Jennifer K. Knight
Department of Molecular Cellular and Developmental Biology, B121C Porter
University of Colorado, Boulder, CO 80309-0347
phone: (303) 735-1949, email: knight@colorado.edu

Education

B.A. 1989	Cornell University	Biology (Neurobiology and Behavior)
Ph.D. 1994	University of Michigan	Neuroscience
Post Doc 1995-1999	University of Colorado	Developmental Genetics

Academic Appointments

2015-present	Associate Professor	MCD Biology, University of Colorado
1999-2015	Instructor, Senior Instructor	MCD Biology, University of Colorado
2006-2014	Coordinator	MCD Biology Science Education Initiative
2004-2005	Research Associate	Science Education (Carl Wieman) University of Colorado
1997	Lecturer	MCD Biology, University of Colorado

Service (Departmental)

2022-present	Program Learning Assessment Project and Quality Teaching Initiative lead coordinator
2012-present	Teaching Evaluation (Peer Teaching Observation) Committee; Chair 2018-present
2002-2015	Undergraduate Curriculum Committee (UGCOM)
2019-present	Undergraduate Curriculum Committee (UGCOM); Chair, fall 2023-present
2014-2020	Coherent Curriculum Committee

Service (University of Colorado)

2018-2022	Co-chair, Arts and Sciences Instructor Task Force
2013-present	Fellow, Center for STEM Learning, University of Colorado, Boulder
2003-present	Faculty Advisor, Alpha Epsilon Delta Pre-Health Honors Society
2021	Inclusive Classrooms Assessment Working Group, Center for Teaching and Learning
2019-2021	Arts and Sciences Council Faculty Affairs Committee
2017-2019	Boulder Faculty Assembly, MCDB Representative
2013-2019	Boulder Faculty Assembly Instructor Affairs Committee
2016-2017	Faculty Leader, Transforming Education, Stimulating Teaching and Learning Excellence (TRESTLE) Scholar Program
2016-2017	Provost's Campus Teaching and Learning Committee
2003-2006,2013	Pre-health Advisory Committee

Service (External)

2021-present	Editor in Chief, *CourseSource* Journal
2020-present	Executive Committee Member at Large, National Institute on Scientific Teaching
2020-present	Codon Learning Chief Academic Officer
2013-present	Monitoring Editor, *CBE-Life Science Education* Journal
2022-present	Abstract Committee, Society for the Advancement of Biology Education Research (SABER)
2021-2023	XBio Educator Advisory Board Member (https://explorebiology.org/)
2019-2021	President and Past President (Executive Committee positions), SABER
2017-2019	Steering Committee, SABER
2019-2021	Advisory Board Member, *CourseSource* Journal
2017-2021	Genetics Senior Editor, *CourseSource* Journal
2017-2020	Education Committee, Genetics Society of America
2012-2016	Chair, Abstract Committee, SABER
2010-2015	National Academies Summer Institutes Workshop Leader; Director, Mountain West Regional Summer Institute.
2009-2012	Faculty Workshop Leader, FIRST IV: Faculty Institutes for Reforming Science Teaching (NSF-

funded future faculty professional development program)
2011 Founding member, SABER
2010 Leader, Biology Scholars Assessment Institute (American Society for Microbiology)

Course material contributions
2022 Author, Codon Learning Genetics Course
2013 Author, active learning exercises and videos, *Biology for a Changing World* (W.H. Freeman)
2007, 2008 Author, Praxis Testing Services, Biology Education
2007 Author, clicker questions for 20 chapters of *Life*, 8e (Pearson)

Honors, Awards and Fellowships
2024 University of Colorado President's Teaching Scholars Program Awardee
2019 Boulder Faculty Assembly Excellence in Teaching and Pedagogy Award
2018 Best Should Teach Gold Award for Excellence in Teaching
2015-2016 Boulder Faculty Assembly Leadership Institute Fellow
2016 Chancellor's Award for Excellence in STEM Education
2010 Chancellor's Award for Excellence in STEM Education
2009 Mentor, Biology Scholars Research Residency Program (Scholarship of Teaching and Learning Institute, American Society for Microbiology)
2005 National Academies Education Mentor in the Life Sciences
2004 National Academies Education Fellow in the Life Sciences
2002, 2004 Dean's Fund for Excellence
2004 Council on Research and Creative Work (CRCW) Seed Grant
2001, 2002 Recognition of Influential Professors Award, Committee on Learning and Academic Support Services, University of Colorado.

