

Audra Richele Day

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Department of Kinesiology and Sport Management

Texas Tech University

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Education:

- 1999-2004 Texas Tech Health Sciences Center
 Ph.D. Medical Biochemistry
 Dissertation Title: Cell Size and Initiation of Meiosis
 in *Saccharomyces cerevisiae*
- 1996-1999 Texas Tech University
 Bc.S. Microbiology
- 1989-1991 Methodist Hospital School of Nursing
 Registered Nurse Licensure

Employment:

- 2018 –
current Texas Tech University
 Department of Kinesiology and Sport Management
 Lubbock, Texas
 Assistant Professor of Practice
- 2016 – 2018 Texas Tech University
 Department of Kinesiology and Sport Management
 Lubbock, Texas
 Instructor
- 2015 – 2016 Texas Tech University
 Office of Recruitment and Student Success
 College of Arts and Sciences
 Lubbock, Texas
 Student Success Advisor
- 2006- 2013 South Plains College
 Biology Department
 Levelland, Texas
 Associate Professor
- 2004-2006 UT Southwestern Medical Center at Dallas
 Internal Medicine/Cardiology
 Dallas, Texas
 Dr. Daniel Garry
 Post-Doctoral Fellow

1999-2004	Texas Tech Health Sciences Center Department of Cell Biology and Biochemistry Lubbock, Texas Dr. Brandt Schneider Graduate Assistant
1996-2000	University Medical Center Emergency Center Lubbock, Texas Staff Nurse
1994-1996	Harris Methodist Hospital Trauma Services Fort Worth, Texas Trauma Coordinator
1992-1994	Harris Methodist Hospital Trauma Services Fort Worth, Texas Charge/Staff Nurse
1991-1992	Methodist Hospital Medical Intensive Care Unit Lubbock, Texas Staff Nurse

Teaching Experience:

2016- current	Exercise Testing and Prescription, Exercise Physiology, Applied Exercise Physiology, Science and Practice of Strength Training Texas Tech University Course and Laboratory Instructor
2016	Programs for Academic Recovery Texas Tech University Instructor
2007-2013	Human Anatomy and Physiology I & II South Plains College Course and Laboratory Instructor
2005-2006	Development of the Murine Heart Science Teacher Access to Resources at Southwestern UT Southwestern Medical Center Dallas Guest Lecturer

2002-2004 General and Advanced Laboratory Methods
Texas Tech Health Sciences Center
Laboratory Instructor

2000-2001 Anatomy and Physiology for Allied Health Professionals
Texas Tech University Health Sciences Center-SON
Student Tutor

Health Care Related Experience:

Triage, assessment, and treatment of emergency room patients

Management of: intravenous vasoactive drugs, trauma resuscitation, acute cerebral vascular injury, acute myocardial infarction, adult/pediatric respiratory crisis, and psychiatric disorders.

Resuscitation and critical care management of trauma patients

Management of Diagnoses: multisystem blunt trauma, elevated intracranial pressure, acute respiratory distress syndrome, multiple system organ failure, chemical/electrical/thermal burns, upper and lower limb amputation, facial fractures, penetrating trauma, and poisoning.

Management of critical care equipment: 12 lead ECG, Swan-Ganz catheter, skeletal traction, Continuous Veno-Venous Hemodialysis, mechanical ventilator, arterial line, Richmond screw/Becker bolt, ventriculo-peritoneal shunts, and complex dressings (Marlex mesh/zipper)

Research-Related Experience:

2005-2007 Research on the genetic and molecular controls of cardiomyocyte proliferation and differentiation. Duties include: mouse animal husbandry; retrieval, processing, and analysis of tissue sections for immunocytochemistry; immunofluorescent microscopy; confocal microscopy; cell culture; and various advanced molecular methods.

2000-2004 Research on the genetic controls of cell size and initiation of meiosis in *Saccharomyces cerevisiae*. Duties included: centrifugal elutriation, advanced yeast genetic methods (tetrad analysis, mating, and spore dissections), nucleotide/protein analysis, and analysis of cell size. Proficient in Polymerase Chain Reaction (PCR), molecular cloning, flow cytometry (Beckman Coulter Epics XL), and use of the Beckman-Coulter Z2 Coulter Counter Channelyzer. Funded by the Houston Endowment and NIH Training Grant in Reproductive Biology (# T32 HD07271).

