

CURRICULUM VITAE Sara P. Gombatto

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EDUCATION

August, 2007 Ph.D.

August, 1999 M.S., P.T.

May, 1998 B.S.

TEACHING POSITIONS

Fall 2017 - Present San Diego State University

Fall 2013 – Spring 2017 San Diego State University

Fall 2007 – Summer 2013 Nazareth College

RESEARCH POSITIONS

POSITIONS

Fall 2013 – Spring 2017 University of California San Diego

Fall 2002 – Summer 2007 Washington University in St. Louis

CLINICAL POSITIONS

2011 – 2013 Clover Physical Therapy (Rochester, NY)

2002 – 2003 Aquatic Fitness Physical Therapy (St. Louis, MO)

2001-2002 Finger Lakes Physical Therapy (Ithaca, NY) Washington University in St. Louis Movement Science

Ithaca College Physical Therapy

Ithaca College Clinical Science

Associate Professor Doctor of Physical Therapy Program

Assistant Professor Doctor of Physical Therapy Program

Assistant Professor, tenure awarded Physical Therapy Department

Visiting Research Scientist, Co-Investigator Departments of Radiology and Orthopaedics

Research Assistant Department of Physical Therapy

Physical Therapist (part-time) Outpatient Physical Therapy Clinic

Physical Therapist (part-time) Outpatient Physical Therapy Clinic

Physical Therapist (full-time) Outpatient Physical Therapy Clinic

PROFESSIONAL LICENSURE

California, Physical Therapy License # PT291575 (July 15, 2016-present) New York State, Physical Therapy License # 020896-1 (2000-2021) Missouri, Physical Therapy License # 2002016788 (2002-2008)

PROFESSIONAL GROWTH

Refereed Journal Articles †publications involving students **After Tenure**

 Ortega S, Ibarra S, Pierce B, Levy S, Gombatto SP: Kinematic and Kinetic Factors Associated with Leg Reach Asymmetry During the Star Excursion Balance Test in Division I Athletes; *Physical Therapy in* Sport, 45(9):63-70, Sep 2020. (PMID: 32634730) † <u>Teaching Significant Item #2</u> Impact Factor (2020): 2.365; International Journal; *Ranking*: 31st in Rehabilitation, 50th in Sports

Sciences; In my role as senior author, I was involved with conceptualization of this project, data collection and processing, data analysis and manuscript writing.

 Berry DB, Hernandez A, Onodera K, Ingram N, Ward SR, Gombatto SP: Lumbar spine angles and intervertebral disc characteristics with end-range positions in three planes of motion in healthy people using upright MRI. *Journal of Biomechanics*, 89(5):95-104, 2019. (PMID: 31047693) † <u>Professional Growth</u> Significant Item #3

Impact Factor (2020): 2.712; International Journal; *Ranking*: 57st in Engineering/Biomedical; Journal of the American Society of Biomechanics and International Society of Biomechanics; In my role as senior author, I was involved with conceptualization of this project, acquisition of funding, data collection and processing, data analysis and manuscript writing.

 Tuttle LJ, Fasching J, Keller A, Patel M, Saville C, Schlaff R, Walker A, Mason M, Gombatto SP: Noninvasive Treatment for Postpartum Diastasis Recti Abdominis. *Journal of Women's Health Physical Therapy*, 42(2):65-75, May/August 2018.[†]

No *impact factor* available. The journal is indexed in OVID and CINAHL. The Journal of Women's Health Physical Therapy is the official publication of the American Physical Therapy Association's Academy of Pelvic Health. It is a peer reviewed publication focusing on the clinical interests of physical therapists and those providing health care for women. The journal is published in the United States. In my role as senior author, I was involved with data analysis, data interpretation, and manuscript writing.

 Mitchell K, Porter M, Anderson L, Phillips C, Arceo G, Montz B, Levy S, Gombatto SP: Differences in lumbar spine and lower extremity kinematics in people with and without low back pain during a step-up task: a cross-sectional study. *BMC Musculoskeletal Disorders*, 18(1): 1-9, 2017. (PMID: 28841866) † *Brofossional Growth Significant form #4*

Professional Growth Significant Item #4

Impact Factor (3-year): 2.302; Open-Access, peer-reviewed journal indexed in Medline; In my role as senior author, I was involved with conceptualization of this project, acquisition of funding, data collection and processing, data analysis and manuscript writing.

 Farrokhi S, Mazzone B, Schneider M, Gombatto SP, Highsmith J, Hendershot BD: The Biopsychosocial Correlates of Chronic Low Back Pain after Lower Limb Amputation. *Medical Hypotheses*, 108:1-9, 2017. (PMID: 29055379)

Impact Factor (2020): 1.538; peer-reviewed, international journal indexed in Medline. In my role as coauthor, I was involved with the literature review and manuscript writing.

