

Resa M. Chandler, Ph.D.
Assistant Professor of Health and Physical Education
Western Carolina University

Education

Ph.D., University of Texas at Austin, 1997, Exercise Physiology
M.A., University of Texas at Austin, 1992, Exercise Physiology
M.S., University of North Carolina at Charlotte, 1989, Biology
B.S., University of North Carolina at Charlotte, 1985, Biology

Professional Experience – Academic

Western Carolina Univ. Cullowhee, NC 2016-present	School of Teaching and Learning Associate Professor of Health and Physical Education Exercise Physiology, Health, Coaching
Brevard College Brevard, NC 2007-2016	Division of Science and Mathematics Exercise Science Major Coordinator Associate Professor of Exercise Science: Medical Physiology, Advanced Anatomy and Kinesiology, Exercise Physiology, Biomechanics, Nutrition
Columbia Basin College Pasco, WA 2005-2007	Department of Math and Science Professor of Biology: Human Anatomy and Physiology, Exercise Physiology, Cell Biology, Nutrition (Dist. Learning), Bioethics (DL)
Xavier University School of Medicine Bonaire, N.A. 2004-2005	Department of Medical Sciences Associate Professor of Medicine: Premedical Biology, Human Physiology, Biochemistry, Cell Biology, Medical Histology
State Univ. of New York Brockport, NY Jan-Aug 2004	Department of Physical Education and Sport Visiting Professor of Exercise Physiology: Exercise Physiology, Research Methods
Austin Community College Austin, TX 1991-98, 2003-04	Department of Biology Adjunct Faculty: Anatomy and Physiology, Cell Biology
Univ. of Texas at Austin Austin, TX 1991-1998	Department of Kinesiology and Health Education Adjunct Faculty and Teaching Assistant: Ergogenic Aids, Exercise Physiology Laboratory, Human Anatomy and Physiology Laboratory, various activity courses
Univ. of Texas at Austin Austin, TX 1992-1996	Department of Women's Athletics Academic Mentor and Tutor

Queens University
Charlotte, NC
1988-1989

Department of Biology
Adjunct Faculty: Human Anatomy and Physiology

Univ. of North Carolina
Charlotte, NC
1985-1989

Department of Biology
Teaching Assistant: Histology Laboratory, Biology Laboratory,
Biology Laboratory Manager

Central Piedmont Com.Coll.
Charlotte, NC
1985-1986

Department of Biology
Adjunct Faculty: Adult Education, Science Instructor

Professional Experience – Administrative

Western North Carolina Coulter Faculty Commons Faculty Fellow (2022-present)

- Research Evidence-based Faculty Mentoring Sources
- Attend faculty mentoring workshops
- Conduct WCU faculty mentoring needs analysis
- Propose a faculty mentoring program
- Conduct a pilot mentoring program

Exercise Science Major Coordinator (2007-2016, Brevard College)

- Student Professional Internship supervisor
- Reorganized Exercise Science Major increasing graduate school admission
- Supervised exercise science faculty
- Coordinated and led monthly faculty meetings
- Chaired and sat on faculty search committees
- Collected student learning outcome data and prepared yearly major assessment reports
- Organized student capstone experience events

NCAA Faculty Athletic Representative (2014-2016, Brevard College)

- Worked with the NCAA and FARs from other educational institutions regarding policies, conference play, student athlete scholarships, academic honors for student athletes
- Worked closely with the registrar to assess eligibility of all student athletes
- Served as the liaison among student athletes, faculty, coaches and the Athletic Director
- Assembled faculty and staff ad hoc committees to hear student athlete appeals
- Prepared a yearly report informing the President of the actions of the FAR office
- Organized strategic planning meetings with the President and the Athletic Director to address
- athletic concerns across campus

SACS 5-year Assessment Committee Member (2014-2016, Brevard College)

- Worked with the Vice President of Academic Affairs collecting data, writing sections of the SACS 5-year Accreditation report

Graduate Faculty (2004, SUNY Brockport)

