#### John F. Zubek, PT, MS, DPT 5637 Ventura Place Haslett, MI 48840 Cell (517) 285-4535 zubekjoh@msu.edu or johnzubek@gmail.com

### Education

CENTRAL MICHIGAN UNIVERSITY Mount Pleasant, Michigan (May, 2008) Doctor of Physical Therapy

MICHIGAN STATE UNIVERSITY East Lansing, Michigan (May, 2000) Master of Science, Kinesiology Major: Exercise Physiology

THE UNIVERSITY OF DAYTON Dayton, Ohio (December, 1996) Bachelor of Science, Education Major: Exercise Science and Pre-Physical Therapy

#### **Professional Licensure**

Physical Therapist, State of Michigan #5501013895 - Current through 2025

#### **Teaching Experience**

Michigan State University, East Lansing, MI

Fixed Term - Associate Professor - Department of Physiology (2024-current)

Fixed Term - Assistant Professor - Department of Physiology (2016-2024)

- PSL 311L Physiology Laboratory for Pre Health-Professionals Course Director
  Coordinate and teach up to 5 sections per semester.
- PSL 310 Physiology Lecture for Pre Health-Professional Students
  - Large enrollment (450+) online asynchronous with interactive case studies.
- PSL 250 Introduction to Physiology Online Asynchronous (Summers only)
  - Medium enrollment (60+) introductory physiology course for STEM students.
- KIN 216 Human Anatomy Co-Instructor with Dr. Karin Pfieffer.
  - Large enrollment (200+) introductory anatomy course for KIN majors.

Fixed Term Adjunct Faculty, Department of Kinesiology (2009-2015)

- KIN 812 Cardiorespiratory Response to Exercise MS and Ph.D. KIN students
- KIN 813 Neuromuscular Response to Exercise MS and Ph.D. KIN students
- KIN 217 Human Anatomy Laboratory Online with lab

Graduate Teaching Assistant, Department of Kinesiology, (1997-1999)

Courses Taught:

- Weight Training I
- Weight Training II
- General Conditioning I

Courses Co-taught/Assisted in:

- KIN 216 Human Anatomy
- KIN 490 Basic Electrocardiography
- KIN 411 Undergraduate Exercise Physiology Laboratory
- KIN 811 Graduate level Exercise Physiology Laboratory
- KIN 125 First Aid/ Personal Safety

Lansing Community College, Lansing, MI.

Adjunct Associate Professor (1999-2017)

- PFKN 208 Biomechanics Lecture/Lab (Developed the course)
- BIOL 202 Human Physiology, Hybrid Lecture with Lab
- BIOL 202 Human Physiology, In person Lecture with Lab
- PFHW 163 Healthy Lifestyles, Lecture
- BIOL 145 Human Anatomy and Physiology, Hybrid Lecture with Lab
- PFKN 250 Measurements in Kinesiology Lecture (Developed the course)

### Central Michigan University, Mt. Pleasant, MI.

Fixed Term Faculty: School of Health Science and Physical Therapy. (2015-2024)

- HSC 680 (formerly HSC 582) Human Gross Anatomy with laboratory
- PTH 672 Clinical Anatomy and Kinesiology of Joints Co- Lab Instructor

Graduate Teaching Assistant (2005-2008)

- HSC 214 Human Gross Anatomy Laboratory
- HSC 582 Human Gross Anatomy Laboratory

<u>Alma College, Alma, MI</u>

Adjunct Faculty – (2000-2002)

- EHS 428 Exercise Testing and Prescription w/EKG Interpretation
- EHS 428L Exercise Testing and Prescription Laboratory
- EHS 301 Nutrition
- EHS 224 Substance Abuse

# Selected Writings \*Trainee

\*Murali, G., Akande, L., Raut, R., Joseph, J., Zhou, G and **Zubek, J**. Streamlining Scientific Writing for Students: The Role of Online Language Simplification Tools. *Cogent Education*. (*under review*)

\*Shine, S., Warznie, J., Zhou, G., & **Zubek, J.** From Virtual to Reality: Evaluating Student Attitudes through VR Dissection Preparations: A Use Case. *Adv Physiol Educ.* (*under review*)

Harfmann, B. D., Bhaskaran, S., **Zubek, J**., Gordish, K., et al. (2024). 11th Annual Michigan Physiological Society Meeting: June 24–25, 2024. *Adv Physiol Educ* 48(4), 833–835.