 Flippin MA, Chen J, Harris J, Paxton E, Fithian D, Ward SR, Gombatto SP: Effect of body mass index on patient outcomes of surgical interventions for the lumbar spine. *Journal of Spine Surgery*, 3(3): 349-357, 2017. (PMID: 29057342)

No impact factor available; peer-reviewed, international journal indexed in Medline. In my role as senior author, I was involved with conceptualization of this project, data analysis and manuscript writing.

 Hernandez A, Gross K, Gombatto SP: Lumbar spine and lower extremity kinematics during a step down functional task in people with and people without low back pain. *Clinical Biomechanics*, May; 47:46-52, 2017. (PMID: 28600994) †

Impact Factor (2020): 2.063; International Journal, *Ranking*: 51st in Orthopedics, 66th in Engineering/Biomedical. In my role as senior author, I was involved with conceptualization of this project, acquisition of funding, data collection and processing, data analysis and manuscript writing.

 Gombatto SP, D'Arpa N, Landerholm S, Mateo C, O'Connor R, Tokunaga J, Tuttle L: Differences in kinematics of the lumbar spine and lower extremities between people with and without low back pain during the down phase of a pickup task, an observational study. *Musculoskeletal Science and Practice (formerly Manual Therapy)*, April; 28: 25-31, 2017. (PMID: 28171775) † <u>Professional Growth Significant Item #5</u> *Impact Factor* (2020): 2.52; *Ranking*: 27th in Rehabilitation; In my role as first author, I was involved with conceptualization of this project, acquisition of funding, data collection and processing, data analysis

and manuscript writing.

 Berry DB, Rodriguez-Soto A, Gombatto SP, Palombo L, Chung C, Jensen A, Kelly KR, Ward SR: Lumbar spine postures in marines during simulated operational positions. *Journal of Orthopaedic Research*, Oct; 35(10):2145-2153, 2017. (PMID: 28052435).[†]

Impact Factor (2020): 3.494; *Ranking*: 18th for orthopedics journals; In my role as co-author, I was involved with data collection, data interpretation and manuscript writing.

Before Tenure

10. Shahidi B, Parra C, Berry DB, Hubbard JC, **Gombatto SP**, Zlomislic V, Allen RT, Hughes-Austin J, Garfin S, Ward SR: Contribution of lumbar spine pathology and age to paraspinal muscle size and fatty infiltration. *Spine*, 42(8): 616-623, 2017. (PMID: 27517512)

Impact Factor (2015): 2.439; Ranking: 16th for orthopedics journals

 Mazzone B, Wood R, Gombatto SP: Spine kinematics during prone extension in people with and without low back pain and among classification-specific low back pain subgroups, *Journal of Orthopaedics and Sports Physical Therapy*, 46(7):571-579, 2016. (PMID: 27170528)

Impact Factor (2014): 3.63 5-year, 3.01 1-year; Ranking: 4th for rehabilitation journals

- Gombatto SP, Brock T, DeLork A, Jones G, Madden E, Rinere C: Lumbar spine kinematics during walking in people with and people without low back pain, *Gait & Posture*, 42(4):539-544, 2015. (PMID: 26380913) † *Impact Factor* (2014): 3.185 5-year, 2.752 1-year
- Berry DB, Rodríguez-Soto AE, Tokunaga JR, Gombatto SP, Ward SR: An endplate-based joint coordinate system for measuring kinematics in normal and abnormally shaped lumbar vertebrae. *Journal of Applied Biomechanics*, 31(6):499-503, 2015. †

Impact Factor (2014): 1.121 5-year, 0.984 1-year

14. Spoto MM, **Gombatto SP**: Diagnostic labels assigned to patients with orthopedic conditions and the influence of the label on selection of interventions – a survey of orthopedic clinical specialists. *Physical Therapy Journal*, 94(6):776-91, 2014.

Impact Factor (2013): 3.896 5-year, 3.245 1-year; *Ranking*: highest rated Physical Therapy Journal, 2nd for rehabilitation journals; *Acceptance Rate*: 25%

- Scholtes SA, Norton BJ, Gombatto SP, Van Dillen LR: Variables associated with performance of an active limb movement following within-session instruction in people with and people without low back pain. *BioMed Research International*, Article ID# 867983, <u>http://dx.doi.org/10.1155/2013/867983</u>, 2013. *Impact Factor* (2015): 2.134; *Acceptance Rate*: 30%
- 16. **Gombatto SP**, Norton BJ, Sahrmann SA, Strube MJ, Van Dillen LR: Factors contributing to lumbar region passive tissue characteristics in people with and people without LBP. *Clinical Biomechanics*, 28(3):255-261, 2013.

