

Anthony T. Paganini, PhD.

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Summary

Interdisciplinary biomedical educator with over 24 years of teaching experience at Michigan State University within the Colleges of Human Medicine, Natural Science, Education, Communication Arts & Sciences, and Engineering.

Distinguished record of excellence in teaching and curriculum development with an educational philosophy of cognitive empathy and practical knowledge of diverse student learning methods such as Problem Based Learning, Case Based Learning, Team Based Learning, Directed Independent Study, Integrative Biomedical/Histology Lab, Human Cadaver Lab, Lecture-Online hybrid. Leader and team member of numerous content development and curriculum development and oversight groups at department, college, and university level.

Experience teaching across entire post-secondary learner development continuum including: non-major undergraduates, major undergraduates, graduate-professional students, graduate students, medical residents, medical fellows. Ongoing commitment and experience in educating, mentoring, and advancing students from underserved populations into health professions.

Education

1998	MICHIGAN STATE UNIVERSITY, East Lansing, MI Doctor of Philosophy, Cellular and Integrative Physiology Dissertation: NMR spectroscopy of phosphocreatine kinetics in skeletal muscle
1990	THE OHIO STATE UNIVERSITY, Columbus, OH Bachelor of Science, Mechanical Engineering Specialization: Measurement and Control Systems
2017	LANSING COMMUNITY COLLEGE, Lansing, MI Associate of Art, <i>summa cum laude</i>, Philosophy

Academic Appointments and Leadership

Michigan State University, College of Human Medicine, East Lansing, MI

2015 - present	Director of Integration and Innovation, Curriculum Leadership Team
2013 - present	Associate Professor, Department of Physiology
2016 - present	▪ Adjunct Associate Professor , Department of Biomedical Engineering
2018 - 2023	▪ Adjunct Associate Professor , Program in Neuroscience
2009 - 2012	Associate Professor , Department of Radiology, Division of Human Anatomy ▪ Director , Division of Human Anatomy
2000- 2008	Assistant Professor , Department of Radiology, Division of Human Anatomy
1998 - 1999	Instructor , Department of Anatomy
1997	Assistant Instructor , Department of Anatomy
	COURSE & INTERSESSION LEADERSHIP- College of Human Medicine
2020-present	Intersession Leadership Teams: Cardiopulmonary Pathophysiology, Histology-Pathology, Pharmacology-Physiology
2020	HM 619: COVID19- Basic Science, Clinical Knowledge, Ethics & Public Health
2018 – present	HM 651-655: Advanced Skills & Knowledge-Transformation Subgroup Leader
2018 – 2020	HM 556: USMLE Step I Preparation: Systems, Science, Strategies
2016 – present	Integrative Biomedical Lab Coordinator- Shared Discovery Curriculum
2013 – 2016	PSL 534 & PSL 535: Medical Cell Biology & Physiology I & II
2000 – 2006	ANTR 551: Medical Gross Anatomy
1999 – 2004	ANTR 585: Directed Study in Human Prosection
1998 – 2004	ANTR 350: Human Gross Anatomy

Chamberlain University, College of Nursing, Troy, MI

2020 - 2021	Visiting Professor, Division of Preclinical Studies
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Teaching Experience- Michigan State University

College of Human Medicine, Department of Radiology, Division of Human Anatomy

1998-2006, 2009, 2011	Gross Anatomy for Pre-Health Professionals Lecture team: all organ systems	ANTR 350
1999- 2008	Directed Studies in Human Prosection	ANTR 585
Fall 1999-2012, Summer 2005-2012	Medical Gross Anatomy Lecture & cadaver lab team member	ANTR 551
Spring, Fall 2009-2011	Radiology Clerkship Introduction to MRI physics, digital literacy for medical students	RAD 609
Summer 2009, 2011, 2013, 2015, 2017	Special Topics in Anatomy Applied musculoskeletal gross anatomy, histology and pathology for bioengineers	ANTR 890

