# Nicola L. Ritter

### Instructional Assistant Professor

Department of Veterinary Integrative Biosciences College of Veterinary Medicine and Biomedical Sciences Texas A&M University, College Station, TX 77843-4458

### EDUCATION

**Ph.D., Educational Psychology, Concentration: Learning Science** Texas A&M University, College Station, TX, 2014

M.Ed., Curriculum and Instruction Texas A&M University, College Station, TX, 2009

**B.S., Interdisciplinary Studies** Texas A&M University, College Station, TX, 2005

### POSITIONS

### 2018 – PRESENT | Director, The Center for Educational Technologies

Department of Veterinary Integrative Biosciences, College of Veterinary Medicine and Biomedical Sciences, Texas A&M University

**2016 – PRESENT I Instructional Assistant Professor, The Center for Educational Technologies** Department of Veterinary Integrative Biosciences, College of Veterinary Medicine and Biomedical Sciences, Texas A&M University

**2014 I Instructional Design Specialist/Virtual Instructor Certificate Program Coordinator** College of Education & Human Development, Texas A&M University

### 2014 | INSTRUCTOR

Virtual Instructor Certification Program, College of Education & Human Development, Texas A&M University

### GRANTS

**2018 | Adaptive learning lessons on critical thinking to integrate veterinary disciplines** USDA National Institute of Food and Agriculture Role: PI Submitted: \$749,760

**2019 I Encouraging High School Students' Interest in STEM through the Creation of Instructional Modules for Teachers through Collaboration among University Faculty and High School Teacher** *National Science Foundation Role: Col Submitted: \$2,999,945* 

**2019 I** Collaborative Research: Emerging Technologies to Scale-up Teaching and Assessing Critical Thinking Skills in STEM

### CURRICULUM VITAE

Current as of February, 2019

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National Science Foundation Role: PI Submitted: \$749,998
<b>2018 I Breaking Through-Fast Tracking Research into Commercialization</b> National Institute of Health Role: Col Submitted: \$325,000
2018   Where Success Begins: Leveraging Learning Analytics to Predict Student Program Success During the
Pre-Admissions Process Texas A&M University PESCA Program Role: PI Awarded: \$25,000
2018 I Creating partnerships between veterinarians and small and medium-sized farmers to enhance economic efficiency and sustainability
USDA-National Institute of Food and Agriculture Role: PI Submitted: \$499,999
2018 I Showcasing award-winning veterinary educators with a teaching panel and teaching nugget videosAmerican Veterinary Medical AssociationRole: ColAwarded: \$2,0000
<b>2018   Adaptive Acute Kidney Injury Cases</b> College of Veterinary Medicine & Biomedical Sciences, Texas A&M University Role: Col Awarded: \$28,730
2018 I Pharmacology Slider Bar College of Veterinary Medicine & Biomedical Sciences, Texas A&M University Role: CoPI Awarded: \$7,852
<b>2018   Adaptive Acute Kidney Injury Cases</b> College of Veterinary Medicine & Biomedical Sciences, Texas A&M University Role: Col Awarded: \$25,000
2018   A Longitudinal Case-Based Online Key Feature Assessment Tool for Clinical Reasoning Based in Multiple Specialties Consortium of Northeastern Colleges of Veterinary Medicine Role: Co-I Awarded: \$9,936
2018 I A Computer-based, Student-Centered Middle-School Approach to One Health Learning DHHS-NIH-National Institute of General Medicine Science (R25) Role: Co-PI Awarded: \$1,337,863
<b>2018 I Adaptive learning lessons on critical thinking to integrate veterinary disciplines</b> USDA National Institute of Food and Agriculture Role: PI Unfunded: \$749,760
2018   Multidisciplinary, problem-based lessons on antimicrobial resistance for seamless integration into
veterinary curricula USDA National Institute of Food and Agriculture Role: Co-PI Awarded: \$300,000
<b>2017 I Breaking Through-Fast Tracking Research into Commercialization</b> National Institute of Health Role: Collaborator Unfunded: \$325,000
2017 I Academic and Continuing Education Curricula on Pesticide Competencies for Medical & Nursing Students and Primary Health Care Providers US Environmental Protection Agency Role: Co-PI Unfunded: \$500,000
<b>2017 I Undergraduate Program</b> W. M. Keck Foundation Role: Co-PI Unfunded: \$300,000
2017 I USAID French West Africa SPS Training Program (TA-CR-17-010) USDA Foreign Agricultural Service Role: PI Awarded: \$235,101
2017 I USAID Spanish SPS Training Program (TA-CR-17-008) USDA Foreign Agricultural Service Role: PI Awarded: \$1,181,054