**Zubek J**, Johnson KMS, Luttrell MJ, Bryner RW, Choate JK, and French MB. Development of the Professional Skills Physiology Curriculum Mapping Tool (PS-MAP). *Adv Physiol Educ* 47:117-123, 2023; doi:10.1152/advan.00115. 2023

\*Natasha Chinoy, Hayden Stoub, Yvonne Ogrodzinski, Katelyn Smith, Devika Bahal, and **John Zubek**. Assessing student desire for professional skills development within the undergraduate science curriculum: a focus on teamwork. *Adv Physiol Educ* 46: 179–189, 2022.

Gaganis V, Beckett E, Choate J, Aguilar-Roca N, Etherington S, Haigh C, Scott D, Sweeney T, **Zubek J**, French M. Virtual delivery: a panacea for the financial and ethical challenges associated with physiology laboratory classes? *Adv Physiol Educ*. 2021 Dec 1;45(4):744-748.

Julia Choate, Nancy Aguilar-Roca, Elizabeth Beckett, Sarah Etherington, Michelle French, Voula Gaganis, Charlotte Haigh, Derek Scott, Terrence Sweeney and **John Zubek**. International educators' attitudes, experiences and recommendations after an abrupt transition to remote physiology laboratories. *Adv Physiol Educ* 45: 310–321, 2021.

French, MB, Choate, J, **Zubek**, J, Bryner, R, Johnson, KMS, and Luttrell, MJ Professional skills for physiology majors: Defining and refining. *Adv Physiol Educ* 44: 653 657, 2020.

**Zubek JF** and \*Kang HJ (2020). Optimal Dosing of the Anesthetic Tricaine Methanesulfonate (MS222) to Ensure Muscle Viability in Xenopus leavis Frogs: A Protocol Project. *HAPS Educator*. 24 (1): 546-50.

\*Jainil Shah, Matthew Artuso, Choonhan Youn, Daniel Gomez, Anna Yannakopoulos, Nathaniel Hawkins, **John Zubek** and Arjun Krishnan. SimpleB.io: An online tool and community for communicating biology and biomedical science in plain language. *Gateways 2020*: A short paper.

**Zubek, John**. "*Teaching Backwards: From Motion to Muscles*." Human Anatomy and Physiology Society (HAPS Blog). 23 Oct., 2017.

**Zubek, JF**. *PATCH<sup>©</sup> Goes To School* Workbooks. Ingham Regional Medical Center (Copyright 2002).

**Zubek JF**, Forsblom L. *Manual for General Conditioning*. Department of Kinesiology, Michigan State University (Spring 1998).

#### Accepted conference and meeting abstracts:

## \*Presenter; \*\* Primary Investigator

\*Wehrwein, E., **Zubek, J.**, Masani, S., & Steele, K. (2024). Integration of career development and professional skills across the curriculum in an undergraduate physiology program and in non-majors courses. Presented at the Physiology Majors Interest Group (PMIG) Conference, August 9, Toronto, Canada.

\*Zubek, J., & Shaltry, C. (2024). J-Bot: Leveraging Socratic chatbots to enhance student engagement in physiology education. Presented at the Physiology Majors Interest Group (PMIG) Conference, August 9, Toronto, Canada.

\*\*Olson, D., \*Thompson, H., \*\***Zubek, J**., & Doherty, J. (2024). Enhancing student understanding of physiological processes through explicit causality instruction. Presented at the Physiology Majors Interest Group (PMIG) Conference, August 9, Toronto, Canada.

\*Khullar, V., \*Li, J., \*Manzzullo, N., & \*\***Zubek, J.** (2024). Integrating hematology training with healthcare practice for pre-health professionals at MSU. Poster presented at the Mid-Michigan Symposium for Undergraduate Research Experiences (Mid-SURE), July 24, Michigan State University, East Lansing, MI.

\*Raut, R., Murali, G., Akande, L., Joseph, J., & **\*\*Zubek, J.** (2024). Streamlining scientific writing for students with DeJargonizer. Presented at the 11th Annual Michigan Physiological Society Meeting, June 24–25, Rochester, MI.

**\*\*\*Zubek, J.**, Shine, S., Warznie, J., & Medina, J. (2024). Enhancing learning opportunities in laboratory science using virtual reality lessons: A use case. *Physiology*, *39*(S1). Poster presented at the American Physiology Summit, May 21, 2024. https://doi.org/10.1152/physiol.2024.39.S1.2333.

\*Raut, R., Akande, L., Murali, G., Joseph, J., & \*\***Zubek, J.** (2024). Streamlining scientific writing for students: The role of online language simplification tools. Presented at the University Undergraduate Research and Arts Forum (UURAF), April 12th. Michigan State University, East Lansing, Michigan. First place award: Education.

