

Hannah C. Anchordoquy, Ph.D.

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EDUCATION:

- 1994-1998 University of Colorado, Boulder, Colorado
Ph.D. in Environmental, Population, and Organismic Biology.
Thesis title: Characterization of the Interval Timer that Mediates Seasonal Reproductive Cycles in the Siberian Hamster (*Phodopus sungorus sungorus*), advised by G. Robert Lynch, PhD.
- 1991-1994 University of Colorado, Boulder, Colorado
M.A. in Environmental, Population, and Organismic Biology.
Thesis title: Torpor pattern and metabolic rate characteristics of *Myotis lucifugus*: metabolic rate variability and effects of two ambient temperatures, advised by C. Carey, PhD.
- 1991 University of Colorado, Boulder, Colorado
B.A. in Environmental, Population, and Organismic Biology
- 1991 University of Colorado, Denver, Colorado
B.A. in Philosophy, with honors

PROFESSIONAL EXPERIENCE:

- 2010-present Senior Instructor – Department of Integrative Biology, University of Colorado, Denver.
- 2010-present Affiliate Faculty – School of Physical Therapy, Rueckert-Hartman College for Health Professions, Regis University, Denver, Colorado.
- 2003-present Research Associate (intermittent) – Institute for Behavioral Genetics, University of Colorado, Boulder, CO. Characterizing changes in telomere length associated with stress, and identification of SNPs associated with behavior disorders in mono- and dizygous twin pairs and individuals with addiction and behavior disorders, in collaboration with Andrew Smolen, PhD.
- 2007-2010 Instructor – Department of Biology, Regis University, Denver, Colorado.
- 2003-2007 Assistant Professor - Department of Physical Therapy, Rueckert-Hartman School for Health Professions, Regis University, Denver, Colorado.
- 2002-2003 Affiliate Faculty - Department of Physical Therapy, Rueckert-Hartman School for Health Professions, Regis University, Denver, Colorado.
- 2001-2002 Postdoctoral Fellow - Institute for Behavioral Genetics, University of Colorado, Boulder, CO. Investigating the association between behavioral disorders and genes for several neurotransmitter-associated proteins (such as dopamine and serotonin transporters, dopamine receptors, and dopamine modifiers). Supervised by Andrew Smolen, PhD.

- 2000-2003 Affiliate Faculty (intermittent)- Department of Environmental, Population, and Organismic Biology, University of Colorado, Boulder.
- 2000-2001 Postdoctoral Fellow - Division of Endocrinology, School of Medicine, University of Colorado Health Sciences Center, Denver, CO. Researching coactivators and corepressors interacting with the A and B isoforms of the progesterone receptor with respect to partial-agonist and partial-antagonist activity in the regulation of breast cancer. Supervised by Katherine Horwitz, Ph.D.
- 1999-2000 National Research Council Postdoctoral Research Associate - Geological Survey and University of Colorado, Boulder, CO. Investigating the fate of steroid hormones in wastewater and receiving streams, and the effect of endocrine disrupters on the timing of seasonal reproduction of fish, in collaboration with David O. Norris, Ph.D, and Larry Barber, MS.
- 1998-1999 Postdoctoral Research Fellow - Department of Pharmaceutical Sciences, School of Pharmacy, University of Colorado Health Sciences Center, Denver, CO. Investigating the molecular mechanisms controlling DNA replication and cell-cycle arrest following cellular damage, under the direction of David J. Kroll, PhD.
- 1994-1998 Research Assistant - Department of Environmental, Population and Organismic Biology, University of Colorado, Boulder, CO. Investigating neural and hormonal mechanisms mediating photoperiodic control of seasonal reproductive cycles of the Siberian hamster, under the direction of G. Robert Lynch, Ph.D.

PUBLICATIONS:

- Anchordoquy HC, McGeary C, Liu L, Krauter KS, Smolen A (2003) Genotyping of three candidate genes following whole genome preamplification of DNA collected from buccal cells. *Behavior Genetics* 33(1):73-78
- Anchordoquy HC, Lynch GR (2000) Evidence of an annual rhythm in a small proportion of Siberian hamsters exposed to chronic short days. *Journal of Biological Rhythms* 15(2):122-125
- Anchordoquy HC, Lynch GR (2000) Timing of testicular recrudescence in Siberian hamsters is unaffected by pinealectomy or long day photoperiod after 9 weeks in short days. *Journal of Biological Rhythms* 15(5):406-416

NON-REFEREED PUBLICATIONS:

- Heisler, R, Hayes AR, Anchordoquy HC (2012) *Lab Guide for Human Anatomy: University of Colorado – Denver* (2nd edition). ISBN#: 978-1-59984-551-7
- Heisler, R, Hayes AR, Anchordoquy HC (2011) *Lab Guide for Human Anatomy: University of Colorado – Denver* (1st edition). ISBN#: 978-1-59984-289-9
- Anchordoquy HC (1998) Characterization of the interval timer that mediates spontaneous recovery following chronic short-day exposure in the Siberian hamster (*Phodopus sungorus sungorus*). Ph.D. Thesis, University of Colorado, Boulder.
- Anchordoquy HC (1994) Torpor pattern and metabolic rate characteristics of *Myotis lucifugus*: metabolic rate variability and effects of two ambient temperatures. M.A. Thesis, University of Colorado, Boulder.