College of Human Medicine, Department of Physiology

Summer 1993-1999, 2004, 2008	Introductory Physiology All organ systems, a university biology selective for non-majors	PSL 250
Summer 2009-2017	Physiology for Pre-Health Professionals All organ systems with clinical applications	PSL 310
Summer 1996, Fall 1996, 1997	Human Physiology I Neurophysiology, digestive and endocrine physiology for majors	PSL 431
Spring 1999 - 2004	Human Physiology II Cardiovascular, respiratory and renal physiology for majors	PSL 432
Fall 2008-2015	Medical Cell Biology and Physiology I Histology & physiology: embryology, connective tissue, neurophysiology, muscle, membrane transport for medical students	PSL 534
Spring 2001-2003, 2007-2016	Medical Cell Biology and Physiology II Histology & physiology: lymphatic system, digestive, reproductive, respiratory, acid-base for medical students	PSL 535
Fall 2016 - 2018	Principles of Medical Cell Biology and Pathophysiology Histology lab team member for medical students	PSL 539

College of Education, Department of Kinesiology

Fall 1997-1999	Physiology of Exercise	KIN 810
Spring 1998	Cardiorespiratory and Metabolic Responses to Exercise	KIN 812
Spring 1997, 1999	Endocrine and Neuromuscular Responses to Exercise	KIN 813
Spring 1997	Special Topics in Exercise Science: Fluid-Electrolyte Homeostasis and Thermoregulation	KIN 910
Summer 1999	Special Topics in Exercise Science: Skeletal Muscle Architecture and Adaptations	KIN 910

Teaching Experience- Michigan State University (cont'd)

College of Communication Arts & Sciences, Department of Communicative Disorders

Fall 2009 - 2010	Anatomy of Speech & Hearing: Lab	CSD 213
Spring 2008 - 2010	Vocal Health for Performers: Lab	CAS 892

College of Human Medicine- MD Program

Fall 2016 - present	Medical School I Large Group Activity; Post Clinic Group; Integrative Biomedical Lab; Clinical Simulation Lab	HM 552
Spring 2017 - present	Medical School II Large Group Activity; Post Clinic Group; Integrative Biomedical Lab; Clinical Simulation Lab; Embryology; Nutrition; Cardiopulmonary Renal, Gastrointestinal, Pharmacology-Physiology	HM 553
Summer 2017 - present	Medical School III Large Group Activity; Clinical Simulation Lab;	HM 554
Fall 2017 - present	Medical School IV Weekly Scholar Group Clinical Simulation Lab	HM 555
Spring 2017 - present	Medical School V Large Group Activity; Rotational Study Group	HM 556
Spring 2014, 2015	Cardiovascular Problem Based Learning Preceptor	HM 515
Spring 2011 - 2015	Respiratory Embryology Lecturer	HM 525
Spring 2011	Respiratory Problem Based Learning Preceptor	HM 525
Spring 2009 - 2015	Urinary Embryology Lecturer	HM 526
Spring 2017	Digestive Problem Based Learning Preceptor	HM 527
Spring 2014 – 2015	General Pathology- Team Lecturer	HM 561
Fall 2013 - 2015, Spring 2013 - 2016	Integrative Clinical Correlations Low back pain, COPD, cerebral palsy, diabetes, asthma, ALS, ataxia	HM 571

Advanced Baccalaureate Learning Experience Program, College of Human Medicine

Summer 2003	Physiology	HM 591
Summer 2005 - 2011	Gross Anatomy	HM 591
Summer 2014 - 2020	Introduction to Histology	HM 591
Fall 2017- 2020	Physiological Biochemistry I	HM 591
Spring 2018 - 2021	Physiological Biochemistry II	HM 591

Office of Academic Achievement, College of Human Medicine

2018 – 2019	Academic Success Toolkit- Physiology, Histology
2020	Step I Collaborative Review with Clinicians

Teaching Experience- Michigan State University (cont'd)