Impact Factor (2013): 2.589 5-year, 1.880 1-year

 Scholtes SA, Gombatto SP, Van Dillen LR: Differences in lumbopelvic motion between people with and people without low back pain during two lower limb movement tests. *Clinical Biomechanics*, 24(1):7-12, 2009. (PMID: 18990474)

Impact Factor (2009): 1.759

18. **Gombatto SP**, Klaesner JW, Norton BJ, Minor SD, Van Dillen LR: Validity and reliability of a system to measure passive tissue characteristics of the lumbar region during trunk lateral bending in people with and people without low back pain. *Journal of Rehabilitation Research and Development*, 45(9):1415-1430, 2008.

Impact Factor (2013): 1.688, first available

Gombatto SP, Scholtes SA, Norton BJ, Van Dillen LR: Differences in symmetry of lumbar region passive tissue characteristics between people with and people without low back pain. *Clinical Biomechanics*, 23(8):986-95, 2008. (PMID: 18590942)

Impact Factor (2008): 2.000

 Van Dillen LR, Bloom NJ, Gombatto SP, Susco TS: Hip rotation range of motion in people with and without low back pain who participate in rotation related sports. *Physical Therapy in Sport*, 9(2):72-81, 2008.[†]

Impact Factor (2008): 0.612

 Gombatto SP, Collins DR, Sahrmann SA, Engsberg JR, Van Dillen LR: Pattern of lumbar region movement during trunk lateral bending in two subgroups of people with low back pain. *Physical Therapy*, 87(4):441-454, 2007. (PMID: 17374634)

Impact Factor (2008): 2.190

- 22. Van Dillen LR, Gombatto SP, Collins DR, Engsberg JR, Sahrmann SA: Symmetry in timing of hip and lumbopelvic motion during hip lateral rotation in two different groups of people with low back pain. Archives of Physical Medicine and Rehabilitation, 88:351-360, 2007. Impact Factor (2008): 2.159
- 23. **Gombatto SP**, Collins DR, Sahrmann SA, Engsberg JR, Van Dillen LR: Gender differences in pattern of hip and lumbopelvic rotation in people with low back pain. *Clinical Biomechanics*, 21(3):263-271, 2006. *Impact Factor* (2008): 2.000

Refereed Conference Papers

Before Tenure

 Paladugu P, Hernandez A, Gross A, Su Y, Neseli A, Gombatto SP, Moon K, Ozturk Y: "A sensor cluster to monitor body kinematics," 2016 IEEE 13th International Conference on Wearable and Implantable Body Sensor Networks (BSN), IEEE, 212-217, 2016.[†]

Journal Articles in Process

- 1. Taylor J, Greenwood D, **Gombatto SP**, Barnes H, Ford K: Quantifying external load and injury occurrence in women's collegiate volleyball players across a competitive season, *revision re-submitted to Journal of Strength and Conditioning Research, August 20, 2021.*
- 2. Weisenberger K, Ingram N, Rauh MJ, **Gombatto SP**: Are frontal plane knee and ankle kinematics associated with lateral ankle sprains? A preliminary study; *revision in progress for submission to International Journal of Sports Physical Therapy.* †
- Ingram N, Wright A, Antosz E, Murczek K, Taylor J, Rauh M, Gombatto SP: Jump Loads and Incidence of Lower Extremity Injury in Women's Collegiate Volleyball Athletes, *in preparation for submission to Scand J* Med Sci Sports. †
- 4. Ortega S, De La Rosa D, Delloro L, Ip G, Orena D, Schmidt B, Tuttle, **Gombatto SP**: Factors that influence asymmetry of impact load during a drop vertical jump in Division I Collegiate Men's Basketball Athletes, *in preparation for submission to Medicine & Science in Sports & Exercise*. †
- 5. **Gombatto SP**, Hernandez Y, Van Dyke J, Liu J, Maluf KS: Efficacy of an Adapted Cognitive Behavioral Telerehabilitation Program for Hispanics/Latinos with Chronic Spine Pain Protocol for the GOALS/Metas Randomized Clinical Trial; *manuscript in preparation for submission*.
- 6. **Gombatto SP**, Rodriguez C, Hernandez Y, Dionicio P, Pierce B, Sanchez-Rojas C, Van Dyke J, Liu J, Maluf KS: An Adapted Cognitive Behavioral Telerehabilitation Program for Hispanics/Latinos with Chronic Spine Pain – A Case Series for the GOALS/Metas Intervention; *manuscript in preparation for submission*.
- Gombatto SP, Lin SF, Dionicio P, Khasira M, Mann S, Van Dyke J, Liu J, Maluf K: Social Determinants of Adherence to Physical Therapy Referral in Patients with Musculoskeletal Pain at a Federally-Qualified Health Care Center – Results of a Patient Survey; data analysis in progress. †

- Dionicio P, Lin SF Rodriguez C, Khasira M, Mann S, Van Dyke J, Liu J, Maluf K, Gombatto SP: Factors Influencing Satisfaction with Physical Therapy Intervention in Patients with Musculoskeletal Pain at a Federally-Qualified Health Care Center – Results of a Patient Survey; data analysis in progress. †
- Cobian Aguilar R, Garcia-Alcaraz C, Roesch SC, Gombatto SP, Wells KJ: Confirmatory Factor Analyses of a New Spanish Translation of the Pain Catastrophizing Scale; manuscript in preparation for submission to the Journal of Pain. †
- 10. Finlayson TL, **Gombatto SP**, Liu J, Baig A, Wooten WJ, Armenta KL, Ayala GX: Partnership Engagement in Transdisciplinary Health Disparities Research: The SDSU HealthLINK Center, in preparation for submission to Int J Enviorn Res Public Health.