\*Harrison, I., \*Sanju, N., Cole, O., Sanchez, K., & \*\***Zubek, J**. (2024). Xenopus optimal health and model welfare project. Presented at the University Undergraduate Research and Arts Forum (UURAF), April 12th. Michigan State University, East Lansing, Michigan

\*Krishnan, K., Decot, H., Ogrodzinski, Y., D'Haem, D., Raut, R., & \*\***Zubek, J.** Gun Violence as an Epidemic: A Public Health-Based Intervention. Presented at the Michigan Physiological Society Mid-Year Symposium. February 14<sup>th</sup>, 2024.

\*Sarah Shine, \*Julia Warznie, \*Jenna Medina, and \*\*\***John Zubek**. Enhancing Learning in Laboratory Science through Virtual Reality Lessons: A Use Case. Presentation Given at the 10<sup>th</sup> Annual Michigan Physiological Society meeting. June 26<sup>th</sup> 2023.

**\*\*\*Zubek J**, Murali G, Chinoy N, Jackson J, Shaltry C, and Krishnan A,. Using Simplex<sup>alpha</sup> (an online writing tool) to Assist Students When Simplifying Complex Ideas for Various Audiences: a Pilot Project. Presented at the first annual American Physiological Society Summit – April 2023. (Poster - Different venue).

\*Zubek J, Johnson KMS, Luttrell MJ, Bryner RW, Choate JK, and French MB. Development of the Professional Skills Physiology Curriculum Mapping Tool (PS-MAP). Presented at the Physiology Department retreat September 2022. (Poster).

\*Hall T, Chinoy N, **\*\*Zubek, J**. Impact of COVID on the Academic and Professional Plans of Pre-Health Professional Students : A Survey Study. Presented at the Mid-SURE student research conference July 27th, 2022. (Poster).

\*Murali G, Chinoy N, Jackson J, Shaltry C, Krishnan A, \*\***Zubek J**. Using Simplex<sup>alpha</sup> (an online writing tool) to Assist Students When Simplifying Complex Ideas for Various Audiences: a Pilot Project. Presented at the 9th annual Michigan Physiological Society Meeting – June 17th, 2022. (Presentation - Different venue).

\*Julia Choate, Nancy Aguilar-Roca, Elizabeth Beckett, Sarah Etherington, Michelle French, Voula Gaganis, Charlotte Haigh, Derek Scott, Terrence Sweeney, and **John Zubek**. Physiology educators' attitudes, experiences and recommendations after an abrupt transition to remote laboratories: Poster Presentation. April 27th, 2021 given at Experimental Biology Annual meeting. (Virtual event).

\*Gaganis V, Beckett E, Choate J, Aguilar-Roca N, Etherington S, French M, Haigh C, Scott D, **Zubek J**, and Sweeney T. Abstract Title: 'Insights Arising from Virtual Laboratory Experiences of 2020. A Focus on Financial and Ethical Challenges of Face-to-Face and Online Physiology Laboratories.' FASEB Journal. May 2021. Volume 35, Issue S1.

\*Natasha Chinoy, Hayden Stoub, Yvonne Ogrodzinski, Katelyn Smith, Devika Bahal, and \*\*John Zubek. "Assessing student desire for professional skills development within the undergraduate science curriculum: A focus on teamwork." (Pilot data). Given at the 8th annual Michigan Physiological Society Meeting – June 24th, 2021. (Virtual event).

\*Matthew Artuso, Anna Yannakopoulos, Daniel Gomez, Nathaniel Hawkins, Jainil Shah, **John Zubek**, \*\*Arjun Krishnan. Quantifying general and discipline-specific word understandability towards better science communication. A long abstract. International Society for Computational Biology. June, 2021.

\*Matthew Artuso, Jainil Shah, Choonhan Youn, Daniel Gomez, Anna Yannakopoulos, Nathaniel Hawkins, **John Zubek** and \*\*Arjun Krishnan. Quantifying word complexity – and

understandability – to help communicate biomedical science in plain language. [Abstract]. Science Gateways Community Institute Annual Conference. October, 2020.

\*Langen, K, \*\***Zubek, J**, Lippert, J. A progression of care for complex regional pain syndrome: a case report. Michigan Physical Therapy Association Fall Research Conference. October 6, 2020.

\*Ogrodzinski, Y., \*\***Zubek, J**. Instructional Hematology for Pre-Health Undergraduates. FASEB Journal. March 2020. 34 S(1):1-1.