Graduate Medical Education

Fall 2000 - 2002	OB/GYN Basic Science Review for Residents Pelvic neurovascular anatomy
Spring 2002 - 2004	Orthopedics Basic Science Review for Residents Biomechanics, biomaterials, NMSK tissue
Fall 2010 - 2012	Radiology Basic Science Review for Residents Digital literacy, atomic structure, introduction to radiation
Fall & Spring 2015 - 2018	Cardiology Basic Science Review for Residents Cell, tissue & systems biology, hemodynamics, epithelial pathology

College of Osteopathic Medicine

Spring 2008 - 2013	Gross Anatomy Lab for Pulmonology/Critical Care	OST 525
Spring 2012 - 2019	Organ System Histology Labs Endocrine, Male/Female Reproductive, Digestive, Integumentary, Cardiovascular, Respiratory for medical students	OST 573-9

College of Engineering, Department of Biomedical Engineering

Spring 2004 - 2007	Quantitative Human Biology	BME 401
Summer 2007	Independent Study in Mechanical Engineering	ME 990
Fall 2019	Biomedical Engineering Design Cardiovascular pathology for biomedical engineering	BME 891

College of Natural Science, Neuroscience Program

Spring 2009 - Spring 2019	Systems Neuroscience Somatosensory systems, motor systems, neuroembryology, auditory, equilibrium, neurolinguistics, higher cortical functions	NEU 839
Spring 2020- present	Systems & Behavioral Neuroscience II Respiratory Control Systems; Introduction to Neurological Exam	NEU 805

College of Natural Science, Department of Microbiology & Molecular Genetics

Spring 2012-2015	Eukaryotic Cell Biology	MMG 409
Summer 2018, 2019	Cell and Molecular Biology	BS 161

Teaching Experience- Chamberlain University

College of Nursing, Division of Preclinical Studies

Spring 2021	Anatomy & Physiology I & II	BIOS 251 & 252
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Teaching Experience- Non-Institutional

Medical Licensing Exam Development & Student Preparation

1995, 1996, 2020	USMLE Step I Preparation: Northwestern Learning Center, East Lansing: Neuroscience, Gross Anatomy
2013	NBOME National Faculty Exam Item Writer, Anatomy
2014	NBME Step I Anatomy & Embryology Item Writer
2022-2024	Development Team: Am. Physiological Society Center for Physiology Education Autonomic Nervous System

Awards and Recognitions

Extramural

2023 Nominated	Am. Medical Assoc. Accelerating Change in Medical Education Award
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University

2007	Senior Class Council Outstanding Faculty Award
2001	Finalist: Senior Class Council Outstanding Faculty Award
1997	Graduate Student Excellence-in-Teaching Citation

College of Human Medicine

2020	Outstanding Curriculum Contribution Award
2020	Gold Humanism National Honor Society - Faculty Inductee
2011, 2013, 2015, 2017, 2018, 2020, 2022	Preclinical Faculty Excellence in Teaching Award
2012, 2014, 2015, 2017	Green Apple Award for Teaching Excellence Block I
2011, 2013, 2016	Finalist: Green Apple Award for Teaching Excellence Block I
2017	Finalist: Green Apple Award for Teaching Excellence Block II
2019, 2022	Green Apple Award for Teaching Excellence Early Clinical Experience
2023	Finalist: Green Apple Award for Teaching Excellence Early Clinical Experience
2019	Finalist: Green Apple Award for Teaching Excellence Middle Clinical Experience
2012	Faculty Appreciation Recognition, Students of Color
2018 Nominated	Lester J. Evans, MD, Distinguished Service Award

College of Osteopathic Medicine

2010, 2012, 2013	Basic Science Faculty Excellence in Teaching Award
2006, 2012, 2013, 2015, 2016	Golden Apple Award for Outstanding Teaching-First Year Medical Students
2011 Nominated	Curriculum Development Leadership Award

Committee Service

Extramural

2012 - 2022	International Society of Medical Science Educators
2014 - 2015	▪ Reviewer- Medical Science Educator Journal
2014 - 2016	▪ Society Leadership Nomination Committee
	▪ Physiology Content Co-Leader- National Medical Curriculum Steering Committee
2017-2018	Curriculum Editorial Board- Physiology Subject Discipline- Aquifer https://www.aquifer.org/aquifer-sciences-contributors/
2014 - 2022	Medical Student Research Journal
	▪ Faculty Editor