Refereed Conference Abstracts

- Gregorio-Pascual P, Dionicio P, Rodriguez C, Hernandez Y, Van Dyke J, Gombatto SP, Maluf K: "Optimizing Delivery and Determinants of Health Behavior Change in a Cognitive-Behavioral TeleRehabilitation Program for Hispanics with Chronic Spine Pain: A RAPID Qualitative Study" presentation at the LeaRRn & CoHSTAR Virtual Institute, "Shaping the Future of TeleRehabilitation through Research", April 2021.(PL)†
- Hernandez Y, Rodriguez C, Pierce R, Sanchez-Rojas C, Khasira M, Liu J, Maluf K, Gombatto SP: "Outcomes of an Adapted Cognitive-Behavioral TeleRehabilitation Program for Hispanics with Chronic Spine Pain: A Case Series" poster presentation at the LeaRRn & CoHSTAR Virtual Institute, "Shaping the Future of TeleRehabilitation through Research", April 2021. (PO)†
- Dionicio P, Hernandez Y, Khasira M, Liu J, Pierce R, Rodriguez C, Sanchez-Rojas C, Van Dyke J, Maluf K, Gombatto SP: "Determinants of Behavior Change and Outcomes of a Culturally Adapted Cognitive-Behavioral TeleRehabilitation Program for Hispanics with Chronic Spine Pain – a Pilot Study" presentation at the Research Centers in Minority Institutions Consortium National Conference, Virtual Conference, March 2021. (PL)†
- 4. Nelson-Wong EJ, Callaghan JP, Gombatto SP, Armour Smith JR: "Spinal Biomechanics from Lab to Clinic: What We've Learned and Where to Go from Here?" presentation Sponsored by the Academy of Physical Therapy Research Biomechanics Special Interest Group at 2021 Combined Sections Meeting, American Physical Therapy Association, Virtual Conference. (Peer-Reviewed Educational Presentation) <u>Teaching Significant Item #5</u>
- Alcaraz AR, Union LM, Postma DJ, Williams SJ, Shutts CR, Harris JL, Taylor N, Maluf KS, Gombatto SP: "The Association Between Fear of Movement and Movement Behavior in People with Chronic Low Back Pain: A Case Series", accepted to International Association for the Study of Pain World Congress on Pain 2020, in-person conference cancelled.(not presented)†
- Maluf K, Kettenburg P, Khasira M, Lewman B, Lui J, Mann S, Van Dyke J, Zepeda Y, Zinn J, Gombatto SP: "Factors Predicting Non-Adherence to Physical Therapy Referral for Spine Pain in a Federally Qualified Health Center", accepted to International Association for the Study of Pain World Congress on Pain 2020, in-person conference cancelled. (not presented)†
- Union LM, Taylor N, Justin KJ, Gombatto SP: "Reliability of clinical and ecological measures of lumbar posture and movement using portable motion sensors," presented at 2020 Combined Sections Meeting, American Physical Therapy Association, Denver, CO. (PO)[†]
- Ortega SL, Ibarra S, Pierce RC, Levy SS, Gombatto SP: "Factors Associated with Leg Reach Asymmetry During the Star Excursion Balance Test in Division-I Athletes," *J Orthop Sports Phys Ther* 2020; 50(1):CSM218. 2020 Combined Sections Meeting, American Physical Therapy Association, Denver, CO. (PO) †
- Rosenthal MD, Gombatto SP, Prescher K: "Medical Screening Utilization in Physical Therapy Clinical Education - a Survey of DPT Students and Clinical Instructors," presented at 2019 APTA Educational Leadership Conference, Bellevue, WA. (PO)
- 10. Roeser S, Hernandez A, Ransone K, Turner C, Weber M, Brunner R, Atkins B, **Gombatto SP**: "Lumbar Spine Posture and Movement During Daily Activities Using Ecological Monitoring in People with Chronic

Low Back Pain – A Case Series," presented at 2019 Combined Sections Meeting, American Physical Therapy Association, Washington, DC. (PO)†

