pp. 105–106., https://doi.org/10.1128/jmbe.v17i1.1022.  |   |   |                              |                     |
|--|------|---|---|---|------------------------------|---------------------|
| Journal of<br>Microbiology<br>and Biology<br>Education | 2016 | Brancaccio-Taras, L., Gull, K. A., & Ratti, C. (2016). The science teaching fellows program: A model for online faculty development of early career scientists interested in teaching. Journal of Microbiology & Biology Education, 17(3), 333–338. https://doi.org/10.1128/jmbe.v17i3.1243   | 3 | 1 | Curricula<br>and<br>Teaching | Research<br>Article |
| Journal of<br>Microbiology<br>and Biology<br>Education | 2016 | Biel, Rachel, and Cynthia J. Brame. "Traditional versus<br>Online Biology Courses: Connecting Course Design and<br>Student Learning in an Online Setting." Journal of<br>Microbiology & Biology Education, vol. 17, no. 3, 2 Dec.<br>2016, pp. 417–422.,<br>https://doi.org/10.1128/jmbe.v17i3.1157.                                  | 2 | 0 | Curricula<br>and<br>Teaching | Research<br>Article |
| Journal of<br>Microbiology<br>and Biology<br>Education | 2017 | Petersen, Joan, and Susan K. McLaughlin. "Design and<br>Revision of an Open-Educational Resource Microbiology<br>Lab Manual Using Student Feedback." Journal of<br>Microbiology & Biology Education, vol. 18, no. 2, 1 Sept.<br>2017, https://doi.org/10.1128/jmbe.v18i2.1302.  | 2 | 2 | Curricula<br>and<br>Teaching | Research<br>Article |
| Journal of<br>Microbiology<br>and Biology<br>Education | 2017 | Axler-DiPerte, Grace L. "Modeling and Visualizing Bacterial<br>Colony Purification without the Use of Bacteria or<br>Laboratory Equipment." Journal of Microbiology & Biology<br>Education, vol. 18, no. 2, 11 Aug. 2017,<br>https://doi.org/10.1128/jmbe.v18i2.1308.   | 1 | 1 | Curricula<br>and<br>Teaching | Teaching<br>Tip     |
| Journal of<br>Microbiology<br>and Biology<br>Education | 2017 | Seitz, H. M., Horak, R. E., Howard, M. W., Kluckhohn<br>Jones, L. W., Muth, T., Parker, C., Rediske, A. P., &<br>Whitehurst, M. M. (2017). Development and validation of<br>the Microbiology for Health Sciences Concept Inventory.<br>Journal of Microbiology & Biology Education, 18(3).<br>https://doi.org/10.1128/jmbe.v18i3.1322 | 8 | 3 | Curricula<br>and<br>Teaching | Research<br>Article |

| Journal of<br>Microbiology<br>and Biology<br>Education | 2017 | Hoskins, Sally G., et al. "Create Two-Year/Four-Year<br>Faculty Workshops: A Focus on Practice, Reflection, and<br>Novel Curricular Design Leads to Diverse Gains for Faculty<br>at Two-Year and Four-Year Institutions." Journal of<br>Microbiology & Biology Education, vol. 18, no. 3, 15 Dec.<br>2017, https://doi.org/10.1128/jmbe.v18i3.1365.   | 3 | 0 | Curricula<br>and<br>Teaching | Research<br>Article |
|--|------|---|---|---|------------------------------|---------------------|
| Journal of<br>Microbiology<br>and Biology<br>Education | 2017 | Shortlidge, E. E., Bangera, G., & Brownell, S. E. (2017).<br>Each to their own cure: Faculty who teach course-based<br>undergraduate research experiences report why you too<br>should teach a cure. Journal of Microbiology & Biology<br>Education, 18(2). https://doi.org/10.1128/jmbe.v18i2.1260   | 3 | 1 | Curricula<br>and<br>Teaching | Research<br>Article |
| Journal of<br>Microbiology<br>and Biology<br>Education | 2018 | Norman-McKay, Lourdes, and The ASM MINAH<br>Undergraduate Curriculum Guidelines Committee.<br>"Microbiology in Nursing and Allied Health (MINAH)<br>Undergraduate Curriculum Guidelines: A Call to Retain<br>Microbiology Lecture and Laboratory Courses in Nursing<br>and Allied Health Programs." Journal of Microbiology &<br>Biology Education, vol. 19, no. 1, 2018,<br>https://doi.org/10.1128/jmbe.v19i1.1524. | 2 | 2 | Curricula<br>and<br>Teaching | Essay               |
| Journal of<br>Microbiology<br>and Biology<br>Education | 2018 | Fillmer, Kornelia, et al. "Using Tobamoviruses for<br>Phylogenetic Instruction in Undergraduate Biology Courses."<br>Journal of Microbiology & Biology Education, vol. 19, no. 2,<br>25 May 2018, https://doi.org/10.1128/jmbe.v19i2.1519.  | 4 | 3 | Curricula<br>and<br>Teaching | Teaching<br>Tip     |
| Journal of<br>Microbiology<br>and Biology<br>Education | 2018 | Andrews, Sarah E., and Melissa L. Aikens. "Life Science<br>Majors' Math-Biology Task Values Relate to Student<br>Characteristics and Predict the Likelihood of Taking<br>Quantitative Biology Courses." Journal of Microbiology &<br>Biology Education, vol. 19, no. 2, 31 July 2018,<br>https://doi.org/10.1128/jmbe.v19i2.1589.   | 2 | 0 | Equity<br>and<br>Diversity   | Research<br>Article |
| Journal of<br>Microbiology                             | 2018 | Genné-Bacon, Elizabeth A., and Carol A. Bascom-Slack.<br>"The Pare Project: A Short Course-Based Research Project<br>for National Surveillance of Antibiotic-Resistant Microbes in  | 2 | 0 | Curricula<br>and<br>Teaching | Teaching<br>Tip     |