Current External Funding:
2024-2027 Collaborative Research: Developing Instructional Materials to Promote Transfer of Biology Core Concept Knowledge Across Scales and Sub-disciplines. **PI.** NSF DUE $232,710 (total $450,407)
2024-2026 Creating a Culture of Teaching as Scholarly Work. **Co-PI**. American Institute of Physics Venture Grants Program. $59,995 (total $110,995)
2022-2024 Teaching STEM Faculty to Create Inclusive Learning Environments through an Open-Access Scientific Teaching Course. **PI.** Hewlett Foundation: $198,900.
2022-2024 Collaborative Research: Online4Bio: Building adaptability for teaching online through peer-reviewed, active-learning resources and professional development. **Co-PI**. NSF DUE $87,202 (total $362,761)

Prior Funding
2021-2022 Improving Access to Biology Education Research by Decreasing Barriers to Participation in the Society for the Advancement of Biology Education Research National Conference. **Co-PI**. NSF DUE 2109356: $49,996.
2017-2021 Problem Solving Through Practice: Identifying Common Student Struggles in Solving Complex Biology Problems and Developing Tools to Drive Improvement. **PI.** NSF DUE 1711348: $299,718.
2014-2019 Collaborative Research: Impact of the Summer Institutes on Faculty Teaching and Student Achievement, PI. NSF DUE 1323019: $476,146
2013-2019 Collaborative Research: Expanding a National Network for Automated Analysis of Constructed Response Assessments to Reveal Student Thinking in STEM. **PI**. NSF DUE 1323022: $137,661
2011-2018 Dissemination of Scientific Teaching through Summer Institutes. **PI.** Regional Institute Director. HHMI 52007221: $200,000
2015-2018 Evaluating the Validity and Instructional Sensitivity of Concept Inventories in Biology. **Co-PI**. Keck Foundation: $293,727
2013-2017 Collaborative Research: Navigating from Vision to Change with Bio-MAPS. **PI**. NSF DUE 1322364:

$153,236.

2013-2017 Collaborative Research: A Community of Enhanced Assessment Facilitates Reformed Teaching. **PI**. NSF DUE 1347729: $55,056.

2012-2015 Investigating Instructional Influences on the Productivity of Clicker Discussions. **PI**. NSF DUE 1140789: $196,627

2010-2014 Collaborative Research: Automated Analysis of Constructed Response Concept Inventories to Reveal Student Thinking: Forging a National Network for Innovative Assessment Methods. **PI**. NSF DUE 1022653: $84,529

2010-2011 University of Colorado Chancellor's Award for Excellence in STEM Education: Development of a capstone concept assessment to measure learning and retention in graduating MCDB students. $9,000

Manuscripts under review

1. Hazlett ZS, Jimenez PC, **Knight JK**. Self-testing and accuracy of reporting learning strategies support student success in Genetics. Submitted to CBE Life Sci Educ.
2. Flowers S, Hazlett ZS, Ramirez M, Treibergs K, Smith MK, **Knight JK**. Sharing OER resources: faculty need more support following workshops. Submitted to Frontiers in Higher Education.