**2016 I Antibiotic Use, Resistance, and Stewardship in Veterinary Practice for Domain 8 (200-2016-91789)** DHHS-Centers For Disease Control and Prevention Role: Co-PI Awarded: \$350,873.84

2016 | Foreign Animal Disease Diagnostician Manual 3rd Edition (16-9100-1538-CA)

2016 | Sanitary & Phytosanitary (SPS) International Training Programs (TA-CR-16-033)

USDA Foreign Agricultural Service Role: Co-PI Awarded: \$52,961

#### 2016 | Adaptive Learning Case Studies

Texas A&M University College of Veterinary Medicine & Biomedical Sciences Role: Collaborator Awarded: \$24,923

**2016 | Foreign Animal Disease Diagnostician Manual Chinese Edition** *Charoen Pokphand Group Role: Co-PI Declined:* \$568.057

#### 2016 | Foreign Animal Disease Continuing Education (15-9100-1492-CA)

USDA MIS-Animal and Plant Health Inspection Service Role: PI Awarded: \$306,064

### 2016 | Pakistan Distance Education for SPS (58-3148-1-235)

USDA Foreign Agricultural Service Role: Collaborator Awarded: \$1,445,025.12

### 2012 | Statistical Techniques Used in Educational Technology Journals, 2011-2012

Texas A&M University College of Education and Human Development Graduate Research Grant Role: PI Awarded: \$600

### CONTRACTS

**2018 I Glucose & Cardiology Module Study** University of Georgia Role: CoPI Awarded: \$5,000.04

### 2018 | USDA Shipping Course Hosting Agreement Contract

USDA Animal and Plant Health Inspection Service Role: PI Awarded: \$5,400

Role: PI

Awarded: \$2,175

### 2018 | StepStone License Agreement Contract

TAMU College of Agriculture & Life Sciences

### 2018 I CSS Basic Instrument Use License Agreement Contract

Oklahoma State University Role: CoPI Awarded: \$3,100

#### 2018 | Murmur Learner License Agreement Contract

University of Illinois Role: CoPI Awarded: \$2,900

### 2018 | StepStone License Agreement Contract

 TAMU College of Agriculture & Life Sciences
 Role: PI
 Awarded: \$625

### 2018 | StepStone License Agreement Contract

TAMU Medical Sciences LibraryRole: PIAwarded: \$2,175

2018 I CSS Basic Instrument Use License Agreement Contract

### Kansas State University Role: CoPI Awarded: \$4,400

#### **2018 I CSS Basic Instrument Use & Knot Tying Course License Agreement Contract** University of Missouri Role: CoPI Awarded: \$6,100

### 2018 I Continuing Education Courses for Veterinarians

VetFolio Role: CoPI Awarded: \$1,383.78

#### **2017 I Continuing Education Courses for Veterinarians** *VetFolio Role: CoPI Awarded:* \$

### PUBLICATIONS

### PEER REVIEWED PUBLICATIONS

(Names in *italics* indicate co-authors are/were graduate students from Texas A&M University.)

Scott, C., **Ritter, N. L.,** Fowler, R., & *Franks, A*. (in press). Developing a Community of Academic Writers: Using Social Media to Support Academic Accountability, Motivation, and Productivity. *Journal of Literacy and Technology*, 19.

*Rezaei, D. F.* & **Ritter, N. L.** (2018). Social media in education: Gains in student learning and instructor best practices In J. S. Keengwe *Handbook of Research on Mobile Technology: Constructivism, and Meaningful Learning*. Hershey, PA: IGI Global.