PUBLICATIONS IN PREPARATION:

(In preparation – considering submission to *Advances in Physiology Education* or *Anatomical Sciences Education* in 2015)

Anchordoquy, HC. Teaching anatomy and physiology as separate disciplines improves student outcomes.

PRESENTATIONS:

Anchordoquy, HC (2011) Undergraduate student test scores are higher after separate anatomy and physiology compared to integrated A&P. American Association of Anatomists Symposium at the Experimental Biology Meeting, Washington DC, 2011

Anchordoquy, HC (2009) What's better? Integrated A&P, or anatomy and physiology taught as separate disciplines? Human Anatomy and Physiology Society Annual Meeting, Baltimore, MD

Smolen S, Anchordoquy HC, McGeary C, Liu L, Krauter KS (2002) Genotyping of three candidate genes following whole genome preamplification of DNA collected from buccal cells. Behavior Genetics Association Symposium, Keystone Colorado.

Anchordoquy HC, Lynch GR (1996) A pineal-independent mechanism mediates some seasonal responses in juvenile Siberian hamsters (*Phodopus sungorus*). Living in the Cold IV, International Hibernation Symposium, Tasmania.

Anchordoquy HC, Lynch GR (1996) The timing of refractoriness in Djungarian hamsters is dependent on their initial exposure to long duration melatonin pulses. Society for Research in Biological Rhythms Annual Symposium, Amelia Island, Florida.

Anchordoquy HC (1993) Torpor patterns in *Myotis ciliolabrum* and *Plecotus townsendii* in relation to energy balance. Living in the Cold III, International Hibernation Symposium, Crested Butte, Colorado.

INVITED NON-REFEREED PRESENTATIONS:

2012 Keynote speaker for the Spring 2012 Golden Key National Honour Society Induction ceremony, University of Colorado, Denver

2009 Invited lecturer for Honors Program "60-second Lecture" Series, Regis University

2009 Invited presentation on Human Health and Climate Change for the Regis Sustainability Committee as part of the Justice Week activities

2008 Invited "Last Lecture" for Alpha Sigma Nu, Jesuit Honor Society, Regis University

COURSES TAUGHT:

- EPOB 4720 Biology of Human Reproduction, 3 SH, lecture
- EPOB 3460 Comparative Vertebrate Anatomy, 5 SH, lectures and lab
- EPOB 3430 Human Anatomy, 5 SH, lectures and assistant lab coordinator
- BL 244/245 Intro to Human Anatomy and Physiology, 4SH, lectures and lab
- BL 246/247 Intro to Human Anatomy and Physiology, 4SH, lectures and lab
- BL 274/275 Introduction to Human Anatomy, 4SH, lectures and laboratory
- BL 276/277 Introduction to Human Physiology, 4SH, lectures and laboratory
- BL 491 Advanced Human Cadaver Dissection, 1SH, independent study

- BL 436 Animal Physiology, 3 SH, lecture
- BL 423 Exercise Physiology, 3 SH, lecture
- BIOL 3225 Human Physiology, 4 SH lecture and lab
- BIOL 3244 Human Anatomy, 5 SH lecture and lab
- BIOL 4644/5655 Advanced Human Anatomy, 2 SH recitation and lab
- BIOL 4050/5050 Special Topics in Biology: Exercise Physiology, 3 SH, lecture
- BIOL 4464/5464 Exercise Physiology, 3 SH, lecture
- DPT 702 Human Physiology, 3 SH, lecture
- DPT 708 Management Applications of Physiology I, 3 SH, lecture and lab
- DPT 732 Management Applications of Physiology II, 4 SH, lecture and lab
- DPT 738 Management Applications of Physiology III, 5 SH, lecture and lab
- DPT 771 Professional Issues/Case Management II, 2 SH

INSTITUTIONAL SERVICE:

University of Colorado, Denver, CO

2014 Faculty mentor for Rho Phi Chapter of the Beta Beta Beta Biological Honor Society

2014 Faculty mentor for Student Organization for First Responder Education
Regis University, Denver, CO

2010 RHCHP School of Pharmacy Curriculum Committee
Neuroscience Advisory Committee
Biology Department Faculty Committee

2009 RHCHP School of Pharmacy Curriculum Committee
Neuroscience Advisory Committee
Biology Department Faculty Committee

2008 RHCHP School of Pharmacy Curriculum Committee
Biology Department Faculty Committee

2007 RHSHP Department of Physical Therapy Exercise Science Committee
Biology Department Faculty Committee
RHSHP Department of Physical Therapy Curriculum Committee
RHSHP Department of Physical Therapy Faculty Planning Committee