\***Zubek, J**, Ogrodzinski, Y, Shaltry C. and Wehrwein, E. Assessing student desire for professional skill development within the undergraduate science curriculum; Part 2: Teamwork. Fall HHMI STEM Summit, December 17th 2019 Michigan State University.

\*Zubek, J. Optimal Dosing of the Anesthetic Tricaine Methanesulfonate (MS222) to Ensure Muscle Viability in Xenopus Leavis Frogs: A Pilot Project. Michigan Physiological Society Annual Meeting, Mt. Pleasant, MI, June 28th, 2019.

\*Zubek, J. Evolution of a New Laboratory Experience in PSL 311L: Gastric Motility from Mouth to Anus. Human Anatomy and Physiology Society Annual Meeting in Portland, Oregon May 2019.

\*Zubek, J and Shaltry, C. Assessing Student Desire for Professional Skill Development. Spring Conference for Student Learning and Success. May 6th, 2019. Michigan State University.

Shaltry, C. (Chair), Wehrwein, E., Denison, A., Mohr, S., Luckie, D., Root-Bernstein, and **\*Zubek, J.** Initiative Status of the Newly Formed Education Development Committee and Subcommittee Directives; Michigan State University, Department of Physiology 2018-2019. PSL Department Retreat May 8th, 2019.

\*Zubek, J and Busik, J. Use of Virtual Reality Technology on Improving the Quality of Lower Extremity Movement in an Adolescent with Cerebral Palsy: A Case Report [abstract]. In: Cerebral Palsy Research Consortium of Michigan Conference VI.; April 19, 2018. Michigan State University.

\*Zubek, John F. "Vacuum Assisted Closure in a Patient with a Dehisced and Infected Post Mastectomy Incision." 12<sup>th</sup> Annual Physical Therapy Student Research Colloquium. May 2, 2008. Mt. Pleasant, MI. Case Report Poster Presentation.

**\*Zubek, JF** & Pivarnik, JM "*Prediction of Success in High School Heavyweight Wrestlers*." Michigan Chapter of the American College of Sports Medicine, Gaylord, MI (1999).

#### **Invited Presentations**

Wehrwein E, Steele K, Masani S and **Zubek J.** (2024) Teaching beyond the facts: The importance of student career and professional skills development. Given at the 2nd annual APS Summit April 7<sup>th</sup>, Long Beach, CA. Group Presentation.

**Zubek, J.,** & Kanady, J. (2024). Generative AI and education: Leveraging AI for teaching and learning in physiology. Invited talk and session facilitation presented at the Physiology Majors Interest Group (PMIG) Conference, August 9, Toronto, Canada. Co-Presentation.

Barb Herzog, PT; Abigail Skallerud, PT, DPT, **John Zubek** PT, DPT. (2024) *Making Laws, Getting Paid*. Co-Presentation given at the APTA Michigan Annual Conference - Payment/Legislative Updates, October 12<sup>th</sup>, Detroit, Michigan.

Shaltry, C and **Zubek**, **J** (2024). Using AI as a course tutor- Experiences at MSU from two partnerships. Co-Presentation with Chris Shaltry. An MSU CTLI-Sponsored Online Workshop. Given December 12<sup>th</sup>.

Coaching and Incorporating Professional Skills Development using Lt. **John Zubek**. 1<sup>st</sup> International Brain Trust Symposium - Sponsored by ADInstruments. Invited speaker. November 4<sup>th</sup>, 2020. (Virtual).

American Physiological Society- Community Discussion for Developing a Plan for Online Labs- invited speaker. John Zubek, PT, DPT Assistant Professor, Department of Physiology, Michigan State University June 29, 2020.

Teaching and Assessing Transferable Skills in the STEM Classroom. Co-Presentation with Dr. Erica Wehrwein. Given at the STEM Teaching Essentials Workshop Series. February 12, 2019.

Teaching and Assessing Professionalism and Employability Skills in the College Classroom: Is it our Job? Co-Presentation with Dr. Erica Wehrwein. Given at the Human Anatomy and Physiology Society Annual Meeting and Conference. Columbus, OH. May 2018.

Improving Classroom Assessment with Six Sigma. Co-Presentation with Dr. Chris Shaltry. Given at the Annual Teaching and Learning Conference. Michigan State University. May 2018.

*Using Evidence Based Medicine in Rehabilitation*. An In-service provided for Physical and Occupational Therapists at Ingham Regional Medical Center. (2 times Fall 2009).

*Vestibular Rehabilitation for Central and Vestibular Hypofunction.* Burcham Hills Health Center, East Lansing, MI (Spring 2008).