- 1997-1998 Research Assistant investigating the pathogenesis of *Erwinia chrysanthemi* in the lab of Dr. Michael San Francisco at Texas Tech University. Examined the regulatory systems that respond to the plant chemical environment during infections and activate bacterial efflux pump genes. Duties included molecular cloning, PCR, and general bacterial growth and transformation.
- 1997-1998 Research Assistant investigating the molecular function of the TolC gene in *Escherichia coli* at Texas Tech University Health Sciences Center in the laboratory of Dr. Joe Fralick. Utilized various bacterial methods to study overlapping function of TolC, a component of a multi-drug resistant pump, in *Escherichia coli* and *Erwinia chrysanthemi*.
- 1996-1997 Research Assistant investigating synthetic synthesis in the lab of Dr. Michael Mayer at Texas Tech University. Duties included liquid chromatography-mass spectroscopy, liquid column chromatography, and organic solvent purification.

Publications:

Justiz R, **Day A**, Day M. "Sympathetic Blockade" *Essentials of Regional Anesthesia*. Ed. Alan D. Kaye, Richard D. Urman, Nalini Vadivelu. New York: Springer, 605-646. Print. June 2012.

Day A. Case Studies in Human Anatomy and Physiology. *Mastering A&P*. Pearson Higher Education. Web. May 2011.

Day A. Cell size and initiation of meiosis in *Saccharomyces cerevisiae*. Doctoral dissertation. 2004

Day A, Markwardt J, Delaguila R, Zhang J, Purnapatre K, Honigberg SM, Schneider BL. Cell Size and Cln-Cdc28 Complexes Mediate Entry into Meiosis by Modulating Cell Growth. *Cell Cycle*. 2004 Nov 06;3(11).

Day A, Schneider C, Schneider BL. Yeast cell synchronization. *Methods Mol Biol*. 2004;241:55-76.

Zhang J, Schneider C, Ottmers L, Rodriguez R, **Day A**, Markwardt J, Schneider BL. Genomic scale mutant hunt identifies cell size homeostasis genes in *S. cerevisiae*. *Curr Biol*. 2002 Dec 10;12(23):1992-2001.

Day A, Schneider C, Ottmers L, Schneider BL. Quantitative assessment of plasmid DNA isolations. *Bioradiations*. 2002.

Abstracts

Day A, Markwardt J, Zhang J, Pernapatre K, Honigberg S, and Schneider BL. Cell size and G1 cyclins influence initiation of meiosis in *S. cerevisiae*. 2004 Miami Nature Biotechnology Winter Symposia.

Day A, Markwardt J, Zhang J, Pernapatre K, Honigberg S, and Schneider BL. The relationship between cell size and meiosis. 2003 DNA Replication Meeting, Cold Spring Harbor Laboratory.

Day A, Ottmers L, Zhang J, and Schneider BL. The role of cell size and G1-cyclins during initiation of meiosis in *S. cerevisiae*. 2002 Yeast Genetics and Molecular Biology Meeting.

Day A, Ottmers L, Schneider C, Zhang J, Pernapatre K, Honigberg S, and Schneider BL. Cell size and initiation of meiosis in *S. cerevisiae*. 2001 DNA Replication Meeting, Cold Spring Harbor Laboratory.

Zhang J, Schneider C, Ottmers L, Rodriguez R, **Day A**, and Schneider BL. Genomic scale mutant hunt identifies cell size homeostasis genes in *S. cerevisiae*. 2001 Yeast Biology Meeting, Cold Spring Harbor Laboratory.

Zhang J, Schneider C, Ottmers L, **Day A**, and Schneider BL. A role for the PKC-MAP kinase cascade in the regulation of cell size. 2001 FASEB summer research conference on protein kinases.

Honors, Grants and Awards:

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| 2019 | Lawrence Schovanec Teaching Development Scholarship, Texas Tech University, Teaching Learning and Professional Development Center. |
| 2005 | Deans Recognition Award- Awarded based upon: educational merit, contributions made to TTUHSC and its students, receipt of research funding and/or scholarships, and community service. |
| 2004 | Cell Biology and Biochemistry Scholarship-TTUHSC Excellence in Research and Poster Presentation |
| 2004 | Miami Nature Biotech Symposia Travel Scholarship |
| 2003-2004 | Houston Endowed Scholarship- Awarded based upon educational merit and outstanding reproductive biology research |
| 2003 | Cell Biology and Biochemistry Scholarship-TTUHSC Excellence in Research and Poster Presentation |

2002 Cell Biology and Biochemistry Scholarship-TTUHSC
Excellence in Research and Poster Presentation

2000-2004 NIH Training Grant in Reproductive Biology (# T32
HDO7271)

Certifications:

2019 Exercise Physiologist Certification, American College of
Sports Medicine

Academic Affiliations:

2014 – Commencement Committee, Texas Tech University
current

2014 - American College Sports Medicine, member
current

2010-2013 Faculty Senate, Department of Biology Representative
South Plains College

2005-2007 Postdoctoral Association, Secretary
University of Texas Southwestern Medical Center