Publications

1. **Knight JK**, Weaver DC, Peffer ME, Hazlett ZS (2022). Relationships between prediction accuracy, metacognitive reflection, and performance in introductory genetics students. CBE Life Sci Educ. doi:10.1187/cbe.21-12-0341
2. Avena JS, McIntosh BB, Whitney ON, Wiens A, **Knight JK** (2021). Successful problem solving in genetics varies based on question content. CBE Life Sci Educ. https://doi.org/10.1187/cbe.21-01-0016
3. Paine AR and **Knight JK** (2020). Student behaviors and interactions influence group discussions in an introductory biology lab setting. CBE Life Sci Educ. doi: 10.1187/cbe.20-03-0054
4. Driessen EP, **Knight JK**, Smith MK, Ballen CJ (2020). Demystifying the Meaning of Active Learning in Postsecondary Biology Education. CBE Life Sci Educ. doi: 10.1187/cbe.20-04-0068
5. Branchaw JL, Pape-Lindstrom PA, Tanner KD, Bissonnette SA, Cary TL, Couch BA, Crowe AJ, **Knight JK**, Semsar K, Smith J, Smith MK, Summers MM, Wienhold CJ, Wright CD, Brownell SE (2020). Resources for Teaching and Assessing the Vision and Change Biology Core Concepts. CBE Life Sci Educ doi: 10.1187/cbe.19-11-0243
6. Avena JS and **Knight JK** (2019). Problem solving in genetics: Content hints can help. CBE Life Sci Educ. 18:ar23 doi: 10.1187/cbe.18-06-0093.
7. Sieke SA, McIntosh BB, Steele MM, **Knight JK** (2019). Characterizing students' ideas about the effects of a mutation in a non-coding region of DNA. CBE Life Sci Educ. 18:ar18 doi: 10.1187/cbe.18-09-0173.
8. Smith MK, Brownell S, Crowe A, Holmes N, **Knight JK**, Semsar K, Summers M, Walsh C, Wright C, Couch B. (2019) Tools for change: measuring student conceptual understanding across undergraduate biology programs using bio-maps assessments. J. Microbiol. Biol. Educ. 20(2): doi:10.1128/jmbe.v20i2.1787
9. Zagallo P, McCourt J, Idsardi R, Smith MK, Urban-Lurain M, Andrews TC, Haudek K, **Knight JK**, Merrill J, Nehm R, et. al. (2019). Through the Eyes of Faculty: Using Personas as a Tool for Learner-Centered Professional Development. CBE Life Sci Educ. 18 (4).
10. Couch, BA, Wright CD, Freeman S, **Knight JK**, Semsar K, Smith MK, Summers MM, Zheng Y, Crowe AJ, Brownell SE (2019). GenBio-MAPS: A programmatic assessment to measure student understanding of Vision and Change core concepts across general biology programs. CBE Life Sci. Educ. 18:arx 1–14, doi: 10.1187/cbe.18-07-0117.
11. Semsar K, Brownell SE, Couch BA, Crowe AJ, Smith MK, Summers MM, Wright CD, **Knight JK** (2019). Phys-MAPS: A programmatic physiology assessment for introductory and advanced undergraduates. Adv Physiol Educ 43: 15–27, 2019; doi:10.1152/advan.00128.2018.
12. Durham MF, **Knight JK**, Bremers E, DeFreece J, Paine A, Couch BA (2018). Student, instructor, and observer agreement regarding frequencies of Scientific Teaching practices using the Measurement Instrument for Scientific Teaching-Observable (MISTO). IJ STEM Ed 5: 31. doi.org/10.1186/s40594-018-0128-1
13. Pelletreau K, **Knight JK**, et al. (2018). A Faculty Professional Development Model That Improves Student Learning, Encourages Active-Learning Instructional Practices, and Works for Faculty at Multiple Institutions. CBE Life Sci. Educ. 17(2) doi.org/10.1187/cbe.17-12-0260.