Joint Academy pre-elective surgery course. Owosso Memorial Hospital, Owosso, MI (2007)

Patella Fracture Rehabilitation. Owosso Memorial Hospital, Owosso, MI (2007).

Effective Treatments for Sciatica; an Evidence Based Approach. Mt. Pleasant, MI (2007).

Educational Aspects of Telehealth for Physical Therapists. Mt. Pleasant, MI (2007).

Acute Respiratory Distress in a 24 year-old patient with Cystic Fibrosis. Grand Rounds Mt. Pleasant, MI (2007).

*Return to Work Guidelines for Therapists*. Eaton Rapids Medical Center, Eaton Rapids, MI (2006).

**Zubek, J.** Keynote, "PATCH<sup>™</sup> Goes To School Program, a 3-year school based cardiac wellness program." Michigan Chapter of the American College of Sports Medicine, Gaylord, MI (2005).

## **Work Experience**

- Staff Physical Therapist McLaren Greater Lansing (formerly IRMC), Lansing, MI. (Staff Therapist, 2008-2016, Per diem 2016-2024).
  - Evaluate and assess patients in the acute care hospital, orthopedic hospital and outpatient rehabilitation clinics.
  - Design and implement individualized rehabilitation programs based on evaluation findings.
  - Provide supervision of Physical Therapy Assistants, Physical Therapy Students, and Rehabilitation Technicians as well as Student Observers.
- Physical Therapist (Per Diem) Burcham Hills Center for Rehabilitation, East Lansing, MI. (2013-2016).
  - Evaluate and assess residents in a subacute setting.
  - Provide a continuum of rehabilitation treatment as outlined by staff therapists.
- Physical Therapist (Per Diem) Outpatient and Home Health services. Innovative Senior Care, Haslett/Lansing, MI. (2011- 2012, and 2013-2015).
  - Evaluate and assess residents in assisted living communities.
  - Work with residents and their families to design and implement treatment programs with appropriate goals towards ageing in place.
- **Physical Therapist (Per Diem)** Holt Senior Care and Rehabilitation Center, Holt, MI. Integrity Rehab (2009- 2010).
  - Evaluated and assessed residents in a subacute setting.
  - Worked with residents and their families to design an implement treatment programs with appropriate goals towards independence.
  - Provided a continuum of rehabilitation treatment as outlined by staff therapists.
- Community Education Coordinator/Program Director "PATCH<sup>TM</sup> Goes To School
  - Ingham Regional Medical, Healthwise University, Lansing, MI (2002 2005)

- Successfully developed and implemented a school-based cardiac wellness program in the greater Lansing tri-county area.
- Presented in excess of 300 *PATCH*<sup>TM</sup> programs to over 10,000 3<sup>rd</sup>-5<sup>th</sup> graders.
- Procured outside financial support including local grants and collaborative fund raising events for further development of the *PATCH*<sup>TM</sup> program.
- Implemented evaluation tools using online quizzes and health behavior surveys to track health behavior changes in school children.
- Initiated cooperative programs with L&L Food Centers, YMCA of Lansing, Burger King Restaurants, Michigan State University and Lansing Community College.

### **Professional Activities**

- Abstract reviewer, Michigan Physiological Society annual conference (2023-2025)
- Manuscript Reviewer, Advances in Physiology Education (2023- current)
- Teaching 2030: Exploring extended reality in higher education. (2022-current).
- iTeachMSU Ambassador. Educational website advisory group. (2018-2021).
- Instructional Technology Initiative. MSU, Dept. of Physiology. CHM Videos (2018).
- Six Sigma/Lean Yellow Belt coursework. McLaren Greater Lansing (2017-2018).
- Student Physical Therapist Clinical Instructor, Level I (2009).
- Internship site supervisor for Michigan State University Department of Kinesiology students at Ingham Regional Medical Center (2002-2005).
- Course Development, Human Phys BIOL 202 to hybrid format, Lansing CC (2003).
- Curriculum Development, *PATCH<sup>TM</sup> Goes To School* curriculum guide and student activity books, Ingham Regional Medical Center (2002).
- Course Development, *Measurements in Kinesiology* PFKN 250 with Tiller Landick, Department of Physical Fitness and Wellness, Lansing CC (2000–2001).
- Chapter Reviewer- McGraw Hill Publishing (2001).
- General Conditioning Course Coordinator, Michigan State University (1998-1999).
- Chair, KIN Graduate Student Organization, Michigan State University (1998-1999).