University

2017 - 2019	University Committee on Graduate Studies
2018 - 2019	▪ Curriculum & Program Review Subcommittee Chairperson
2017 - 2019	▪ Graduate-Professional Judiciary Subcommittee member
2018 - 2019	▪ University Council UCGS Representative
2011- 2017	University Committee on Curriculum
2014 - 2015	▪ Full Committee Chairperson
2013 - 2014	▪ Subcommittee A (Natural Science, Engineering, Health Colleges) Chairperson
2016 - 2017	▪ Subcommittee A (ibid.) Chairperson
2014 - 2015	Faculty Senate
	▪ University Academic Program Digital Workflow Taskforce member
2013 - 2014	University Committee on Liberal Learning
2016 - 2017	University Military Education Advisory Committee
2007 - 2009	President's Advisory Committee on Disability Issues
2008 - 2009	▪ Chairperson
2007 - 2008	Biomedical and Health Institutional Review Board

College of Human Medicine

	CHM Standing Committees & Standing Curriculum Workgroups
2023 – 2024	Admissions Committee
2011 - 2020	Curriculum Committee, member
2015 - 2017	▪ Chairperson , Curriculum Committee
2019 - 2023	▪ Curriculum Audit & Integration Subcommittee
2015 – 2020; 2023-present	Graduate & Undergraduate Studies Committee, member
2016 – 2017; 2023-2024	▪ Chairperson , Graduate & Undergraduate Studies Committee
2014 - present	Early Clinical Experience Curriculum Development Workgroup
2015 - present	Middle Clinical Experience Curriculum Development Workgroup
2017 - present	Advanced Skills & Knowledge Curriculum Development Workgroup
2018 - 2021	Admissions Committee: Advanced Baccalaureate Learning Experience Cohort
2020 - 2022	Continuing Medical Education Committee
2021 – 2022	▪ Chairperson CME Committee

Committee Service (cont'd)

College of Human Medicine

CHM Search Committees

2002, 2003, 2006-2008	Anatomy Faculty, Division of Human Anatomy
2009, 2010, 2013, 2019	Grand Rapids Basic Science Faculty
2011 - 2012	Department of Radiology Chairperson
2015	Chairperson , Assoc. Dean Undergraduate Medical Education
2016-2017	Research Faculty, Office of Medical Education, Research & Development
2018-2019	Medical Education Specialists - Office of Academic Achievement
2019	Director of the Academy – Office of Academic Affairs

CHM Program Evaluation & Continuous Quality Improvement

2022-2023	LCME Site Visit Basic Science Representative
2022	LCME Educational Programs Subcommittee member
2011 - present	Curriculum Leadership Team, Basic Science Representative
2013 - present	Curriculum Database Development & Mapping Workgroup
2014	Co-Chairperson , Pain Content Audit Committee
2015 - 2017	Just in Time Medicine Expert Content Review Board Member
2016 - present	Coordinator , Enduring Themes in Basic & Clinical Sciences Workgroup
2017 - present	Coordinator , AAMC Curriculum Database Submission Workgroup
2017 - present	Just In Time User Interface Workgroup
2000	Chairperson , Autonomic Nervous System Integration in Block I
2002, 2014	College Admissions Prerequisites Advisory Committee
2007	Secchia Center Gross Anatomy Lab Architecture & Ergonomics
2007 - 2008	Block I Pathology Curriculum Revision Committee
2009 - 2011	Embryology Content Audit Workgroup
2009 - 2011	Urinary Domain Curriculum Development Group
2013 - 2015	Cardiovascular Domain Curriculum Development Group
2011 - 2014	Curriculum Advisory Group
2013 - 2014	Fixed Term Faculty Promotion & Retention Task Force
2013 - 2014	LCME Accreditation Team-Educational Programs Subcommittee
2000 - 2015	Block I Course Directors Committee