14. Summers MM, Couch BA, **Knight JK**, et al. (2018). EcoEvo-MAPS: An Ecology and Evolution Assessment for Introductory through Advanced Undergraduates. CBE Life Sci. Educ 17(2) doi.org/10.1187/cbe.17-02-0037.
15. **Knight JK**, Brame CJ (2018). Evidence-Based Teaching Guides: Peer Instruction. CBE Life Sci. Educ. 17(2) doi.org/10.1187/cbe.18-02-0025.
16. Shi J, **Knight JK**, Chun H, Guild NA, Martin JM (2017). Using Pre-Assessment and In-Class Questions to Change Student Understanding of Molecular Movements. J. Microbiol. Biol. Educ. 18(1):18.1.3. doi:10.1128/jmbe.v18i1.1195.
17. McCourt JS, Andrews TC, **Knight JK**, et al (2017). What Motivates Biology Instructors to Engage and Persist in Teaching Professional Development? CBE Life Sci. Educ. 16(3):ar54. doi:10.1187/cbe.16-08-0241.
18. Durham MF, **Knight JK**, Couch BA (2017). Measurement Instrument for Scientific Teaching (MIST): A Tool to Measure the Frequencies of Research-Based Teaching Practices in Undergraduate Science Courses. CBE Life Sci Educ. 16:ar67. doi: 10.1187/cbe.17-02-0033.
19. Pelletreau, K.N., Andrews, T., Armstrong, N., Bedell, M.A., Dastoor, F., Dean, N., Erster, S., Fata-Hartly, C., Guild, N., Greig, H., Hall, D., **Knight, J.K**., Koslowsky, D., Lemons, P.P., Martin, J., McCourt, J., Merrill, J., Moscarella, R., Nehm, R., Northington, R., Olsen, B., Prevost, L., Stoltzfus, J., Urban-Lurain, M., and Smith, M.K. (2016). A clicker-based study that untangles student thinking about the processes in the central dogma. Course Source Vol 3.
20. **Knight JK**, Wise SB, Sieke S (2016). Group random call can positively affect student in-class clicker discussions. CBE Life Sci. Educ. 15(4).
21. Prevost LB, Smith MK, **Knight JK** (2016). Using student writing and lexical analysis to reveal student thinking about the role of stop codons in the central dogma. CBE Life Sci. Educ. 15(4).
22. Batzli JM, **Knight JK**, Hartley LM, Cordero Maskiewicz A, Desy E (2016). Crossing the Threshold: Bringing Biological Variation to the Foreground. CBE Life Sci. Educ. 15(4).
23. Couch BA, **Knight JK** (2015). A Comparison of Two Low-Stakes Methods for Administering a Program-Level Biology Concept Assessment. J. Microbiol. Biol. Educ 16, 178-185.
24. Couch BA, Brown TL, Shelpat TJ, Graham MJ, **Knight JK**. (2015) Scientific Teaching: Defining a Taxonomy of Observable Practices. CBE Life Sci. Educ. 14, 1-12
25. Couch BA, Wood WB, **Knight JK**. (2015) The Molecular Biology Capstone Assessment: A Concept Assessment for Upper-Division Molecular Biology Students. CBE Life Sci. Educ. 14,1-11.
26. **Knight JK**, Wise SB, Rentsch J, Furtak EM (2015). Cues Matter: Learning Assistants Influence Introductory Biology Student Interactions during Clicker-Question Discussions. CBE Life Sci. Educ. 14, 1-14.
27. **Knight JK**, Wise, SB, Southard KM (2013). Understanding clicker discussions: student reasoning and the impact of instructional cues. CBE Life Sci. Educ. 12, 645–654.
28. **Knight JK**, Wood WB, Smith MK. (2013). What's downstream? A set of classroom exercises to help students understand recessive epistasis. Journal of Microbiology and Biology Education 14, 197-205.
29. Hoskinson, A-M, Cabalero, MD, **Knight JK** (2013) How Can We Improve Problem-solving in Undergraduate Biology? Appling Lessons From 30 Years of Physics Education Research. CBE Life Sci. Educ. 12: 153-161.
30. Smith MK and **Knight JK** (2012). Using the Genetics Concept Assessment to Document Persistent Conceptual Difficulties in Undergraduate Genetics Courses. Genetics 191, 21–32.
31. Haudeck KC, Kaplan, JJ, **Knight JK**, Long, T, Merrill, J, Munn A, Nehm R, Smith MK, Urban-Lurain M (2011). Harnessing Technology to Improve Formative Assessment of Student Conceptions in STEM: Forging a National Network CBE Life Sci Educ 10, 149-155
32. Semsar K, **Knight JK**, Birol G, Smith MK (2011). The Colorado Learning Attitudes about Science Survey (CLASS) for use in Biology. CBE Life Sci. Educ 10, 268-278.
33. Smith MK, Wood, WB, Krauter, K, **Knight JK.** (2011). Combining Peer Discussion with Instructor Explanation Increases Student Learning from In-class Concept Questions. CBE Life Sci. Educ. 10, 55-63.
34. Shi J, Wood WB, Martin JM, Guild NA, Vincens Q, **Knight JK.** (2010). A Diagnostic Assessment for Introductory Molecular and Cell Biology. CBE Life Sci. Educ. 9, 453-461.
35. **Knight JK** and Smith MK (2010). Different but equal? How non-majors and majors approach and learn genetics. CBE Life Sci. Educ. 9, 34-44.
36. Smith MK, Wood WB, Adams WK, Wieman C, **Knight JK**, Guild NA, Su TT (2009). Why peer discussion improves student performance on in-class concept questions. Science 323, 122-124.