- 11. Gross K, Schneider K, Hernandez A, Paladugu P, Sathyamoorty K, Moon K, Ozturk Y, Gombatto SP: "Reliability and validity of a low-profile mobile sensor system for ecological monitoring of lumbar spine posture and movement", presented at 2018 Combined Sections Meeting, American Physical Therapy Association, New Orleans, LA. (PO)†
- Nalbandian S, Medicke M, Lovell B, Bancells K, Ingram N, Ibarra S, Abdenour T, Rosenthal M, Gombatto SP, "High flexion movement pattern associated with patellar tendinopathy and low back pain in NCAA division I men's basketball players a case series," *J Orthop Sports Phys Ther* 2018;48(1):A249-250. 2018 Combined Sections Meeting, American Physical Therapy Association, New Orleans, LA. (PO)†
- 13. Weisenberger K, Martens M, Fellow J, Beerbaum S, Ingram N, Ibarra S, Abdenour T, Rauh M, Gombatto SP, "Knee varus movement pattern associated with history of lateral ankle sprains in NCAA division I men's basketball players a case series," *J Orthop Sports Phys Ther* 2018; 48(1):A271. 2018 Combined Sections Meeting, American Physical Therapy Association, New Orleans, LA. (PO)†
- McCabe S, O'Brien B, Ruiz F, Cozine E, Gombatto S, Rauh MJ, "Sport specialization in high school crosscountry runners." J Orthop Sports Phys Ther 2018;48(1):A49. 2018 Combined Sections Meeting, American Physical Therapy Association, New Orleans, LA. (PL)[†]
- Berry DB, Rodriguez-Soto AE, Gombatto SP, Shahidi B, Chung C, Ward SR: "Lumbar Spine Postures in Marines During Simulated Operational Positions," Orthopedic Research Society Annual Meeting, San Diego, CA, March 2017. (PL)
- Mazzone B, Stewart J, Gombatto SP: "Lumbopelvic Kinematics During Forward Bending in People With and Without Low Back Pain," Orthopedic Research Society 2017 Annual Meeting, San Diego, CA, March 2017. (PO)
- 17. Mitchell K, Porter M, Anderson L, Arceo G, Phillips C, Montz B, Gombatto SP: "Differences in Lumbar Spine and Lower Extremity Kinematics in People With and Without Low Back Pain During a Functional Step-Up Task," *J Orthop Sports Phys Ther* 2017;47(1):A19. 2017 Combined Sections Meeting, American Physical Therapy Association, San Antonio, TX. (PL by invitation)†
- Carper E, Beachy G, Akau C, Gombatto S, Rauh M: "Incidence of Injury in Interscholastic Basketball Players: A 25-year Longitudinal Study," J Orthop Sports Phys Ther 2017;47(1):A171-172. 2017 Combined Sections Meeting, American Physical Therapy Association, San Antonio, TX. (PO)†
- Schlaff R, Saville C, Patel M, Walker A, Keller A, Fasching J, Mason-Cover M, Gombatto SP, Tuttle L: "Postpartum Diastasis Recti Abdominis: Treatment and Functional Implications," presented at APTA Combined Sections Meeting, San Antonio, TX, February 2017. (PO)†

Before Tenure

- 20. Stambaugh JR, Rodriguez-Soto A, Berry D, Parra C, Gombatto SP, Kelly K, Ward S: "Structural Adaptations of Paraspinal Musculature in Active-Duty Marines With Intervertebral Disc Degeneration," Society of Military Orthopedic Surgeons, December 2016.[†]
- 21. Hernandez A, Gross K, **Gombatto SP**: "Differences in lumbar spine and lower extremity kinematics between people with and without low back pain during a step down functional task," presented at the American Society of Biomechanics (ASB) Annual Conference, Raleigh, NC, August 2016. (PO)† **Hernandez was awarded a competitive ASB Diversity Award to fund her conference attendance.*
- 22. Gombatto SP, D'Arpa N, Landerholm S, Mateo C, O'Connor R, Tokunaga J: "Differences in kinematics of the lumbar spine and lower extremities between people with and without low back pain during a pick up task." Journal of Orthopaedic and Sports Physical Therapy, 46(1): A91-92, 2016. Presented by students at APTA Combined Sections Meeting, Anaheim, CA, February 2016. (PO)†
- 23. Arceo G and Gombatto SP: "Prevalence of impairments, pain, and symptom change with impairment modification using a movement system impairment examination for low back pain," Journal of Orthopaedic and Sports Physical Therapy, 46(1): A60-61, 2016. Presented by Arceo at APTA Combined Sections Meeting, Anaheim, CA, February 2016. (PO)†

