
Ruth E. Heisler
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EDUCATION

- 1992-1995 **M.A., Environmental, Population, and Organismic Biology**
University of Colorado Boulder, Boulder, CO
- 1987-1992 **B.S., Biology, College of Biological Sciences**
University of Minnesota Twin Cities, Minneapolis, MN

PROFESSIONAL EXPERIENCE

- 2022-present **Teaching Professor of Distinction**
- 1999-2022 **Senior Instructor/Teaching Associate Professor**
- 1996-1999 **Instructor**
Department of Integrative Physiology
University of Colorado Boulder, Boulder, CO
- 2017-2021 **Associate Chair of Undergraduate Affairs**
Department of Integrative Physiology
University of Colorado Boulder, Boulder, CO
- 2001-2016 **Undergraduate Coordinator/Academic Scheduling**
Department of Ecology and Evolutionary Biology
University of Colorado Boulder, Boulder, CO
- 1995-1996 **Lecturer**
Department of Environmental, Population, and Organismic Biology
University of Colorado Boulder, Boulder, CO
- 1996 **Lecturer**
Department of Biology
Regis University, Denver, CO

AWARDED EDUCATION GRANTS

- 2016-2017 Type II TRESTLE Award, Center for STEM Learning, \$10,000
Title: Development and Implementation of Case Studies Across Foundational IPHY Curriculum—A Continuation of the SEI Effort
Principal Investigators: Foley TE, Casagrand J, **Heisler R**

TEACHING AWARDS

- 2015 BFA Faculty Recognition Award
- 2013 ASSETT Award of Excellence as an Outstanding Teacher for Technology

SERVICE ACTIVITIES

Department

- 2017-present IPHY Curriculum Committee, Chair/co-Chair
- 2004-present IPHY Curriculum Committee
- 2004-present Faculty mentor to instructors in IPHY
- 2006-present Faculty peer reviews
- 2022 PUEC Committee for Dr. Leif Saul

2017-2021 IPHY Executive Committee
 2021 Graduate Admissions Committee
 2016, 2019 Chair of PUEC and promotion committee for Heidi Bustamante
 2012, 2019 Chair of PUEC committee for Dr. Steve Hobbs
 2019 Chair of PUEC committee for Dr. Nicole Stob
 2018-2019 Academic Review and Planning Advisory Committee (ARPAC)
 2014-2016 STEM Education Initiative, Departmental Action Team committee
 2010-2015 IPHY Graduate Student Training
 2012-2013 Human Anatomy Lab redesign committee, Chair
 2011 PUEC committee Bob Hermanson
 2006-2012 Environmental, Health & Safety lab proctor
 2006-2007 Undergraduate Task Force
 2006 IPHY Strategic Planning Committee
 2003 Search Committee: Physiology lab coordinator
 2002 EPOB Curriculum Committee
 2001 Student Outcomes Committee, Chair
 2001 Anatomy Lab Ventilation
 2000-2001 Student Fees Committee

College

2020 Chair of PUEC committee Lameese Akacem
 2017 ASSETT Hiring Committee
 2014-2017 Arts and Science Committee (ASC)
 2015-2017 ASC Online Education Committee
 2014-2015 Faculty Student Mentor Program

Campus

2022 Search Committee for new advisor Office of Prehealth Advising (OPHA)
 2014-present Admitted Student Day departmental representative
 2006-present Prehealth Advisory Committee
 2016-2018 Learning Management System Faculty Working group
 2014-2015 Lynda.com site license/Leadership Institute sub-group
 2011-2014 Boulder Faculty Assembly departmental representative
 2011-2014 Boulder Faculty Assembly Academic Affairs committee
 2011 MOOC (Massive Open Online Course) committee, BFA representative

Scholarly

2008-2009 American Academy of Forensic Science Workshop steering committee
 2001-2002 Visible Human Scholars workshop *Center for Human Simulation & AHEC*

Public

1997-present Anatomy lab cadaver tours: Boulder High School, Red Rocks Community College, Southwest Acupuncture College, Boulder Preparatory High School
 1999,2000,2004 Mr. Wizard Program: Assisted Dr. Todd Gleeson with "Muscles in Motion".
 2001-2003 Biological Sciences Initiative: workshop for high school teachers on how to use the Explorable Virtual Human program.