- Supervised education graduate theses

Dean of Premedical Studies (2005)

- Designed the one-year program to address scientific deficiencies in accepted students with non-scientific undergraduate majors
- Conducted evaluations of faculty teaching courses in this program (chemistry, statistics, physics, biology)

Dean of Student Affairs (2004 Xavier University School of Medicine)

- Writing and implementing policies on student conduct
- Assembled faculty to rule on honor violations

Professional Experience – Health and Fitness

Fit4Diabetes
New York City, NY
2008-2010
Diabetes Consultant and Exercise Specialist

OutFitness
Austin, TX
1995-2005
Owner, Developer, Trainer of The Nth Degree Fitness Program,
Personal Trainer

Service

National

National Academy for Kinesiology in Higher Education (NAKHE) Bylaws Committee (2018-present), **Chair** (2020-present)
NAKHE Leadership Institute Committee (2018-present)
International Journal of Kinesiology in Higher Education Reviewer (2021, 2022)
Autonomic Neuroscience – Basic and Clinical Reviewer (2021)

State of North Carolina

Carolina's Exercise Sci. & Kinesiology Research Symposium Committee (2019-2022)
North Carolina Journal Reviewer (2019)

Western Carolina University

Coulter Faculty Commons Faculty Fellow (2022-present)
Phi Kappa Phi Honor Society President (2022- 2023)
Grievance Committee (2021- present)
CEAP Diversity Committee (2021-present)
Peer Review of Teaching Materials, Health & Phys Edu (2016-2022), **Chair** (2018-2019)
School of Teaching & Learning Travel Funds Committee (2020-2022)
Guest Lecturer: Sexuality Through the Lifespan (2018), Risky Behaviors (2019)
CEAP Curriculum Committee, STL Representative (2017-2020), **Chair** (2019-2020)
CEAP Strategic Plan Update Ad Hoc Committee (2018-2019)
Chief Faculty Marshal (2018-2019)
Commencement Faculty Marshal (2017-2019)
Infrastructure Advisory Committee, CEAP Representative (2017-2018)
Honors Projects (Mathis, 2018; Henry, 2017; Chisholm, 2017)
School of Teaching & Learning Social Committee (2016-17)
Whee Call You (2017)
Freshman Move-in Day (2016)

Brevard College

NCAA Faculty Athletic Representative (2014- 2016)
Athletic and Compliance Committee: **Chair** (2013- 2014), Member (2014-2016)
Faculty Council: **Chair** (2015-16), Member (2014 – 2015)
Retention Performance Management® Committee: **Chair** (2015-2016)
So. Assoc. of Colleges & Schools (SACS) 5-Year Assessment Committee (2014- 2016)
Academic Affairs Committee: **Chair** (2007-2016)
Assistant Professor of Exercise Science Search Committee: **Chair** (2015)
Assistant Professor of Biology Search Committee: Member (2010, 2014)
Mid-tenure Review Committees: (2012, 2014)
Facilities High Impact and Retention Committee (2013- 2016)
Curriculum Development and Assessment Committee (2008-2013)
Academic and Informational Technology Committee (2007-2008)
Appalachian Trail Course Development Committee (2008)
Voice of Rivers Advisory Committee (2008)

Columbia Basin College (2005-2007)

Faculty Senate: **Chair**
Faculty Professional Development: **Chair**
New Faculty Integration Committee: **Chair**
Informational Services Liaison

Xavier University School of Medicine (2004-2005)

Academic Progression Committee
Student Grievance Committee
Faculty Advancement Committee
Advisor for Xavier Student Government Association

SUNY Brockport (2004)

Ad Hoc Committee for the restructuring of the department curriculum

Organization Memberships /Certifications

Phi Kappa Phi Honor Society, member,
President-elect WCU Chapter
National Association for Kinesiology in
Higher Education, member, Bylaws
Committee Chair
Department Head Certification, NAKHE
Leadership Development Workshop,
NAKHE
SHAPE, member
CitiTraining for Human Subjects
American Red Cross Adult CPR/AED
American College of Sports Medicine
Exercise Science Major Coordinator
Sigma Xi Scientific Research Society