2006 RHSHP Department of Physical Therapy Exercise Science Committee
Biology Department Faculty Committee
RHSHP Department of Physical Therapy Curriculum Committee
RHSHP Department of Physical Therapy Faculty Planning Committee

2005 Biology Department Faculty Committee
RHSHP Department of Physical Therapy Exercise Science Committee
RHSHP Department of Physical Therapy Curriculum Committee
RHSHP Department of Physical Therapy Faculty Planning Committee
Chair, RHSHP Department of Physical Therapy Faculty Recruitment and
Development Committee
Chair, RHSHP Department of Physical Therapy Curriculum Review Committee,
Science and Inquiry Section

2004 Biology Department Faculty Committee
RHSHP Department of Physical Therapy Exercise Science Committee

- Chair, RHSHP Department of Physical Therapy Faculty Recruitment and Development Committee
RHSHP Department of Physical Therapy Faculty Planning Committee
2003 Biology Department Faculty Committee
RHSHP Department of Physical Therapy Curriculum Committee
RHSHP Department of Physical Therapy Faculty Planning Committee
2002 RHSHP Department of Physical Therapy Curriculum Committee
RHSHP Department of Physical Therapy Faculty Planning Committee

SERVICE - RESEARCH ADVISING:

Independent Study Projects:

- William Matthew Rogers – The Anatomy of Melancholy: Beyond the chemical imbalance theory. A biological study of clinical depression. Spring 2013.
Christopher Lind – Current knowledge of the function and development of vertebrate nasal structures: Identifying potential research studies based on current literature. Spring 2014.
Dawn Wilson – The healthiest ways to accommodate a sleep deprived schedule: Review of the physiology of sleep deprivation and the current clinical recommendations for minimizing its impact. Fall 2014

Undergraduate Honors Thesis Students:

- Alex Colgan – Co-advisor with Dr. Steve Doty for “Seeking magis: A virtuous approach to medical practice” as partial fulfillment of the requirements for the Bachelor of Sciences with Honors (2009), Regis University, Denver, CO.
Joanna Welch – Second advisor for “Hip Dislocation in Cerebral Palsy Patients” as partial fulfillment of the requirements for the Bachelor of Sciences with Honors (2007), Regis University, Denver, CO

Doctor of Physical Therapy Research Students:

- Kathleen Hair, Meagan Scott, Sandra Sweley, Whitney Welsh, Alicia Wright – Coadvisor with Dr. Susan Scherer for “A pilot study comparing oxygen consumption between overweight/obese and normal weight populations in activities of daily living” in partial fulfillment of the requirements for the Doctor of Physical Therapy (2006), Regis University, Denver, CO.

FUNDED GRANT ACTIVITY:

- 1999 National Research Council Postdoctoral Research Associateship. Two year salary award to investigate the effect of exogenous estrogen on seasonal reproduction in fish downstream of wastewater treatment facilities.
2007 Grant from private donors and Caring for Colorado to update experimental equipment for the Regis Human Biology laboratory (\$100,000.00).
2010 Capital Equipment Grants for equipment upgrades in the Anatomy and Physiology labs, University of Colorado, Denver (2 proposals for \$69,202 total, to purchase new data acquisition equipment for physiology and humidors for anatomy).
2011 Capital Equipment Grants for equipment upgrades in the Anatomy and Physiology labs, University of Colorado, Denver (2 proposals for \$75,454 total, to

update and improve the anatomy specimens and purchase cycle ergometers, lactometers, and gas sensors for physiology)

HONORS AND AWARDS:

- 2012 Honorary induction into the Golden Key International Honour Society
- 2006 National Society of Collegiate Scholars, nomination for 2006 NSCS Faculty of the Year.
- 1996 University of Colorado Graduate Teaching Award - Department of Environmental, Population, and Organismic Biology, University of Colorado, Boulder.
- 1995 University of Colorado Graduate Teaching Award - Department of Environmental, Population, and Organismic Biology, University of Colorado, Boulder.
- 1994 University of Colorado Graduate Teaching Award - Department of Environmental, Population, and Organismic Biology, University of Colorado, Boulder.

MEMBERSHIP IN SCIENTIFIC/PROFESSIONAL ORGANIZATIONS:

- 2003-present Human Anatomy and Physiology Society
- 2010-present American Association of Anatomists

PUBLIC SERVICE:

- 1998-2001 Eiber Build-a-Generation, Lakewood, CO. Neighborhood organization directed at securing funding for after-school programs for at-risk youth.
- 2003-2005 Colorado High School Charter School, Denver, CO. Service learning project for Regis University Human Anatomy and Physiology students to benefit at-risk students from the Colorado High School Charter School.
- 2002-2004 COPAN Breastfeeding Promotion Taskforce