- 24. Flippin MA, Chen J, Harris J, Fithian D, Ward SR, **Gombatto SP**: "Effect of body mass index on intraoperative outcomes and complications of instrumented lumbar spine surgery," presented by Flippin at North American Spine Society Conference, Chicago, IL, October 2015. (*e*PO)
- 25. Rubin JL, Berry DB, Ward SR, **Gombatto SP**: "Lumbar spine kinematics for end-range trunk positions in healthy individuals using upright MRI," presented at American Society of Biomechanics Conference, Columbus, OH, August 2015. (PO)†
- 26. Flippin MA, Chen J, Harris J, Fithian D, Ward SR, Gombatto SP: "Effect of obesity on complications of spinal surgery related to mechanical factors including re-operation rate and adjacent segment disease," presented by Flippin at International Society for the Study of the Lumbar Spine Meeting, San Francisco, CA, June 2015. (PL)
- 27. Rodriguez-Soto AE, Stambaugh J, Su J, Berry D, **Gombatto SP**, Kelly K, Ward SR: "Spinal Muscle Quality Changes in Physically Active Individuals with Disc Degeneration," presented by Rodriguez-Soto at Orthopaedic Research Society, Las Vegas, NV, March 2015. (PO)†
- 28. Berry DB, Rodríguez-Soto AE, Tokunaga JR, **Gombatto SP**, Ward SR: "An Endplate-Based Joint Coordinate System for Measuring Kinematics in Normal and Abnormally Shaped Lumbar Vertebrae," presented by Berry at Orthopaedic Research Society, Las Vegas, NV, March 2015. (PO)†
- 29. Mazzone BM, Wood RW, **Gombatto SP**: "Spine Kinematics During Prone Extension in People With and Without Low Back Pain," Journal of Orthopaedic and Sports Physical Therapy, 45(1): A108-109, 2016. Presented at APTA Combined Sections Meeting, Indianapolis, IN, February 2015. (PO)
- 30. Gombatto SP, Brock T, DeLork A, Jones G, Madden E, Rinere C, Wood R: "Lumbar Spine Kinematics During Walking in People With and People Without Low Back Pain," Journal of Orthopaedic and Sports Physical Therapy, 45(1): A120, 2016. Presented at APTA Combined Sections Meeting, Indianapolis, IN, February 2015. (PO) †
- 31. Berry DB, Rodriguez-Soto AE, Gombatto SP, Jaworski R, Kelly KR, Ward SR: "Lumbar Spine Postures in Marines During Simulated Operational Conditions," Presented by Berry at World Congress of Biomechanics, Boston, MA, June 2014. (PO) †
- 32. **Gombatto SP**, Ellis M, Joyce C, Linske, G Muehlenkamp P: "Validity and reliability of a multi-segmental lumbar spine model using a 3D motion analysis system." Presented in Research Section, at APTA Combined Sections Meeting, San Diego, CA, February 2013. (PO) †
- 33. Chau C, Gombatto SP, Flannery J, Mancuso K, Merrill-Blew C, Pilc C: "Locomotion and Skilled Locomotion in Typically Developing Five- to Six-Year-Old Children II: Obstacle Walking." Presented by Chau at Society for Neuroscience Conference, New Orleans, LA, 2012. (PO) †
- 34. Wood R, **Gombatto SP**: "Physical Therapy management of a patient with chronic low back pain using the movement system approach: clinical, laboratory, and self-report measures." Journal of Orthopaedic and Sports Physical Therapy, 42(1):A83, 2012. Presented at APTA Combined Sections Meeting, Chicago, IL, February 2012. (PO)
- 35. Hertline KH, Siracuse J, **Gombatto SP**: "Kinematics and Muscle Activation of the Low Back and Hip in Lacrosse Players with and without Low Back Pain." Presented at NYPTA Conference, 2012. (PL)
- 36. **Gombatto SP**, Sahrmann SA, Scholtes SA: "Hip and Low Back Interactions in Patients with Low Back Pain." Program Presentation at APTA Combined Sections Meeting, New Orleans, LA, February 2011.
- 37. **Gombatto SP**, Wood R: "Relationship between low back pain classifications using three different systems pilot clinical data." Presented at NYPTA Conference, Rye, NY, 2011. (PO)
- 38. Gombatto SP, Fuller MA, Lewis DJ, Jamieson CM, Zanghi LM: "Differences in lower lumbar region rotation between people with and without low back pain during walking – a pilot study," Journal of Orthopaedic and Sports Physical Therapy, 41(1):A60, 2011. Presented at APTA Combined Sections Meeting, New Orleans, LA, February 2011. (PO)†
- 39. **Gombatto ŠP**, Kroll ME, McCallum KE, Schiffer MN: "Relationship between lumbar region kinematics during a clinical test and a functional activity in people with and without low back pain," presented at Canadian Society of Biomechanics, Kingston, ON, June 2010. (PO) †
- 40. Scholtes SA, Norton BJ, Van Dillen LR, **Gombatto SP**: "Prediction of ability to modify lumbopelvic motion in people with and people without low back pain," Journal of Orthopaedic and Sports Physical Therapy, 40(1):A36, 2010. Presented at APTA Combined Sections Meeting, Boston, MA, February 2010. (PO)
- 41. Scholtes SA, Norton BJ, **Gombatto SP**, Van Dillen LR: "The relationship between lumbopelvic motion displayed during active and passive hip lateral rotation in people with and people without low back pain,"