Department

Doctoral Dissertation Committee Member, Department of Kinesiology

2001	▪ Roop Jayaraman, Ph.D., <i>MRI Studies of Delayed Muscle Soreness</i>
2002	▪ Daniel Vaughn, Ph.D., <i>Effectiveness of Therapeutic Exercise for Excessive Thoracic Kyphosis</i>

Department of Higher and Adult Learning and Education

2012	▪ Tracy Holland, M.A. <i>Faculty perceptions of leadership in higher education</i>
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Department of Radiology

2010-2011	▪ Department Academic Program Review Committee for University Provost
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Department of Physiology

2013 - 2019	▪ Professional Educational Affairs Committee
2013 - 2014	▪ PSL 250 Instructor Search Committee
2018 - 2019	▪ Education Development Committee, ex officio

Professional Development

Summer 2020	Basics of Online Teaching- CIRTl Workshop
Fall 2014	Certificate of Completion: Rooms for Engaged and Active Learning
June 2013	Certificate of Completion: IAMSE Essential Skills in Medical Education
2011 - 2012	Adams Academy Fellow for Instructional Excellence and Innovation
February 2013	National Board of Medical Examiners Step I Item Writer Workshop

Academic Advising

Faculty Advisor

2011 - 2012	Honors College Professorial Assistant-Medical Illustration
2008 - 2013	American Medical Student Association
2018 - 2019	Culinary Medicine Student Interest Group
2017 - 2019	Student Pathophysiology Journal Club

Publications

- 2023 A. Sousa, B-Mavis, H-Laird-Fick, R-DeMuth, J-Gold, M-Emery, **A-Paganini**, M-Colon-Berlingeri, C-Arvidson, H-Toriello, C-Parker, R-Malinowski, C-Han, D-Wagner, *Learning by doing and creation of the shared discovery curriculum*, Medical Education Onlin, v28
- 2018 **A.T. Paganini**, D.E. Blue, A. Elmoselhi. Ischemic Heart Disease and Management Drugs. In A. Elmoselhi (Ed.), *Cardiology: An Integrated Approach* (pp. 111-130). New York, U.S.A. McGraw-Hill Education
- 2015 **A.T. Paganini**. Basic Science Core Discipline Curriculum. MedU Science. eds. Poznanski and Fall. Hanover, NH: Institute for Innovative Technology In Medical Education,. Available from: <http://www.med-u.org>
- 2012 **A.T. Paganini**, *Clinical Case Studies, Supplement to Sherwood's Human Physiology, 8th Ed*, Cengage Learning
- 2009 S.C. Forbes, **A.T. Paganini**, J.M. Slade, T.F. Towse, R.A. Meyer; *Phosphocreatine recovery kinetics following low and high intensity exercise in human triceps surae and rat posterior hind limb muscles*, Am J Physiol Regul Integr Comp Physiol 296: R1-R9
- 2006 **A.T. Paganini**, *Survey of Human Systemic Physiology and Gross Anatomy*, McGraw-Hill Primis, ISBN 0-390-70677-9
- 1999 J.M. Miller, J. Parker, K. Nadler, C. Bromberg, J. Potter, M. Heidemann, J. Vriezen, A. Corrigan, **A. Paganini**, *Implementing Innovative Teaching of Science At Michigan State University using Integrative Studies Courses as a Springboard*, NASA-NOVA Phase I Project, http://nova.ed.uidaho.edu/pdf/project_summaries/12.pdf
- 1997 **A.T. Paganini**, J.F. Foley, R.A. Meyer; *Linear dependence of muscle phosphocreatine kinetics on mitochondrial content*. Am J Physiol Cell Physiol 272: C501-C51
- 1997 T. Adams, K. Olson, **A. Paganini**, R. Stephenson; *Study Guide for Human Physiology, 4th. Ed.*, Kendall-Hunt