### **Committees Served**

- Education Development Committee Chair (2024).
- Faculty Search Committee Dept. of Physiology, PSL 250 (2024).
- Fixed Term Faculty Annual Review Committee (2018, 2023 and 2024)
- Faculty Search Committee Dept. of Physiology, Neuroscience faculty x 3 (2021-2022).
- APTA-MI Legislative Action Committee Legislative member/co-chair (2019 current).
- Exploratory Committee for Online MS degree in Physiology ad hoc. (2019-2021).
- Undergraduate Program Curriculum Committee Dept. of Physiology, MSU. (2021-2023).
- Education Curriculum Committee (EDC). Dept. of Physiology, MSU. (2018-2023).
- PSL 311L Curriculum Development Committee (2016).

- Ad Hoc Committee for Review of Fixed Term Faculty (Spring 2016).
- PSL 331 Physiology Bridge Course Workshop Member (Spring 2017).
- Program/Course Outcomes Committee Lansing Community College, Department of Physical Fitness and Wellness (Fall 2015).
- Staff Representative, Service Excellence Ingham Regional Medical 2009-2010)
- Student Representative, Curriculum Advisory Committee, Central Michigan University, Department of Physical Therapy (Fall 2007).
- Graduate Student Representative (on call), Student Grievance Committee, Central Michigan University Department of Health Science (2008).
- Department Representative, Public Health Advisory Committee, Ingham Regional Medical, Lansing, MI (2004).
- *PATCH™* Program Evaluation Committee, Ingham Regional Healthcare Foundation, Lansing, MI (2002-2004).
- Adjunct Representative, Science Department Leadership Team, Lansing CC (2000-2001).
- "Anatomy and Physiology Innovative Resource Initiative," Lansing CC (1999-2004).

# Awards/Scholarships/Funding

- Xenopus 1, Corp. \$2,000 for Xenopus Model Welfare Project. Ongoing.
- 2023 TLE Award \$73,142 From Michigan State University, Office of the Provost.
- 2021 College of Natural Science Teaching Prize.
- 2021 TLE Award \$46,675 From Michigan State University, Office of the Provost.
- 2019 TLE Award \$27,247 From Michigan State University, Office of the Provost.
- 2018 TLE Award \$73,245 From Michigan State University, Office of the Provost.
- Graduate Teaching Assistantship Central Michigan University, (2005-2007).
- Kosciuszko Foundation Polish-American Tuition Scholarship \$5,000 (2005 and 2006).
- IRMC Physical Therapy Student Tuition Scholarship \$15,000 (2006 and 2007).
- Recipient of the Patric Ludwig Community Benefit Award *PATCH*<sup>TM</sup> Program, Michigan Health and Hospital Association (June 2004) at the Grand Hotel, Mackinac Island, MI.
- "Teaching Applegram" Center for Teaching Excellence at Lansing CC (2003 and 2004).
- Graduate Teaching Assistantship Michigan State University, KIN (1997,1998).
- Graduate Research Assistantship Michigan State University, KIN (1998,1999).

# **Professional/Community Presentations**

- Career Panel Speaker/Participant. MWACSM Annual Regional Meeting in Grand Rapids, Michigan. 11/10/2017.
- Guest Presenter: *How to incorporate mixed and novel assessment strategies using Lt.* Given at the 1<sup>st</sup> Annual Brain Trust Symposium, Boston, MA. September 30<sup>th</sup> 2017.
- Guest Speaker, PATCH<sup>TM</sup> Goes To School Program, Teacher and student survey results on

*program effectiveness*. Ingham Regional Healthcare Foundation's Annual Support Committee. (2005).

- Guest Speaker, *Walk the Talk, 10,000 Steps to Better Health*. Michigan School Foods Service Association (MSFSA), Mt. Pleasant, MI (2004).
- Guest Speaker, *PATCH<sup>TM</sup> Goes To School Program: Current status and community alliances.* Ingham Regional Medical Center's Board of Trustees. (2004).
- Guest Lecturer- *Current Community Health Education Programs* (To undergraduate Kinesiology students at Michigan State University in 2002 and 2003).
- Guest Speaker, *PATCH<sup>TM</sup> Goes To School Program: An upcoming IRMC Foundation sponsored program for Tri-County area.* Ingham Regional Healthcare Foundation's Annual Support Committee. (2002).
- Guest Speaker, *Bone and Joint Health*. Senior Health Education session, Ingham Regional Medical Center, Lansing, MI (2003).
- Guest Speaker, *Heart Safety*. Consumers Energy Employee Safety Conference, Lansing, MI (2002).
- Zubek, JF and Forsblom, L. *Teaching General Conditioning Activities*. Michigan State University (1998).