COURSES TAUGHT

- Introduction to Human Anatomy
- Introduction to IPHY
- Human Anatomy Laboratory

- Comparative Vertebrate Anatomy
- Pedagogy seminar: Undergraduate Teaching in IPHY
- Critical Thinking: Topics in Forensics
- Forensic Biology
- General Biology Laboratory
- Non-majors laboratory coordinator
- Human Anatomy lab coordinator
- Comparative Vertebrate Anatomy lab coordinator
- Human Physiology Laboratory
- Teaching in Biology/Integrative Physiology

COURSE DEVELOPMENT

2022	New course design to support preparing for career/job search: IPHY 3020 Next Steps
2020	New course design to promote freshman success: IPHY 1020 Intro to IPHY
2014-2015	38 Screencasts with subtitles for Anatomy laboratory
1996-present	Cadaver prosections

PROFESSIONAL DEVELOPMENT

2022	ASSETT Faculty Fellow
2021	Online Teaching Academy
Aug 2017	Department Education Specialist Training Workshop, led by Dr. Carl Weiman at Stanford University
2009-present	Human Anatomy and Physiology Society annual meeting symposia and workshops
2016-present	Shared Innovation Discussion Group (ShInDiG), University of Colorado Boulder
2014-present	Leadership Institute, University of Colorado Boulder
2016	ePortfolio Pilot Project, Office of the Provost, University of Colorado Boulder
2014-present	Annual Symposium on STEM Education, University of Colorado Boulder
2015	ASSETT Teaching with Technology Workshop
2013	COLTT conference, University of Colorado Boulder
2013	ASSETT Hybrid and Online Course Development Workshop
2012	Assessment Institute: <i>Achieving Course Goals: Gathering Evidence About Student Learning</i> , Faculty Teaching Excellence Program, University of Colorado Boulder
2003-2009	Science Education Initiative course development
2003-2006	Visible Human Scholars Group of anatomy instructors from Colorado universities, colleges and community colleges interested in incorporating technology into human anatomy education.

STUDENT ADVISEES

1996-present	Graduate Teaching Assistants (110+) Human Anatomy Laboratory, Human Anatomy Lecture, Comparative Vertebrate Anatomy Laboratory, Forensic Biology Laboratory, Biology: A Human Approach
1996-present	Undergraduate Teaching Assistants (400+) Human Anatomy Laboratory, Human Anatomy Lecture, Comparative Vertebrate Anatomy Laboratory, Forensic Biology Laboratory, Biology: A Human Approach
1996-present	Independent Study Students (20+)
1996-present	Undergraduate Internships (61)

Honor's Students

- Spring 2021 Hash Brown, *Associations of multiple light characteristics with human circadian phase and sleep regularity in free-living individuals*
- Fall 2016 Jeremy Taylor, *Absent or Not?: Classically Conditioning Spike-and-Wave Discharge in Sprague Dawley Rats*
- Spring 2009 Rebecca Vartuili MCDB

Undergraduate Research Opportunity Program (UROP)

- Spring 2006 Ross Benik Development of protocol for extracting and amplifying fly DNA for use in species determination.

Other

- Spring 2009 William Waldron, Committee for individually structured major: International Health.
- 1996-2008 Mentored graduate student cadaver dissectors (48+)

PRESENTATIONS (ORAL AND POSTER)

Posters

1. **Heisler, R** IPHY 1020: A course to improve retention, promote student success, and build community. Center for STEM Learning 2022 Symposium, 2022.
2. Foley TE, Casagrand J, and **Heisler R**. Curriculum Coordinators in Integrative Physiology: A new approach to sustaining STEM transformations. 7th Annual Symposium on STEM Education, 2016.
3. Casagrand J, Foley TE, and **Heisler R**. Challenges encountered when integrating case studies across the foundational IPHY curriculum. 7th Annual Symposium on STEM Education, 2016.
4. Foley TE, Semsar KA Bentley F, **Heisler R**. Initial impact of IPHY teaching assistant training. Science Education Initiative End-of-Year Event, 2010.
5. Semsar KA, Foley TE, Bentley F, **Heisler R**, Saul L, and Lowry C. Head, shoulders, knees, and toes. What concepts should your Anatomy students know? Science Education Initiative End-of-Year Event 2010
6. Routh J, Benay F, Foley TE, Saul L, Lowry CA, **Heisler R**, and Semsar KA. Can color-coding guide the way through complicated anatomy figures? Noyce Fellow Presentation, 2009.
7. Semsar KA, Benay F, Foley TE, **Heisler R**, Saul L, and Lowry C. Finding a way to make homework helpful & valued. Science Education Initiative End-of-Year Event 2009

