
Ruth Elizabeth Heisler

303-492-5678 (office)
ruth.heisler@colorado.edu

EDUCATION

University of Colorado Boulder **May 1995**
Master of Arts in Biology, Dept of Environmental, Population, and Organismic Biology

University of Minnesota Twin Cities **June 1992**
Bachelor of Science in Biology, College of Biological Sciences

PROFESSIONAL EXPERIENCE

Current Positions

Undergraduate Associate Chair 2017-present

- Department of Integrative Physiology, University of Colorado Boulder

Senior Instructor 2003-present

- Department of Integrative Physiology, University of Colorado Boulder

Previous Positions

Undergraduate Coordinator/Academic Scheduling 2001-2016

- Department of Ecology and Evolutionary Biology, University of Colorado Boulder

Senior Instructor 1999-2003

- Department of Environmental, Population, and Organismic Biology, University of Colorado Boulder

Instructor 1996-1999

- Department of Environmental, Population, and Organismic Biology, University of Colorado Boulder

Lecturer 1995-1996

- Department of Environmental, Population, and Organismic Biology, University of Colorado Boulder

Lecturer 1996

- Department of Biology, Regis University

Graduate Teaching Assistant 1992-1995

- Department of Environmental, Population, and Organismic Biology, University of Colorado Boulder

Field Crew Chief 1991-1992

- Minnesota Department of Natural Resources/University of Minnesota

Research Assistant 1990-1992

- Bell Museum of Natural History

AWARDED EDUCATION GRANTS

Type II TRESTLE Award, Center for STEM Learning, \$10,000 2016-2017

- 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

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SERVICE ACTIVITIES

Department

- IPHY Executive Committee 2017-present
- IPHY Teaching Committee 2004-present
- Faculty mentor instructors in IPHY 2004-present
- Faculty peer reviews 2006-present
- STEM Education Initiative, Departmental Action Team committee 2014-2016
- Chair of PUEC and promotion committee for Heidi Bustamante 2016
- IPHY Graduate Student Training 2010-2015
- Human Anatomy Lab redesign committee, Chair 2012-2013
- Chair of PUEC committee for Dr. Steve Hobbs. 2012
- PUEC committee Bob Hermanson 2012
- Environmental, Health & Safety lab proctor 1996-2012
- Undergraduate Task Force 2006-2007
- IPHY Strategic Planning Committee 2006
- Search Committee: Physiology lab coordinator 2003
- EPOB Curriculum Committee 2002
- Student Outcomes Committee (chair) 2001
- Anatomy Lab Ventilation 2001
- Student Fees Committee 2000-2001

College

- ASSETT Hiring Committee
- Arts and Science Committee (ASC) 2014-2017
- ASC On-line Education Committee 2015-2017

Campus

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

Scholarly

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

Public

- Anatomy lab cadaver tours: Boulder High School, Red Rocks Community College, Southwest Acupuncture College, Boulder Preparatory High School 1997-present
- Mr. Wizard Program: Assisted Dr. Todd Gleeson with "Muscles in Motion".
4/1999, 1/2000, 11/2000, 4/2004
- Biological Sciences Initiative: workshop for high school teachers on how to use the Explorable Virtual Human program. 11/2003

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COURSES TAUGHT

- Introduction to Human Anatomy
- 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

- 38 Screencasts with subtitles for Anatomy laboratory 2014-2015
- Cadaver prosections 1996-present

PROFESSIONAL DEVELOPMENT

- Department Education Specialist Training Workshop, led by Dr. Carl Weiman at Stanford University Aug 2017
- Human Anatomy and Physiology Society annual meeting symposia and workshops 2009-present
- Shared Innovation Discussion Group (ShInDiG), University of Colorado 2016-present
- Leadership Institute, University of Colorado Boulder 2014-present
- ePortfolio Pilot Project, Office of the Provost, University of Colorado 2016
- Annual Symposium on STEM Education, University of Colorado Boulder 2014-present
- ASSETT Teaching with Technology Workshop 2015
- COLTT conference, University of Colorado Boulder 2013
- ASSETT Hybrid and Online Course Development Workshop 2013
- Assessment Institute: *Achieving Course Goals: Gathering Evidence About Student Learning*, Faculty Teaching Excellence Program, University of Colorado 2012
- Science Education Initiative course development 2008-2009
- Visible Human Scholars 2003-2006
Group of anatomy instructors from Colorado universities, colleges and community colleges interested in incorporating technology into human anatomy education.

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STUDENT ADVISEES

Graduate Teaching Assistants (110+)

1996-present

- Human Anatomy Laboratory
- Human Anatomy Lecture
- Comparative Vertebrate Anatomy Laboratory
- Forensic Biology Laboratory
- Biology: A Human Approach

Undergraduate Teaching Assistants (400+)

1996-present

- Human Anatomy Laboratory
- Human Anatomy Lecture
- Comparative Vertebrate Anatomy Laboratory
- Forensic Biology Laboratory
- Biology: A Human Approach

Independent Study Students (20+)

1996-present

Undergraduate Internships (61)

1996-present

Honor's Students

- 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.
- Graduate student cadaver dissectors (48+) 1996-2008

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PRESENTATIONS (ORAL AND POSTER)

Posters

1. 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.
2. 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.
3. Foley TE, Semsar KA Bentley F, **Heisler R.** Initial impact of IPHY teaching assistant training. Science Education Initiative End-of-Year Event, 2010.
4. 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
5. 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.
6. 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

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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

- Center for Human Simulation, Univ. of Colorado Health Sciences 1999-2004
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.
- Reindeer Publishing 2001
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

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AFFILIATIONS/MEMBERSHIPS

Human Anatomy and Physiology Society

2008-present

REFERENCES

Dr. Carol Wessman
Professor
Dept. of Ecology and Evolutionary Biology
Director of CIRES Ecosystem Science Division
Director of Environmental Studies
University of Colorado Boulder
Carol.wessman@colorado.edu
303-492-1139

Dr. Mark Osadjan
Assistant Professor
University of Minnesota Duluth
Swenson College of Science and Engineering
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Dr. Nora Hebert
Professor, Biology
Red Rocks Community College
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Dr. David Norris
Professor Emeritus
Dept. of Integrative Physiology
University of Colorado Boulder
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