Beta Beta Beta Biological Society
Human Anatomy and Physiology Society
American College of Sports Medicine
American Council on Exercise Certified
Personal Trainer
Association of Biology Graduate
Students/vice president
American Society of Zoologists
North Carolina Academy of Science
Phi Beta Delta
Southeastern Electron Microscopic Society
Xavier University Student Government
Association

Honors and Awards

- Coulter Faculty Commons Faculty Fellow, 2022, 2023
- Natl. Assoc. for Kinesiology in Higher Education, President's Award, 2023
- Natl. Assoc. for Kinesiology in Higher Education, Distinguished Teaching Award, 2022
- Phi Kappa Phi Honor Society Inducted Member, 2020
- WCU Honors College Faculty Excellence Award (student nomination), 2020
- WCU First-Year Advocate Nominee (student nomination), 2020
- WCU CEAP Exemplary Faculty Service Award Nominee, 2019
- WCU CEAP Dean's Research Award Nominee, 2019
- Health Educators Academy Member, 2019-2020
- Brevard College Student Government Association Outstanding Faculty of the Year, 2011
- Brevard College Student Government Association Outstanding Faculty of the Year: Math and Science Division, 2010
- Brevard College Honorary Athletic Varsity Letter, 2010, 2011, 2013
- Chandler, et al. (1994) acknowledged as an "outstanding contribution to the field of sports nutrition" by the Research Digest Editors of the International Journal of Sport Nutrition, 1994.
- Associate member of Sigma Xi Society, inducted 1987.
- Selected to compete in the graduate research competition at the annual conference of the American Society of Zoologists.

Grants

- UNC FY2023 Undergraduate Research Program Grant (2022). *Fostering Critical Thinking in Human Motion Analysis* (\$34,657.00)
- Stringer, A.J., Hilger, L.J, Sinyard, A., Beaudet, R, & **Chandler, R.M.** Intentional Learning Plan funding to support HPE 488 students in attending the NC SHAPE Conference, \$1630.08. October 2022.
- Leadership Mentor Program (2021). National Association for Kinesiology in Higher Education (\$1500.00)
- Stringer, A.J., & **Chandler, R.M.** Intentional Learning Plan funding to support HPE 488 students in attending the NC SHAPE Conference, \$1289.00. November 2021.
- Chandler, R.M., Becker, D. R., Stringer, A., Grist, C. (2019). *High Intensity Interval Training and Cognitive Functioning in Prekindergarten Children*, National Association for Kinesiology in Higher Education - Hellison Interdisciplinary Grant (\$5,000.00)
- Chandler, R.M., Stringer, A.J., & Kaysing, N.M. (2017). *Catamount H.I.I.T.*, Provost's Internal Support Grant, Western Carolina University. (\$9535.50)

- Received the Exceptional Faculty Award Grant (2006) Columbia Basin College to write a new Anatomy and Physiology Lab Manual (\$7350.00)
- Shaklee, Inc. Grant for \$80,000 to research the effects of supplements on muscle mass and strength.
- Sigma Xi Society Supplemental Grant (\$500) funding research on the shell granules of *Convoluta pulchra*.

Peer-Reviewed Publications

Stringer, A.J. & **Chandler, R.M.** (2023). Getting Prekindergarten Students Up and Moving: Strategies for Improving Cardiovascular Fitness. *Journal of Physical Education, Recreation and Dance*, 94(4): 33-40. <https://doi.org/10.1080/07303084.2023.2172113>

Chandler, R.M., Vinci, D.B., Brown, J.J., Fiaund, V., Bunn, J.A., & Triplett, C.R. Exercise science pandemic pedagogy: Acceptance, advances, and a call for a unified scholastic exercise science pedagogical voice, submitted to *Kinesiology Reviews* April 2022.