## **Clinical Experience**

- Student Physical Therapist Subacute, Long term care, Geriatrics. Burcham Hills Health Center. East Lansing, Michigan. 560 hrs (2008).
- Student Physical Therapist Acute care, Wound care, Lymphedema. Owosso Memorial Healthcare, Owosso, Michigan. 560 hrs (2007).
- Student Physical Therapist Outpatient orthopedics. Eaton Rapids Medical Center, Eaton Rapids, Michigan, 240 hrs (2006).
- Graduate Assistant/Exercise Lab Technician Human Energy Research Laboratory, Michigan State University. 460 hrs (1997-1998).
- Exercise Specialist Phase III Cardiac Rehabilitation, Jewish Community Center, Beachwood, Ohio (1997).

### **Professional Development**

- CTLI Spring Conference Michigan State University (2022-2024)
- Ally Quick Tips & Captioning Basics. Natalie Vandepol (2022)
- Accommodating Students with Invisible Disabilities. Shelby Gombosi (2022)
- Center for Physiology Education Community Townhall. American Physiological Society event (2022)
- More than a square: Students add dimension to their digital learning experiences during the pandemic. Laura Bix Presenter (2021)
- The Types of Disabilities that Affect MSU Students. Natalie Vandepol (2021)
- What do we keep, lessons learned from remote teaching and learning? Margaret Stieben (2021)
- Dig-IN meeting of D2L Tech invited presenter with Chris Shaltry for incorporating SCORM modules into online teaching (2020)
- First Day of Class: Success on Day 1, Success Throughout. Kelly Millenbah (2019)
- Accelerate your Grading: Software Solutions for Online Grading. Geffrey Recketenwald and Stephen Thomas (2019)
- STEM Essentials Workshops
  - Assessments to Engage Students w/Three-Dimensional Learning (2016)
  - Impact of UG Research (2017)
  - Learning Narratives from Students of Color (2017)
  - Using Objects in Teaching (2017)
  - Design with the end in mind (2017)
  - Technology Tune-up (2018)
  - Thriving as a Fixed Term Faculty (2018)
  - Developing Models in an Introductory Cell and Molecular Biology Course (2018)
- Improving Critical Thinking and Writing Through Scientific Literature Review. Kellie Walters and Roberto Lopez (2018)
- HUB Teaching and Learning Technology Symposium (2018)
- The Frugal Spartan: Strategies for Teaching Science Practices Using Free Technologies at MSU. Stephen Thomas (2018)
- Making your Online Presence Known. Chris Shaltry and Steven Thomas (2018)
- Identification and Treatment Techniques Using Myofascial Release 8 hrs. (2018)

- Rehab Professional's Guide to Pharmacology: Non-Pharmacological and Pharmacological Methods to Treat Pain 1 hr. Summit Education. 10/6/18.
- Shoulder Disorders | Diagnosis, Management and Evidence-Based Treatment 6 hrs. Summit Education.
- Patients with Emotional Instability-8 hrs, Institute Natural Resources (Summer 2013).
- The Eden Alternative Training 14 hrs, Burcham Hills Retirement Center (2008).
- Writing for Publication- 48 hrs training, Lansing Community College (2004).
- Certificate of completion 60 hrs of Online Instructor Training, MVU (2003).

# **Other Research - Principal Investigator**

- Vacuum Assisted Closure in a Patient with a Dehisced and Infected Post Mastectomy Incision. Gale Capehart, Advisor. Central Michigan University, Mt. Pleasant, MI (2007). Doctoral Case Report Submission.
- Assisted Ambulation in a Resident with Bilateral CVA Who Was Essentially Quadriplegic. Karen Grossnickle, Advisor. Central Michigan University, Mt. Pleasant, MI (2008). Doctoral Case Report Submission.

## **Co-Investigator**

- *The Learning of Successful Chopstick Use by Beginners: a motor control study.* Central Michigan University, Mt. Pleasant, MI (2006).
- Evaluation of the *PATCH<sup>TM</sup> Goes to School Program on changing health behaviors of schoolchildren.* Ingham Regional Healthcare Foundation and Michigan State University. Dr. James Pivarnik, Research Director and Grant Recipient (2005).
- *Prediction of Success in High School Heavyweight Wrestlers*. Dr. James Pivarnik, Project Advisor. In partial fulfillment of the requirements for Master of Science in Kinesiology at Michigan State University, East Lansing, MI (2000).