| and Biology<br>Education                               |      | Environmental Samples." Journal of Microbiology &<br>Biology Education, vol. 19, no. 3, 31 Oct. 2018,<br>https://doi.org/10.1128/jmbe.v19i3.1603.   |    |   |                              |                     |
|--|------|---|----|---|------------------------------|---------------------|
| Journal of<br>Microbiology<br>and Biology<br>Education | 2018 | Kolokithas, A., & Calderón, O. (2018). A how-to guide on<br>Bringing Undergraduate Research to community and<br>Technical Colleges. Journal of Microbiology & Biology<br>Education, 19(3). https://doi.org/10.1128/jmbe.v19i3.1653  | 2  | 2 | Curricula<br>and<br>Teaching | Teaching<br>Tip     |
| Journal of<br>Microbiology<br>and Biology<br>Education | 2019 | Mathur V, Arora GS, McWilliams M, Russell J, Rosenwald<br>AG. (2019). The Genome Solver Project: Faculty Training<br>and Student Performance Gains in Bioinformatics. J<br>Microbiol Biol Educ. 20(1):20.1.4.<br>doi/10.1128/jmbe.v20i1.1607  | 5  | 0 | Curricula<br>and<br>Teaching | Research<br>Article |
| Journal of<br>Microbiology<br>and Biology<br>Education | 2019 | Meléndez, J. (2019). Teaching microbiology by celebrating<br>traditional foods and cultures from Morocco and Perú.<br>Journal of Microbiology & Biology Education, 20(1).<br>https://doi.org/10.1128/jmbe.v20i1.1685  | 1  | 1 | Curricula<br>and<br>Teaching | Teaching<br>Tip     |
| Journal of<br>Microbiology<br>and Biology<br>Education | 2019 | Wolyniak, M. J., Austin, S., Bloodworth, L. F., Carter, D.,<br>Harrison, S. H., Hoage, T., Hollis-Brown, L., Jefferson, F.,<br>Krufka, A., Safadi-Chamberlin, F., Santisteban, M. S.,<br>Soneral, P., VanWinkle, B., & Challa, A. K. (2019).<br>Integrating CRISPR-Cas9 technology into undergraduate<br>courses: Perspectives from a National Science Foundation<br>(NSF) workshop for Undergraduate Faculty, June 2018.<br>Journal of Microbiology & Biology Education, 20(1).<br>https://doi.org/10.1128/jmbe.v20i1.1702 | 14 | 1 | Curricula<br>and<br>Teaching | Essay               |
| Journal of<br>Microbiology<br>and Biology<br>Education | 2019 | Basta, Holly, and Deborah Catherine Cole. "Histology<br>Personal Trainer: Identifying Tissue Types Using Critical<br>Thinking and Metacognition Prompts." Journal of<br>Microbiology & Biology Education, vol. 20, no. 2, 30 Aug.<br>2019, https://doi.org/10.1128/jmbe.v20i2.1791.   | 3  | 1 | Curricula<br>and<br>Teaching | Teaching<br>Tip     |