Lectures, Workshops & Outreach

1. Human Anatomy & Physiology Society annual meeting *Developing and Incorporating Interrupted Case Studies into your Anatomy and Physiology course(s)*. May 2017, Salt Lake City, UT
2. TRESTLE (Transforming Education, Stimulating Teaching and Learning Excellence) Annual Meeting and Course Transformation Institute *Implementing Case Studies*. October 2016
3. Heisler, R. *In Pearson Webinar Series: Help Students Prepare for Human Anatomy Lecture and Lab Using Mastering A&P* [Webinar]. <http://www.pearsoned.com/events/learning-makes-us-webinar-series-help-students-prepare-for-human-anatomy-lecture-and-lab-using-masteringap/> November 4, 2015 and February 17, 2016.
4. Human Anatomy & Physiology Society annual meeting *Creating a 21st Century Learning Experience in your Anatomy Laboratory* May 2013, Las Vegas, NV
5. Human Anatomy & Physiology Society annual meeting, *Virtual anatomy: Maximizing student learning and assessment using online interactive tools* May 2011, Victoria, BC
6. Human Anatomy & Physiology Society annual meeting, *Using PAL 2.0 as an assessment tool in your classroom* May 2010, Denver, CO

7. Human Anatomy & Physiology Society annual meeting, *Using PAL 2.0 as an assessment tool in your classroom* May 2009, Baltimore, MD
8. American Academy of Forensic Science Educational Conference *Forensic Anthropology in the Classroom* June 7-9, 2009, Boulder, CO
9. American Academy of Forensic Science Educational Conference *Forensic Entomology in the Classroom* June 7-9, 2009 Boulder, CO
10. Science Education Initiative End of year event *Implementing Homeworks into Anatomy: The good, the bad, and the not so ugly* May 2008, Boulder, CO
11. PreCollegiate Development Program *So, you want to be a Forensic scientist?* Sept 2004, Boulder, CO
12. College of Music, provided and explained brain models to graduate student teaching a seminar on auditory responses. 2006, Boulder, CO

PUBLICATIONS (IN REVERSE CHRONOLOGICAL ORDER)

Books and Educational Materials

1. Hebert N, **Heisler R**, et al 2015 *A Photographic Atlas for Anatomy & Physiology* Benjamin Cummings, 212 pp
2. **Heisler R**, et al 2013 *Practice Anatomy Lab 3.0 Lab Guide* Benjamin Cummings, 496 pp
3. **Heisler R** et al 2011 *Practice Anatomy Lab 3.0* Benjamin Cummings, CD-ROM
4. **Heisler R** & Hebert, N. 2008 *Practice Anatomy Lab 2.0* Benjamin Cummings, CD-ROM

Instruction Manuals (non-refereed)

1. Hobb S, **Heisler R**, Bustamante H, Saul L *Human Anatomy Laboratory Manual* Pearson Custom Publishing
2. Wacker A, Saul L, **Heisler R** & Hobbs S "IPHY 3415 Human Anatomy Lab Model Atlas" Pearson, 57 pp.
3. **Heisler R** & Hayes A. *Human Anatomy Laboratory Manual, Editions 3-7*, Bluedoor Publishing, 171 pp
4. **Heisler R**. 2005 *Human Anatomy Laboratory Manual, 2nd Edition*, Outernet Publishing, 171 pp
5. Cundiff M, **Heisler R**, Osadjan M. 2002 *Biology: A Human Approach Laboratory Handbook*, McGraw-Hill Custom Publishing, 118 pp.
6. **Heisler R**. 1999 *Comparative Vertebrate Anatomy Lab Manual*, 81 pp.
7. **Heisler R**. 1999 *Human Anatomy Laboratory Manual, 2nd Edition*. Pearson Custom Publishing, 212 pp.
8. **Heisler R**. 1997 *Human Anatomy Laboratory Manual: EPOB 3420*. Simon & Schuster Custom Publishing, 221 pp.

Unpublished reports

1. Bright RC, Gatenby C, **Heisler R**, Plummer E, Stramer K, Ostlie W. 1995 *A Survey of the Mussels of the Pomme de Terra and Chippewa Rivers, Minnesota* 1990 Unpublished Report to the Minnesota Department of Natural Resources. 131 pp.

CONSULTING ACTIVITIES

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| 1999-2004 | Center for Human Simulation, Univ. of Colorado Health Sciences
Helped design educational format and written content for 3D interactive anatomical images using data from Visible Human Project. Project funded by the National Library of Medicine. |
| 2001 | Reindeer Publishing
Content design for on-line biology labs. |

Textbook Reviews

- *Cat Anatomy and Dissection Guide* by Bruce D. Wingerd
- *Human Anatomy Laboratory Manual* by Eric Wise
- *Human Anatomy, 1st Edition* by Kenneth Saladin
- *Human Anatomy, 1st Edition* by Michael McKinley
- *Human Anatomy Laboratory Manual* by Robert Seegmiller, a cadaver based lab manual with CD.
- *Principles of Human Anatomy, 9th Edition* by Gerard Tortora both pre and post revision

AFFILIATIONS/MEMBERSHIPS

2008-present Human Anatomy and Physiology Society

2018-present Physiology Majors Interest Group