Fiaud, V., Triplett, C.R., Bunn, J.A., Brown, J.J., **Chandler, R.M.**, and Vinci, D.M. Exercise Science Pandemic Pedagogy (Part 1): Pitfalls and Paradigm. Submitted to *International Journal of Kinesiology in Higher Education*, revisions pending.

Brown, J.J., & **Chandler, R.M.** (2021) A survey of HBCU nutritional habits and attitudes about health. *ECronicon Nutrition* 16(9): 7-16. <https://www.ecronicon.com/ecnu/ECNU-16-00968.php>

Chandler, R.M., Maddox, G., Singleton, D. & Stringer, A.J. (2021) University Health Class: Keep or Cut? Implications for the Future. *International Journal of Kinesiology in Higher Education*. <https://doi.org/10.1080/24711616.2021.1908192>

Chandler, R.M. & Stringer, A.J. (2020) A comprehensive exploration into utilizing high intensity interval training (HIIT) in physical education classes. *Journal of Physical Education, Recreation and Dance* 91(1): 14-23. <https://doi.org/10.1080/07303084.2019.1679296>

Meltzer, N.W., Bobilya, A.J., Faircloth, W.B., & **Chandler, R.M.** (2020) An investigation of moderators of change and the influence of the instructor on outdoor orientation program participants' biophilic expressions. *Journal of Outdoor and Environmental Education* 23: 207-224. <https://doi.org/10.1007/s42322-020-00051-w>

Wells, G. M., **Chandler, R.M.** Watterson, T. A., Friaud, V., & Beudet, R. (2019) Kinesiology Gets Moving! The NAKHE Leadership Development Workshop Goes Outside. *International Journal of Kinesiology in Higher Education* 4(3): 91-104. <https://doi.org/10.1080/24711616.2019.1673686>

Stringer, A.J., McNamnee, J., Moe, E., **Chandler, R.M.** (2019) Using enhanced communication skills to promote professional growth in physical education teachers: a case study. *The North Carolina Journal* 51(1): 49-59.

Meltzer, N.W., A.J. Bobilya, W.B. Faircloth, D. Mitten, & **R.M. Chandler** (2018). The Effect of an Outdoor Orientation Program on Participants' Biophilic Expressions. *Journal of Outdoor and Environmental Education* 21(2):187-205. <https://doi.org/10.1007/s42322-018-0013-x>

Grant, K.E., **R.M. Chandler**, A.L. Castle, & J.L. Ivy (1997). Chromium and exercise training: effect on obese women. *Med. Sci. Sports Exerc.* 29: 992-998.

Ivy, J.L., M.Y. Cortez, **R.M. Chandler**, H.K. Byrne, & R.H. Miller (1994). Effects of pyruvate and pyruvalglycine on the metabolism and insulin resistance of obese Zucker rats. *Am. J. Clin. Nutr.* 59: 331-337.

Chandler, R.M., Byrne, H.K., Patterson, J.G., & Ivy, J.L. (1994). Dietary supplements affect the anabolic hormones after weight-lifting exercise. *J. Appl. Physiol.* 76: 839-845.

Chandler, R.M., Thomas, M.B., & Smith, III, J.P.S. (1992). The role of shell granules and accessory cells in eggshell formation in *Convoluta pulchra* (Turbellaria, Acoela). *Biol. Bull.* 182: 54-65.

Smith, III, J.P.S., Thomas, M.B., **Chandler, R.M.**, & Zane, S.F. (1988) Granular inclusions in the oocytes of *Convoluta* sp., *Nemertoderma* sp., and *Nemertinoidea elongates* (Turbellaria, Acoelomorpha). The 4th International Symposium on the Biology of the Turbellaria. *Fortschr. Zool.*

Thomas, M.B., Smith, III, J.P.S., **Chandler, R.M.**, & Barker, A. (1988). Eggshell granules in some primitive Turbellaria: more evidence of polyphyly? *Am. Zool.* 25: 91A (abstract).

Chandler, R.M., Smith, III, J.P.S., & Thomas, M.B. (1988). A morphometric analysis of egg shell formation in *Convoluta* sp. *J. Elisha Mitchell Sci. Soc.* 104: 190 (abstract).