| Journal of<br>Microbiology<br>and Biology<br>Education | 2019 | Beck, Christopher W., and Lawrence S. Blumer. "A Model<br>for an Intensive Hands-on Faculty Development Workshop<br>to Foster Change in Laboratory Teaching." Journal of<br>Microbiology & Biology Education, vol. 20, no. 3, 31 Oct.<br>2019, https://doi.org/10.1128/jmbe.v20i3.1799.  | 2 | 0 | Curricula<br>and<br>Teaching | Research<br>Article |
|--|------|--|---|---|------------------------------|---------------------|
| Journal of<br>Microbiology<br>and Biology<br>Education | 2019 | Gonzalez, Kimberly A., et al. "Collaborative Mentoring for<br>Retaining Secondary Biology Teachers." Journal of<br>Microbiology & Biology Education, vol. 20, no. 3, 31 Oct.<br>2019, https://doi.org/10.1128/jmbe.v20i3.1811.   | 3 | 1 | Other                        | Teaching<br>Tip     |
| Journal of<br>Microbiology<br>and Biology<br>Education | 2019 | Chou, Ann F., et al. "Impact and Outcomes of the Oklahoma<br>IDEA Network of Biomedical Research Excellence Summer<br>Undergraduate Research Program." Journal of Microbiology<br>& Biology Education, vol. 20, no. 3, 31 Oct. 2019,<br>https://doi.org/10.1128/jmbe.v20i3.1815.   | 3 | 0 | Curricula<br>and<br>Teaching | Research<br>Article |
| Journal of<br>Microbiology<br>and Biology<br>Education | 2019 | Byrd, Jeffrey J., et al. "Guidelines for Biosafety in Teaching<br>Laboratories Version 2.0: A Revised and Updated Manual<br>for 2019." Journal of Microbiology & Biology Education,<br>vol. 20, no. 3, 18 Aug. 2019,<br>https://doi.org/10.1128/jmbe.v20i3.1975.   | 5 | 1 | Curricula<br>and<br>Teaching | Teaching<br>Tip     |
| Journal of<br>Microbiology<br>and Biology<br>Education | 2020 | Moore, Michael E., et al. "Facilitating Long-Term Mentoring<br>to Effectively Implement Active Learning Instruction:<br>Formation of the Promoting Active Learning and Mentoring<br>(PALM) Network." Journal of Microbiology & Biology<br>Education, vol. 21, no. 3, 12 Nov. 2020,<br>https://doi.org/10.1128/jmbe.v21i3.2203. | 9 | 2 | Curricula<br>and<br>Teaching | Essay               |
| Journal of<br>Microbiology<br>and Biology<br>Education | 2020 | Axler-DiPerte, Grace L., and Mary T. Ortiz. "What's Your<br>Diagnosis? A Rapid Inquiry–Based Game to Differentiate<br>and Review Medically Important Microbes." Journal of<br>Microbiology & Biology Education, vol. 21, no. 3, 12 Nov.<br>2020, https://doi.org/10.1128/jmbe.v21i3.2059.                                      | 2 | 2 | Curricula<br>and<br>Teaching | Teaching<br>Tip     |

| Journal of<br>Microbiology<br>and Biology<br>Education | 2020 | Clement, Laurence, et al. "The Supervisory Role of Life<br>Science Research Faculty: The Missing Link to Diversifying<br>the Academic Workforce?" Journal of Microbiology &<br>Biology Education, vol. 21, no. 1, 10 Apr. 2020,<br>https://doi.org/10.1128/jmbe.v21i1.1911.                              | 4   | 2 | Equity<br>and<br>Diversity   | Essay               |
|--|------|--|-----|---|------------------------------|---------------------|
| Journal of<br>Microbiology<br>and Biology<br>Education | 2020 | Lopatto, David, et al. "Facilitating Growth through<br>Frustration: Using Genomics Research in a Course-Based<br>Undergraduate Research Experience." Journal of<br>Microbiology & Biology Education, vol. 21, no. 1, 28 Feb.<br>2020, https://doi.org/10.1128/jmbe.v21i1.2005.                           | 103 | 6 | Curricula<br>and<br>Teaching | Research<br>Article |
| Journal of<br>Microbiology<br>and Biology<br>Education | 2020 | Smith-Keiling, Beverly L., et al. "Starting the Conversation:<br>Initial Listening and Identity Approaches to Community<br>Cultural Wellness." Journal of Microbiology & Biology<br>Education, vol. 21, no. 1, 10 Apr. 2020,<br>https://doi.org/10.1128/jmbe.v21i1.2073.                                 | 11  | 1 | Equity<br>and<br>Diversity   | Essay               |
| Journal of<br>Microbiology<br>and Biology<br>Education | 2020 | Hood, Suzanne, et al. "Some Believe, Not All Achieve: The<br>Role of Active Learning Practices in Anxiety and Academic<br>Self-Efficacy in First-Generation College Students." Journal<br>of Microbiology & Biology Education, vol. 21, no. 1, 10<br>Apr. 2020, https://doi.org/10.1128/jmbe.v21i1.2075. | 14  | 6 | Equity<br>and<br>Diversity   | Research<br>Article |

| Supplemental Table 3:<br>Number of CC BER Publications in Each Paper Type<br>Category Between 2016-2020 |                  |  |
|---|------------------|--|
| Type of Paper   | Number of Papers |  |
| Research Article  | 93               |  |
| Teaching Tip  | 20               |  |
| Essay   | 26               |  |
| Case Study  | 3                |  |
| Review Article  | 1                |  |
| Editorial   | 3                |  |
| Letter to Editor  | 1                |  |
| Total   | 147              |  |

| pe | Supplemental Table 4:<br>Number of CC BER Publications in Each Paper Topic<br>Category Between 2016-2020 |                  |
|----|--|------------------|
|    | Paper Topic  | Number of Papers |
|    | Curricula and Teaching   | 108              |
|    | Degrees and Transfer   | 10               |
|    | Equity and Diversity   | 22               |
|    | Other  | 7                |
|    | Total  | 147              |