*Quiroz, R. E.,* **Ritter, N. L.**, *Li, Y., Newton, R., Palkar, T.* (2016). Standards Based Design: Teaching K-12 Educators to Build Quality Online Courses. *Journal of Online Learning Research*, *2*, 123-144.

Ritter, N. L. (2017). Technology acceptance model of online learning management systems in higher education: A metaanalytic structural equation model. *International Journal of Learning Management Systems*, *5*, 1-15.

*Delen, E., Kaya, F.,* **Ritter, N. L.**, & Sahin, A. (2015). Understanding parents' perceptions of communication technology use. *International Journal of Online Educational Sciences*, 7, 22-36. Doi: <u>http://dx.doi.org/10.15345/iojes.2015.04.003</u>

**Ritter, N. L.** (2014). The Need for Meta-Analytic Thinking in Educational Technology Research. Doctoral dissertation, Texas A&M University. Available electronically from <a href="http://hdl.handle.net/1969.1/153240">http://hdl.handle.net/1969.1/153240</a>

Ritter, N. L. & Delen, E. (2013). Undergraduates' facebook use: Evidence-based practice to implement social media in education. *Int. J. Social Media and Interactive Learning Environments*, 1, 387-405. doi: 10.1504/IJSMILE.2013.057463 IRB2013-0176M

*Warne, R. Lazo, M., Ramos, T.* & **Ritter, N.** (2012). Statistical methods used in gifted education journals, 2006-2010. *Gifted Child Quarterly*, 56, 134 - 149. doi: 10.1177/0016986212444122

*Kaya, F., Delen, E.,* & **Ritter, N.** (2012). Test review: Children's Organizational Skill Scales (COSS). *Journal of Psychoeducational Assessment*, 30, 205-208. doi: 10.1177/0734282911416320

Ritter, N., Kilinc, E., Navruz, B., & Bae, Y. (2011). Test Review: Test of Nonverbal Intelligence-4 (TONI-4). Journal of Psychoeducational Assessment, 29, 384-388. doi: 10.1177/0734282911400400

### REFEREED PRESENTATIONS

Heseltine, J.C., **Ritter, N.L.**, Nabity, M.B. (June, 2018). *Activating Student Learning through Adaptive Learning Modules*. Joint Symposium of the Primary Care Veterinary Educators and the Veterinary Educators Collaborative, Ithaca, New York.

Heseltine J.C., **Ritter, N.L.,** Nabity, M.B. (June, 2018). *Rehearsing the Role of the Decision Maker: Adaptive Learning Modules Allow Students to Progress.* 2018 ACVIM Forum. Seattle, Washington.

Heseltine, J.C., Ritter, N.L., Nabity, M.B. (January, 2018). *Students' Perspectives on Computer-Directed Individualized Instruction on Clinical Reasoning*. 2018 College of Veterinary Medicine Teaching Showcase. College Station, TX.

Heseltine, J.C., **Ritter, N. L.**, Nabity, M. (March, 2017). *Activating Student Learning through Adaptive Learning Case Studies and Digital Badging*. Paper presented at the meeting of Texas A&M University System's Teaching with Technology Conference.

Heseltine, J., **Ritter, N. L.**, Nabity, M. (January, 2017). *Instruction through Case-based Adaptive Learning*. Paper presented at the meeting of Texas A&M University College of Veterinary Medicine & Biomedical Sciences Teaching Showcase.

*Quiroz, R. E.,* **Ritter, N. L.**, *Li, Y., Newton, R.* (October, 2016). *Standards Based Design: Teaching K-12 Educators to Build Quality Online Courses.* Paper presented at the meeting of Quality Matters Conference.

*Mercer, R.* & **Ritter, N. L.** (September, 2015). Teaching faculty to design online courses-centering Quality Matters in a historically decentralized process. Paper presented at the meeting of Quality Matters Conference, Baltimore, MD.

*Scott, C.,* **Ritter, N. L.**, *Fowler, R., & Franks, A.* (February, 2015). Academia and Facebook: Social Media's Effects on Academic Writing. Paper submitted to the annual meeting of Ethnographic & Qualitative Research Conference, Las Vegas, NV.