Journal of Orthopaedic and Sports Physical Therapy, 40(1):A82, 2010. Presented at APTA Combined Sections Meeting, Boston, MA, February 2010. (PO)

- 42. Miller-Spoto M, **Gombatto SP**: "Integration of joint mobilization/manipulation and the diagnosis and treatment of movement system impairments of the lumbar spine." Program Presentation at APTA Combined Sections Meeting, Las Vegas, NV, February 2009.
- 43. **Gombatto SP**, Norton BJ, Šahrmann SA, Strube MJ, Van Dillen LR: "Factors predicting lumbar region passive elastic energy in people with and people without low back pain," Journal of Orthopaedic and Sports Physical Therapy, 39(1):A92-93, 2009. Presented at APTA Combined Sections Meeting, Las Vegas, NV, February 2009. (PO)
- 44. **Gombatto SP**, Scholtes SA, Norton B, Van Dillen LR: "Differences in passive tissue characteristics of the lumbar region during trunk lateral bending between people with and people without low back pain," Journal of Orthopaedic and Sports Physical Therapy, 38(1):A63, 2008. Presented at APTA Combined Sections Meeting, Nashville, TN, February 2008. (PO)
- 45. Scholtes SA, **Gombatto SP**, Van Dillen LR: "Gender Differences in Timing of Lumbopelvic Movement During the Clinical Test of Active Knee Flexion," Journal of Orthopaedic and Sports Physical Therapy, 38(1):A69, 2008. Presented at APTA Combined Sections Meeting, Nashville, TN, February 2008. (PO)
- 46. **Gombatto SP**, Klaesner JW, Norton BJ, Scholtes SA, Van Dillen LR: "Reliability and validity of a system to measure in vivo passive stiffness and extensibility of the trunk in people with and without low back pain," Presented at World Congress for Low Back and Pelvic Pain, Barcelona, Spain, November 2007. (PO)
- 47. Scholtes SA, **Gombatto SP**, Van Dillen LR: "A System for Measuring Passive Tissue Stiffness and Extensibility of the Hip," Journal of Orthopaedic and Sports Physical Therapy, 37(1):A61, 2007. (PO)
- 48. **Gombatto SP**, Zou D, Sahrmann SA, Van Dillen LR: "Trunk passive stiffness with trunk lateral bending in two subgroups of people with low back pain," Journal of Orthopaedic and Sports Physical Therapy, 36(1):A39, 2006. Presented at APTA Combined Sections Meeting, San Diego, CA, February 2006. (PO)
- Bloom NJ, Gombatto SP, Susco TJ, Van Dillen LR: "Hip rotation range of motion in people with and without low back pain who participate in rotation-related leisure activities," Journal of Orthopaedic and Sports Physical Therapy, 36(1):A30, 2006. (PO)
- 50. Scholtes SA, **Gombatto SP**, Sahrmann SA, Van Dillen LR: "A pilot study of the effect of impairment-based exercise on kinematics with trunk lateral bending in people with low back pain," Journal of Orthopaedic and Sports Physical Therapy, 36(1):A56-A57, 2006. (PO)
- 51. **Gombatto SP**: "Differences in lumbar motion during trunk lateral bending between people in two low back pain classifications." Presented at Marilyn Gossman Seminar, APTA Combined Sections Meeting, New Orleans, LA, February 2005. (PL)
- 52. Sahrmann SA, Van Dillen LR, **Gombatto SP**. Movement system impairment-based classifications of low back pain. ACRM-ASNR Joint Conference, Ponte Vedra Beach, FL, 2004.
- 53. **Gombatto SP**, Collins DR, Sahrmann SA, Engsberg JR, Lenke LG, Van Dillen LR: "Gender differences in coordination of pelvic and hip motion in people with and without low back pain," Journal of Orthopaedic and Sports Physical Therapy, 34(1):A49, 2004. Presented at APTA Combined Sections Meeting, Nashville, TN, February 2004. (PO)
- 54. **Gombatto SP**, Collins DR, Sahrmann SA, Engsberg JR, Lenke LG, Van Dillen LR: "Symmetry in timing of pelvic and hip motion during hip lateral rotation in individuals with low back pain," Journal of Orthopaedic and Sports Physical Therapy, 34(1):A50, 2004. Presented at APTA Combined Sections Meeting, Nashville, TN, February 2004. (PO)
- 55. **Gombatto SP**, Fiore A. McKenzie Method Clinical Assistant: The Lumbar Spine. APTA National Conference, Washington, DC, 1999.

Invited Presentations

- 1. Ayala GX, **Gombatto SP**, House CD: "SDSU HealthLINK Center" presentation at the Research Centers in Minority Institutions Consortium National Conference, Virtual Conference, March 2021.
- Lin S, Gombatto SP, Aguilar RC, "Electronnic Data Capture Systems: REDCap Cloud & Qualtrics" HealthLINK Center Career Enhancement Seminar, November 2020.
- 3. **Gombatto SP**, "Movement Patterns in People with Low Back Pain" VA Medical Center La Jolla, Outpatient Physical Therapy Department, August 2017.