Chandler, R.M. & Thomas, M.B. (1987). An ultrastructural examination of late oogenesis and the laid egg of *Convoluta* sp. *Am. Zool.* 27: 121A (abstract).

Chandler, R.M. & Thomas, M.B. (1986). An ultrastructure of the oocyte of *Convoluta* sp. *J. Elisha Mitchell Sci. Soc.* 102: 179-180.

Peer-Reviewed Presentations

Chandler, R. M. *New Faculty Connections: Peer Mentoring Learning Community.* National Association of Kinesiology in Higher Education Annual Conference, Phoenix, AZ. January 2024.

Chandler, R. M. & Glickman, E. *Post Tenure Slump? Not in My House!* National Association of Kinesiology in Higher Education Annual Conference, Phoenix, AZ. January 2024.

Brown, J.J., **Chandler, R.M.**, & Fiaud, V. *Implementing the Development of Critical Thinking Practices.* National Association of Kinesiology in Higher Education Annual Conference, Phoenix, AZ. January 2024.

Wells, G. M., Beaudet, R. J., & **Chandler, R. M.** *Team-teaching Model for Health, Anatomy, and Pedagogy: Three Heads Are Better Than One.* National Association of Kinesiology in Higher Education Annual Conference, Phoenix, AZ. January 2024.

Chandler, R.M., Brown, J.J., Fiaud, V. & Armitano-Lago, C. *Expansion of OER during the COVID Era.* National Association of Kinesiology in Higher Education Annual Conference, New Orleans, LA. January 2023.

Chandler, R.M. *New Faculty Orientation in a Post-Pandemic Era.* National Association of Kinesiology in Higher Education Annual Conference, New Orleans, LA. January 2023.

Brown, J.J., **Chandler, R.M.**, Fiaud, V. & Armitano-Lago, C. *Fostering Critical Thinking in Human Motion Analysis.* National Association of Kinesiology in Higher Education Annual Conference, New Orleans, LA. January 2023.

Brown, J.J., & **Chandler, R.M.** *Disease Prevalence and Risk Perception in a Rural University Student Population: Implications and Discussion.* Accepted to National Association of Kinesiology in Higher Education Annual Conference, New Orleans, LA. January 2023.

Stringer, A.J. & **Chandler, R.M.** *A New Approach to Intern Supervision When Times Are Tough.* National Association of Kinesiology in Higher Education Annual Conference, Phoenix, AZ. January 2022.

Brown, J.J., **Chandler, R.M.**, & Fiaud, V., *Getting Hands on Experiences Six Feet Apart.* National Association of Kinesiology in Higher Education Annual Conference, Phoenix, AZ. January 2022.

Brown, J.J. Delk, D., Fiaud, V., & **Chandler, R.M.** *Evolution of Using Digital Writing Groups to Move Forward in Academia.* National Association of Kinesiology in Higher Education Annual Conference, Phoenix, AZ. January 2022.

Chandler, R.M. & Stringer, A.J. *The Challenges of Conducting Research in a Lab School for Middle School-Aged Children.* National Association of Kinesiology in Higher Education Annual Conference, Palm Springs, CA. 2020, January 2020.

Chandler, R. M. & Stringer, A. J. *Cardiometabolic Risk Factors Responses to Supplemental High Intensity Exercise in Middle School Children.* 21st International Conference on Physical Education and Sport Science, Venice, Italy. April 2019.

Stringer, A. J. & **Chandler, R. M.** *Considerations for the Use of High Intensity Interval Training in Secondary Physical Education.* 21st International Conference on Physical Education and Sport Science, Venice, Italy. April 2019.

Chandler, R. M. *Launching Micro Credentialing/badges in a Midsized State University.* National Association of Kinesiology in Higher Education Annual Conference, Savannah, GA. January 2019.

Chandler, R. M. & Stringer, A. J. *Can High Intensity Interval Training Make a Positive Difference to Children in an Underperforming School?* National Association of Kinesiology in Higher Education Annual Conference, Savannah, GA. January 2019.