**Ritter, N. L.** & *Navruz, B.* (February, 2015). The Need for Meta-Analytic Thinking in Educational Technology. Paper submitted to the annual meeting of the Southwest Educational Research Association (SERA), San Antonio, TX.

**Ritter, N. L.** & *Navruz, B.* (February, 2015). A Primer: Meta-Analytic Structural Equation Modeling. Paper submitted to the annual meeting of the Southwest Educational Research Association (SERA), San Antonio, TX.

*Navruz, B., Bicer, A.*, & **Ritter, N. L.** (February, 2015). Reliability generalization of the Survey Attitudes toward Statistics (SATS). Paper submitted to the annual meeting of the Southwest Educational Research Association (SERA), San Antonio, TX.

*Navruz, B.,* **Ritter, N. L.**, & *Juntune, J. E.* (February, 2015). Examination of the factor structure of the Reynolds Intellectual Assessment Scales (RIAS) with a sample from poverty. Paper submitted to the annual meeting of the Southwest Educational Research Association (SERA), San Antonio, TX.

*Mercer, R.* & **Ritter, N. L.** (September, 2014). Teaching faculty to design online courses-centering Quality Matters in a historically decentralized process. Paper presented at the meeting of Quality Matters Conference, Baltimore, MD.

*Scott, C., Fowler, R.,* **Ritter, N. L.**, Wright, K., & Franks, A. (April, 2014). Academic facebook?: Using social media to support academic motivation, productivity, and accountability. Paper presented at the meeting of American Educational Research Association, Philadelphia, PA.

**Ritter, N. L.** (2013). Statistical Techniques Used in Educational Technology 2010-2013. Paper accepted at the meeting of Association of Educational Communications and Technology, Anaheim, CA.

*Bicer, A.,* **Ritter, N. L.**, Capraro, M. M., Cavlazoglu, B., & Sahin, A. (2013). Integrating Writing into Mathematics Classroom through Facebook. Paper presented at the meeting of School Science and Mathematics Association Conference, San Antonio, TX.

**Ritter, N. L.** (February, 2012). A comparison of distribution-free and non-distribution free methods in factor analysis. Paper presented at the meeting of Southwestern Educational Research Association, New Orleans, LA (ED529153).

**Ritter, N. L.** (February, 2011). Designing surveys to determine the impact of online social networks. Paper presented at the meeting of Student Affairs Administrators in Higher Education (NASPA) Technology, Newport, RI.

**Ritter, N. L.** (February, 2010). Understanding a widely misunderstood statistic: Cronbach's alpha. Paper presented at the meeting of Southwestern Educational Research Association Conference 2010, New Orleans, LA (ED526237).

### **OTHER PEER REVIEWED PUBLICATIONS**

Sanitary and Phytosanitary Standards International Training English Program. (2017). College Station, TX: Texas A&M University & United States Department of Agriculture. (172 hours contact time)

Adaptive Case Studies on Chronic Kidney Disease. (2017). College Station, TX: Texas A&M University. (8 hours contact time)

Foreign Animal Disease Diagnostician Manual [3rd ed.]. (2017). College Station, TX: Texas A&M University & United States Department of Agriculture.

Foreign Animal Disease Diagnostic Continuing Education Curriculum. (2017). College Station, TX: Texas A&M University & United States Department of Agriculture. (6 hours contact time)

Sanitary and Phytosanitary Standards International Training Program. (2017). College Station, TX: Texas A&M University & United States Department of Agriculture. (172 hours contact time)

Odyssey Middle School Science. (Version 16) e-course. (2011). Austin, TX: CompassLearning, Inc.

Odyssey High School Health. (Version 15.0) e-course. (2010). Austin, TX: CompassLearning, Inc.

Odyssey High School Earth Science. (Version 15.0) [e-course]. (2010). Austin, TX: CompassLearning, Inc.

Odyssey High School Chemistry. (Version 15.2) [e-course]. (2010). Austin, TX: CompassLearning, Inc.