Abstracts and Proceedings

- 2021 R. Malinowski, G. Ferenchick, **A. Paganini**, *Creating a Virtual Course from Scratch in Two Weeks: Lessons Learned*, ChangeMedEd, Virtual Conference. Sept 21-Oct 1
- 2017 Migdalisel Colon-Berlingeri, Monica Van der Ridder, Heather Laird-Fick, **Anthony Paganini**, David Solomon, Ling Wang. *Protocol for design and implementation of a progress test to assess knowledge and application of basic science in an integrative medical curriculum* The Generalists in Medical Education Conference, Boston, MA, November 2-3
- 2017 Gold, J, DeMuth, R, Emery, M, Ferenchick G, Laird-Fick H., Mavis, B., **Paganini, A**, Parker, C. Sousa, A, Wagner, D., *"John Dewey Rediscovered: Putting Experience at the Center of Medical Education"*, Poster Presentation at AAMC Central Group on Educational Affairs, Chicago, IL
- 2015 Fulton, T, Bradbury, M, Dell, M, Dickinson, B, Edmondson, A, Everse, S, Fishback, J, Gallman, E, Harris, D, Jones, J, Lyons, L, Nixon, J, **Paganini, A**, Poznanski, A, Russo, D, Szarek, J, Wilson-Delfosse, A, Fall, *"Unpacking your brain: collaborative identification of core basic science concepts important in clinical decision-making."* Poster Presentation at the International Association of Medical Science Educators Annual meeting, San Diego, CA
- 2009 Y. Kousa, Z. Ahammad, E.E. Rogers, J.N. Saultz, M.S. Park, **A.T. Paganini**, *Nothing but nets: Medical students create a service project to combat the spread of malaria.*, American Medical Student Association, Washington. D.C.
- 2008 S.C. Forbes, **A.T. Paganini**, J.M. Slade, T.F. Towse, R.A. Meyer, *Non-negative least squares (NNLS) and gated CSI analysis of phosphocreatine recovery kinetics in human skeletal muscle*. International Society for Magnetic Resonance in Medicine, Toronto
- 2008 J.M. Slade, **A.T. Paganini**, S.C. Forbes, T.F. Towse, R.A. Meyer, *Biphasic Phosphocreatine Recovery After Plantar Flexion in Humans*, American College of Sports Medicine Annual Meeting, Indianapolis
- 2006 **A.T. Paganini**, T. Adams. *Estimating Time-of-Death by Body Temperature Analysis*, American Academy of Forensic Sciences Annual Meeting, Seattle
- 1998 **A.T. Paganini**, R.A. Meyer; *Effect of cell heterogeneity on estimation of muscle oxidative capacity from PCr recovery*, Biomedical Engineering Society Annual Fall Meeting, Cleveland
- 1998 **A.T. Paganini**, J. F. Foley, R.A. Meyer; *The slow phase of phosphocreatine recovery is explained by fiber type heterogeneity.*, American College of Sports Medicine Annual Meeting, Orlando
- 1994 **A.T. Paganini**, J. F. Foley, R.A. Meyer; *Estimation of mitochondrial content from a single rest to work transition.*, American College of Sports Medicine Annual Meeting, Indianapolis
- 1998 R.A. Meyer, J.F. Foley, **A.T. Paganini**, *Mechanisms of Muscle ATP homeostasis during intense exercise.*, Biomedical Engineering Society Annual Fall Meeting, Cleveland
- 1998 R. Stoyanova, **A.T. Paganini**, R.A. Meyer and T.R. Brown. *Application of Principal Component Analysis (PCA) to Kinetic Muscle Data: An Integrated Analysis Approach*. International Society for Magnetic Resonance in Medicine, Sydney
- 1997 R.A. Meyer, **A.T. Paganini**, R. Stoyanova, T.R. Brown; *Non-negative least squares (NNLS) analysis of PCr recovery rates in skeletal muscle with mixed fiber types*. International Society for Magnetic Resonance in Medicine, Vancouver
- 1994 B.B. Roman, **A.T. Paganini**, J.M. Foley, R.A. Meyer, and A.P. Koretsky, *Functional and Energetic Effects of Increased Creatine Kinase Activity on Transgenic Mouse Skeletal Muscle*, Society of Magnetic Resonance, San Francisco