Stringer, A. J. & **Chandler, R. M.** *So Many Desired Outcomes - So Little Time! What High Intensity Interval Training Brings to Secondary PE Programs.* National Association of Kinesiology in Higher Education Annual Conference, Savannah, GA. January 2019.

Beaudet, R. J., Wells, G. M., & **Chandler, R. M.**, *Keep My Health Class! Why Universities Need to Require Academic Health/wellness Courses.* National Association of Kinesiology in Higher Education Annual Conference, Savannah, GA. January 2019.

Watterson, T. A., Wells, G. M., **Chandler, R. M.**, & Beaudet, R. J., National Association of Kinesiology in Higher Education Leadership Development Workshop, NAKHE, Northern Arizona University, Flagstaff, AZ. August 2018.

Chandler, R. M. & Stringer, A.J. *Links in the Chain: Bringing Lab to Life.* National Association of Kinesiology in Higher Education, Phoenix, AZ. January 2018.

Stringer, A.J. & **Chandler, R.M.** *What to do about Students Exhibiting an Unconscious Bias? Considerations for Student Screening prior to Practicums and Internships.* National Association of Kinesiology in Higher Education January 2018.

Chandler, R.M. & Stringer, A.J. *Exercise Physiology Check Up: Safe & Effective Fitness.* SHAPE, March 2017.

Chandler, R.M. & Stringer, A.J. *Do This, Not That: Exercise Physiology Update for Fitness Design.* NC AAHPERD, November 2016.

Chandler, R.M. *A Morphometric Analysis of Egg Shell Formation in Convoluta sp.* North Carolina Academy of Science, Charlotte, NC. 1988.

Chandler, R.M., & Thomas, M.B. *An Ultrastructural Examination of Late Oogenesis and of the Laid Egg of Convoluta sp.* Graduate Research Competition, American Society of Zoologists, Baltimore, Maryland. 1987.

Smith, III, J.P.S., **Chandler, R.M.**, & Barker, A. *Eggshell Granules in Some Primitive Turbellaria: More Evidence of Polyphyly?* American Society of Zoologists, Baltimore, Maryland. 1986.

Chandler, R.M., & Thomas, M.B. *The Ultrastructure of the Oocyte of Convoluta pulchra.* North Carolina Academy of Science, Wilmington, North Carolina. 1986.

Non-Peer-Reviewed Publications

Chandler, R.M. *How to use HIIT in physical education.* SHAPE America Blog: What's new in health & physical education. January 30, 2020. <https://blog.shapeamerica.org/2020/01/how-to-use-high-intensity-interval-training-hiit-in-physical-education/>

Non-Peer-Reviewed Presentations

Chandler, R.M. *High Intensity Interval Training*. Presented to WCU Health and Physical Education Club, February, 2020.

Chandler, R.M. *The Use of Illegal Substances*. Presented to the Brevard College Student Athletes, NCAA Compliance, 2009.

Chandler, R.M. *The Female Athlete Triad*. Presented to the Brevard College community during National Eating Disorder Awareness Week, 2009.

Chandler, R.M. *The Ergogenic Effects of Creatine Supplementation*. Presented to Sigma Xi: UNCA Chapter, 2007.

Chandler, R.M. *The Effects of Progressive Resistance Training and Nutritional Supplements on Select Aspects of Endocrinology, Muscle Physiology, and Coronary Risk Factors*. Dissertation defense presentation. University of Texas at Austin, Austin, Texas. 1997.

Chandler, R.M. *Nutritive Supplementation Affects the Anabolic Hormonal Response after Weightlifting*. Master's thesis presentation. University of Texas at Austin, Austin, Texas. 1992.

Chandler, R.M. *The Ultrastructure and Probable Role of Eggshell Formation of the Granules of the Oocyte of the Acoel Turbellarian *Convoluta "pulchra"**. Master's thesis presentation. University of North Carolina at Charlotte, Charlotte, North Carolina. 1988.