Odyssey High School Physics. (Version 15.2) [e-course]. (2010). Austin, TX: CompassLearning, Inc.

Odyssey High School Biology. (Version 15.2) [e-course]. (2010). Austin, TX: CompassLearning, Inc.

Odyssey High School Physical Science. (Version 15.2) [e-course]. (2010). Austin, TX: CompassLearning, Inc.

Odyssey K-8 Mathematics. (Version 15.2) [e-course]. (2010). Austin, TX: CompassLearning, Inc.

SmartMath Intervention Program. (Version 12.0) [e-course]. (2006). Austin, TX: CompassLearning, Inc.

### EDITORIAL BOARD

**2017 I International Network Center for Fundamental and Applied Research** Editorial Board Member, Anatolian Journal of Instruction

### PUBLICATIONS REFEREED

2017 | Journal of Veterinary Medical Education

2016 | Quality Matters Master Reviewer

2016 | Journal of Educational Computing Research

### PROFESSIONAL SERVICE

#### 2014 I Southwestern Education Research Association Conference Proposal reviewer

**2013 I Inderscience Publishers** Peer reviewer for International Journal of Social Media and Interactive Learning Environments (IJSMILE).

### 2013 I Athabasca University Press

Outside reviewer for International Handbook of E-learning by Mohamed Ally and Badrul Khan, 2014.

### 2013 I Southwestern Education Research Association Deans' Award

### 2012 I Southwestern Educational Research Association (SERA)

Student representative for Texas A&M University

2012 I Texas A&M University Chapter Association for Educational Communications and Technology (AECT) Past President

2011-2012 I Texas A&M University Chapter Association for Educational Communications and Technology (AECT) President

2010-2011 I Texas A&M University Chapter Association for Educational Communications and Technology (AECT) President-Elect

**2010 I Texas A&M University Association for Educational Communications and Technology (AECT) Local** Co-founder

## UNIVERSITY SERVICE

### 2017-present | Academic and Professional Track Committee

Faculty Representative, College of Veterinary Medicine & Biomedical Sciences

#### 2017-present | Women's Faculty Network

Officer & Steering Committee Representative, College of Veterinary Medicine & Biomedical Sciences

### 2016-present | Texas A&M University Subscriber Reviews

**Quality Matters Master Reviewer** 

2012-present I Promoting Outstanding Writing for Excellence in Research (POWER) Writing Support Service Consultant

### 2012-present I Texas A&M University Association of Baptist Students (ABS)

Faculty Advisor

#### 2011 | Texas A&M University Student Research Week (SRW) 2011

Out-of-field judge for oral presentations, Human Anatomy, Physiology, and Kinesiology, Graduate/Undergraduate level.

### **COLLEGE LEVEL**

2017-present I Initiative for Educational Excellence Liaison

### CERTIFICATIONS

2014 I Certificate in Education & Social Sciences Advanced Research Methods

- 2014 I Certified Quality Matters Higher Education Peer Reviewer
- 2014 I Certified Quality Matters K-12 Secondary Peer Reviewer
- 2014 I Certificate in Applying the Quality Matters K-12 Rubric
- 2012 I Certificate in Applying the Quality Matters Higher Education Rubric
- 2012 I Virtual Instructor Certificate Program

**2011 I** Texas A&M University College of Education and Human Development Summer Statistics Workshop Item Response Theory (IRT)

2011 I Texas A&M University College of Education and Human Development Summer Statistics Workshop Meta-Analysis

**2010 I** Texas A&M University College of Education and Human Development Summer Statistics Workshop Intermediate Statistics: ANOVA and Regression

2008 I North Carolina Testing Program Certification in Item Development Basics

- 2005 I Scott and White Worth the Wait Teacher Certification
- 2005 I Texas State Board of Education 4th -8th Grade Mathematics/Science Certification

### HONORS AND AWARDS

- 2018 | Texas A&M University GoWeb Award for Transformational Education
- 2013 I CODiE Award recipient for product design
- 2012 I Eddie Award recipient for product design
- 2012 I Bessie Award recipient for product design