Textbook and Media Reviewer

2000	Fundamentals of Physiology 3e , L. Sherwood, West Publishing
2002	Human Anatomy and Physiology 6e , E. Marieb, Addison-Wesley Publishing
2002	Human Physiology 4e , R. Rhoades and R. Pflanzer, Thomson Learning Publishing
2004	Human Anatomy 1e , M. McKinley, Prentice-Hall Publishing
2005	Human Anatomy and Physiology 7e , E. Marieb, Addison-Wesley Publishing
2005	Human Anatomy 2e , Saladin, McGraw Hill Publishing
2005	Human Anatomy 9e , Tortora, Wiley Publishing
2006	Stedman's Medical Spellchecker and Pathology CD , Lippincott Publishing
2008	Biology 8e , N. Campbell and J. Reece, Benjamin Publishing
2020	Cell and Molecular Biology, 2e , N. Chandar & S. Viselli, Wolter-Kluwer Publishing
2020	Biology-How Life Works 3e , J. Morris et. al., Macmillan Publishing
2020	Board Review Series- Gross Anatomy 7e , K. Chung, Wolters-Kluwer Publishing

Oral Presentations

2018	International Society of Medical Science Educators Annual Conference, Nevada, 2018 <i>"Development of a Physiology Core Concept Framework to Facilitate Integration with Clinical Decision Making"</i>
2014	International Graduate Teaching Assistant Orientation Program , MSU Graduate School, August, 2014. <i>"It is about student learning, not you teaching."</i>
2004	Biomathematics Seminar Series , Michigan State University Mathematics Department. <i>Survey of Metabolic Control Analysis, 2004</i>
1996	Conference on Teaching , Michigan State University Graduate School., February 1996. <i>Co-instruction and homework development in a quantitative problem-solving course</i>
1995	National Biomedical Engineering Society Fall Meeting, Boston. <i>Influence of mitochondrial content on the control of oxidative phosphorylation. Testing models of respiratory control in skeletal muscle</i>
1995	Society for College Science Teachers , Lansing, 1995 Panel Member: <i>Problems and Needs of Graduate Teaching Assistants</i>
1991-1995	Graduate Student Seminars , Department of Physiology, Michigan State University. <i>Biochemical crosstalk in intracellular signal transduction</i> , April 1995. <i>Non-invasive assessment of skeletal muscle aerobic capacity</i> , June 1994. <i>Effects of aerobic training on rat gastrocnemius</i> , January 1993. <i>A historical perspective of skeletal muscle energetics</i> , October 1991. <i>Principles of physiological control systems</i> , March 1991.

Community Engagement & Volunteering

Spring 2013 - 2018	Michigan Science Olympiad Anatomy B (Middle School) Judge & Team Leader
Spring 2013 - 2015	MSU Science Festival Presenter: MRI of Internal Body Motion
Spring 2014	Michigan 4-H Exploration Days Science Palooza Presenter: MRI of Joint Motions
Fall 2012 - 2014	Physiology Fun Day Team Member, Cardiovascular Station, Impressions 5 Museum
2005, 2010	Shiawassee County Health Department, Pulmonology Review; Immunity Review
Spring 2008	Volunteer- Rehabilitation & Senior Center Durand, MI
Spring 2006	Volunteer- Emergency Department, Hurley Medical Center, Flint, MI
Spring 2005	Volunteer- The Disability Network, Flint, MI
Spring 2005	Volunteer- Trauma-Burn Unit, University of Michigan Health System, Ann Arbor, MI
Spring 2004	Volunteer- Avalon Hospice, Flint, MI

Grants

2019	Michigan State University National Rural HCOP Academy. Health Resources and Services Administration. Wendling A, Phillips J, Paganini A , Roskos S, \$3,198,985. (declined)
2020	Spencer Foundation, Exploring medical students' online reading comprehension strategies in a flipped learning environment. Zheng, B., Spiro, R., Paganini, A. Ward. A., \$10,000 (declined)