# **Research Data Collection/Test Technician**

- *Sudden Death in Young Athletes Research Study*. Ingham Regional Medical Center. Dr. David Strobl, D.O. Medical Director (2002-2005).
- *Prostate Cancer Screening Initiative and Outreach.* Ingham Regional Medical Center. Dr.Terrance Frank, Medical Director. (2002-2005).
- Title *The use of the compression sock on metabolism, cardiac output, and core temperature during cycling*. Michigan State University. Dr. James Pivarnik, Research Director. (Spring 1999).
- Title *Effect of the compression sock on vertical jump before and after running fatigue.* Michigan State University. Dr. James Pivarnik, Research Director. (Fall 1998).
- Title *The use of "Bio-Grip" on walking and running performance*. Michigan State University. Dr. James Pivarnik, Research Director. (Summer 1998).

- Title *The use of the compression sock on aerobic capacity and running economy,* Michigan State University. Dr. James Pivarnik, Research Director. (Spring 1998).
- Title *Walking economy using the Wolverine hiking boot*. Michigan State University. Dr. James Pivarnik, Research Director. (Fall 1997).
- Title *The effect of added weight on pull-up performance*. A scaling effect. University of Dayton. Dr. Paul Vanderburgh, Research Director. (Fall 1996).

## **Current Certifications**

• BLS Certified – American Red Cross (Current).

## Affiliations

### **Professional Memberships:**

- American Physical Therapy Association (APTA)
- Michigan Physical Therapy Association (MPTA)
- Human Anatomy and Physiology Society (HAPS)
- Michigan Physiological Society (MPS) Treasurer (2022–present)
- American College of Sports Medicine (ACSM, 2004)
- North American Society for Pediatric Exercise Medicine (2004–2005)

## **Student Memberships:**

- ACSM National and Midwest Chapters (1996–1999)
- American Physiological Society (1997–1998)
- Cardiovascular and Respiratory Physical Therapy Section of APTA

### **Conference Attendance**

# American College of Sports Medicine (ACSM):

- National Meetings: Cincinnati, OH (1996); Orlando, FL (1998); Seattle, WA (1999); Indianapolis, IN (2004)
- Midwest Chapter Meetings: South Bend, IN (1997); Cleveland, OH (1998); Toledo, OH (2012); Grand Rapids, MI (2018)
- Michigan Chapter Meetings: Gaylord, MI (1998, 2005)

# Michigan Physical Therapy Association (MPTA):

- Fall Annual Conferences: Frankenmuth, MI (2008); Grand Rapids, MI (2019, 2022); Detroit, MI (2023, 2024)
- Pain Summit: Ypsilanti, MI (2019)
- Virtual Conferences: (2020)

# Human Anatomy and Physiology Society (HAPS):

Annual Conferences: Salt Lake City, UT (2017); Columbus, OH (2018); Portland, OR (2019); Virtual (2020)

# Michigan Chapter of the American Physiological Society (MPS):

Annual Conferences: Detroit, MI (2016); Alma, MI (2017); Mt. Pleasant (2019), Alma, MI (2023), Rochester, MI (2024).

# **ADI Brain Trust:**

• Conferences: Boston, MA (2017); Chicago, IL (2018); Virtual (2021).

- American Physiological Society (APS):
  - Annual Summits: (2023–2024)

# **Other Service**

- APTA- MI Chapter Federal Affairs Liaison (2024-current).
- President Elect, Michigan Physiological Society (2024-current).
- Science Olympiad National Director for Division B Anatomy & Physiology (2024).
- Michigan Physiology Society Treasurer (2022 2024).
- APTA- MI Chapter Legislative Action Committee Co-Chair (2019--2024).
- Michigan State Science Olympiad State Coordinator Division B Anatomy & Physiology (2019 2023).
- PSL 475 Capstone Undergraduate Poster Presentation Judge (2018-2021).
- PHuN Day Station Leader "Be a Doctor," "CPR." (2017, 2018).
- MSU Math, Science and Technology Summer camp 5 minutes with a Physiologist. Exercise and Metabolism Lab. 7/18/17
- Cerebral Palsy Outreach Network (CPON) within the Department of Epidemiology, MSU. Principal Investigator Dr. Nigel Paneth. (2016 2023).
  - Attend research meetings with independent activities consisting of participant recruitment and protocol scoring for validity various CP mobility assessments.
- Guest Instructor for Gifted and Talented Summer Science Camp, Lansing Community College (Summers 2002-2007).
- Volunteer, Ingham Regional Healthcare Foundation (2002-2004).
- Event supervisor for Science Olympiad, Lansing Community College (2000-2004).
- Event co-supervisor for Science Olympiad state competition, Michigan State University (Spring 1999).