37. Smith, MK, Wood, WB, **Knight, JK** (2008). The Genetics Concept Assessment: A New Concept Inventory for Gauging Student Understanding of Genetics. CBE Life Sci. Educ. 7, 422-430.
38. **Knight, JK** and Wood, WB (2005). Teaching more by lecturing less. CBE Life Sci. Educ. 4, 298–310.
39. **Knight, JK** and Wood, W.B. (1998). gad-1 is required for gastrulation initiation in C. elegans and encodes a protein with WD repeats. Dev. Biol. 198, 253-265.
40. Powell-Coffman JA, **Knight JK,** Wood WB (1996). Onset of C. elegans gastrulation is blocked by inhibition of embryonic transcription with an RNA polymerase antisense RNA. Dev. Biol. 178, 472-483.
41. **Knight, JK**, Raymond, PA (1995). Retinal pigmented epithelium does not transdifferentiate in adult goldfish. J. Neurobiol. 27, 447-456.
42. Raymond PA, Barthel LK, Rounsifer ME, Sullivan SA, **Knight JK** (1993). Expression of rod and cone visual pigments in goldfish and zebrafish: a rhodopsin-like gene is expressed in cones. Neuron 10, 1161-1174.
43. **Knight JK,** Raymond, PA (1990). Time course of opsin expression in developing rod photoreceptors. Development 110, 1115-1120.

Conference Proceedings

44. Peffer M, Quiqley D, Brusman L, Avena JS, **Knight JK** (2020). Trace Data from Student Solutions to Genetics Problems Reveals Variance in the Processes Related to Different Course Outcomes. Proceedings of the Tenth International Learning Analytics & Knowledge Conference. Frankfurt am Main, Germany.
45. Prevost LB, **Knight JK**, Smith MK, Urban-Lurain M (2013). Student writing reveals their heterogeneous thinking about the origin of genetic variation in populations. In Proceedings of the National Association for Research in Science Teaching (NARST) annual conference. Rio Grande, Puerto Rico.
46. Wood WB and **Knight JK** (2004). Teaching large biology classes: active-engagement alternatives to lecturing and evidence that they work. Molecular Biology of the Cell 15, S338a.
47. **Knight JK,** (2004) Using the worm, Caenorhabditis elegans, in undergraduate genetics and developmental biology laboratories. Tested Studies for Laboratory Teaching, Conference Proceedings of the Association for Biology Laboratory Education (ABLE), Volume 26.
48. **Knight JK** and Wood, WB (2002). Student discussion of journal articles in a class of >60. Dev. Biol. 247, 408.

Invited Reviews

49. **Knight JK**. (2010). Biology Concept Assessment Tools: Design and Use. Microbiology Australia 31(1), 5-8.

Books and Book Chapters

50. Smith MK and **Knight JK** (2020). Clickers in the Biology Classroom: strategies for writing and effectively implementing clicker questions that maximize student learning. in Active learning in college science: The case for evidence-based practice. J.J. Mintzes and E.M.Walter, Eds. Berlin: Springer Nature.
51. Dirks C, **Knight JK** (2016). Measuring College Learning in Biology. in Improving Quality in American Higher Education: Learning Outcomes and Assessments for the 21st Century, Jossey-Bass, San Francisco CA.
52. Mari-Beffa, M and **Knight, JK** eds. (2005) Key Experiments in Practical Developmental Biology. Cambridge University Press.

Invited Talks (2015-2023)

2023 Rochester Institute of Technology, Life Sciences faculty seminar
2023 Cornell University, Center for Teaching Innovation seminar
2023 Washington State University, Transformation Change Initiative, speaker and workshop leader
2023 University of California Santa Barbara, Center for Innovative Teaching Research and Learning seminar
2023 University of California Irvine, Department of Molecular Life Sciences faculty seminar
2022 University of Northern Colorado, Department of Biology faculty seminar
2022 University of Missouri, Department of Biology faculty seminar
2021 Center for Teaching and Learning, University of Colorado: "Building Teaching Communities"
2021 University of California Davis Department of Plant Biology faculty seminar
2020 Wayne State University Keynote Address, Wayne State University Student Success Through Evidence-based Pedagogies (WSU-SSTEP) Celebration of Teaching event

2020 University of Washington, Dept. Biology faculty seminar
2020 Denver University Center for Innovative Teaching invited seminar
2019 Colorado School of Mines Department of Biochemistry faculty seminar
2019 Washington University, Center for Integrative Research on Cognition, Learning, and Education, faculty seminar
2019 Vanderbilt University, Biology Dept faculty seminar
2018 Case Western Reserve University, Neuroscience Dept. faculty seminar
2018 Cornell University, Center for Teaching Innovation seminar
2018 University of California Santa Cruz, Department of Biology faculty seminar
2017 Scientific Teaching Webinar; Yale Center for Teaching and Learning
2017 ASMCUE Denver; invited plenary: Evidence-based methods to improve student learning
2017 UC San Diego, Dept. Biology faculty seminar
2017 UC Irvine SABER West invited workshop a
2017 University of Utah, Dept. Biology faculty seminar
2016 West Virginia University, Dept. Biology, faculty seminar
2016 University of North Texas, Dept. Biology, faculty seminar
2016 University of Maine Center for RISE workshop and invited conference talk
2016 Harvard University Medical School, seminar for Curriculum Fellows Program
2016 Yale University Summer Institute Leaders Meeting
2015 University of Tennessee, Dept. Biology faculty seminar
2015 Iowa State, Dept. Biology faculty seminar
2015 University of Georgia, Department of Genetics, faculty seminar
2015 University of Minnesota, Department of Biology Teaching and Learning, faculty seminar
2015 University of Northern Colorado, Department of Biology, faculty seminar

Teaching Activities

Classroom Teaching

Current courses:

MCDB 2150 Principles of Genetics
Every spring semester: 2015-present; Fall 2021, 2022 (co-taught with Dr. Christy Fillman)

MCDB 4650 Developmental Biology
Fall and Spring semesters 1999-2007; Spring semesters 2007-2013, Fall 2017-Fall 2020

MCDB 5650 Teaching and Learning
Once per academic year 2010-present

MCDB 6440/EDUC 5800 Skills and Strategies for Teaching Biology
Spring 2022; anticipate once per year (co-taught with a School of Education faculty member)

MCDB 5230 Graduate Core
2 classes per academic year, 2019-present

Previously taught courses:

MCDB 1030 Plagues and People; Fall semesters 2011-2014
MCDB 1041 Fundamentals of Human Genetics; Spring semesters 1999-2014
MCDB 3650 The Brain, from Molecules to Behavior; Fall semesters 2007-2014
MCDB 4660 Developmental Biology Lab; Fall and Spring semesters 1999-2007
MCDB 4790 Experimental Embryology; Spring semesters 2014, 2015, 2016

Postdoc advisor to:

Sharleen Flowers	2022-Current
Citlally Jiminez	2022-2023; Current position: Purdue Online, Instructional Developer
Melanie Peffer	2019-2020; Current position: Instructor, Residential Academic Program, University of Colorado
Jennifer Avena	2015-2020; Current position: Assistant Professor, Colorado State University

Betsy McIntosh	2017-2018; Current position: Learning Assistant Program Lead University of Colorado
Kate Semsar	2014-2016; Current position: Assistant Director of STEM Education, Miramontes Arts and Sciences Program, University of Colorado
Jeremy Rentsch	2014-2015: Current position: Assistant Professor, Francis Marion University
Brian Couch	2011-2014; Current position: Associate Professor, University of Nebraska, Lincoln
Sarah Wise	2009-2010; Current position: ASSETT, University of Colorado
Jia Shi	2006-2009; Current position: Instructor, Integrative Physiology, University of Colorado
Michelle Smith	2006-2010; Current position: Senior Associate Dean for Undergraduate Education and Professor of Ecology and Evolutionary Biology, Cornell University

Graduate student advisor to

Joshua Fandel	2022-current PhD student
Zachary Hazlett	2021-current PhD student
Alex Paine	2016-2020 (PhD, MCDB, 2020)
Gretchen Wettstein	2017-2019 (Masters, MCDB, 2019)

Main Research Advisor to Undergraduate Honors Students

Austin Hammermeister Suger	2020 Summa Cum Laude, MCD Biology, University of Colorado
Nicholas Breitnauer	2009, Summa Cum Laude, General Honors, University of Colorado
Tassa Ruoff	2001, Summa Cum Laude, MCD Biology, University of Colorado

Undergraduate Honors Student Committees: served on 26 since 2003

Undergraduate Research Students supervised: 35 since 2006

Teaching supervised: Learning Assistants in the University of Colorado Learning Assistant: 35 since 2005, in courses MCDB 1030, MCDB 1041, MCDB 2150, and MCDB 4650.