- "Science Fiction, Science Future", *Comic Con International* 2017, San Diego, CA, July 2017; invited panelists included Andy Weir (author of *The Martian*), Mike Johnson (writer, *Star Trek* comics) and Cindy Pon (author, *Want*), Dr. Stuart Lee (*NASA* scientist), Allison Hutchings (engineer), **Dr. Sara Gombatto** (Associate Professor, SDSU).
- 5. **Gombatto SP**, "Ecological Monitoring of Lumbar Spine Posture and Movement" SDSU Human Dynamics in the Mobile Age Lightning Talks, April 2017.

Before Tenure

- 6. **Gombatto SP**, "Limb and Trunk Movements in People With and People Without Low Back Pain." University of Waterloo, Department of Kinesiology Lecture Series, Waterloo, CA, March 2011.
- 7. **Gombatto SP**, "Classification of a Patient with Low Back Pain A Case Report." Finger Lakes District Meeting, Rochester, NY, April 2010.
- 8. **Gombatto SP**, "Movement impairments in people with low back pain." Washington University Program in Physical Therapy, St. Louis, MO, September 2004.
- 9. **Gombatto SP**, "Hip rotation impairments in people with low back pain." Washington University Medical School, Division of Occupational Health, St. Louis, MO, May 2004.
- 10. Van Dillen LR, **Gombatto SP**, "Update: Evidence for movement impairment tests used to examine people with LBP." Orthopedic Faculty Retreat, St. Louis, MO, March 2004.
- 11. **Gombatto SP**, Fiore A, "McKenzie Method Clinical Assistant: The Lumbar Spine." APTA National Conference, Washington, DC, June 1999.
- 12. **Gombatto SP**, "McKenzie Method Clinical Assistant: The Lumbar Spine." APTA Southern Tier District Meeting, Ithaca, NY, February 1998.
- 13. **Gombatto SP**, "McKenzie Method Clinical Assistant: The Lumbar Spine." James J. Whalen Academic Symposium, Ithaca, NY, March 1998.

Conference Abstracts in Process

After Tenure

- Garcia-Alcaraz, C., Roesch, S. C., Cobian Aguilar, R., Gombatto, S., Wells, K. J. Psychometric Evaluation of a Spanish Pain Anxiety Symptom Scale in Spanish-Speaking Mexican Americans with Chronic Pain. Submitted for presentation at the 43rd Annual Meeting & Scientific Sessions of the Society of Behavioral Medicine, September 2021.
- Garcia-Alcaraz, C., Roesch, S. C., Cobian Aguilar, R., Gombatto, S., Wells, K. J. Understanding the Pain Experience of Spanish-Speaking Mexican Americans with Chronic Pain. Submitted for presentation at the 43rd Annual Meeting & Scientific Sessions of the Society of Behavioral Medicine, September 2021.
- Aguilar Cobian R, Garcia-Alcaraz C, Roesch SC, Gombatto SP, Wells KJ. Confirmatory Factor Analyses of a New Spanish Translation of the Pain Catastrophizing Scale. Submitted for presentation at the 43rd Annual Meeting & Scientific Sessions of the Society of Behavioral Medicine, September 2021.

Funded Research Grants

After Tenure

- \$19,884,795 "SDSU HealthLINK Center for Transdisciplinary Health Disparities Research," NIMHD U54 (Center Principal Investigators Dr. Guadalupe X. Ayala and Dr. Kristen J. Wells), Co-Lead Investigator (Project MPI) for one of two Research Projects entitled "Culturally Adapted Cognitive Behavioral Based Physical Therapy for Latinos with Chronic Spine Pain" (\$2.3M total costs), awarded September 11, 2018. Professional Growth Significant Item #1
- \$35,143 "Validation of a Depth Sensor Camera System for Measuring Full Body Kinematics," Principal Investigator, Smith & Nephew, September 2021 – February 2022, *contract in progress*. <u>Professional</u> <u>Growth Significant Item #2</u>

9

Before Tenure

- 532,040 "Lumbar spine musculoskeletal physiology and biomechanics during simulated military operations," DOD (PRMRP/CDMRP), Co-Investigator (Ward SR, Kelly K, Co-Principal Investigators), 9/2013-9/2016.
- 2. \$9,656 "Validation of a Spine Motion Monitor for Measuring Lumbar Spine Posture & Movement," University Grants Program, **Principal Investigator**, SDSU, 1/2015-12/2016.
- \$8,424 "Spine Motion Monitor Application for Clinical Monitoring of Posture and Movement in People with Low Back Pain," President's Leadership Fund (Research Affairs), Principal Investigator, SDSU, 6/2015-6/2016.
- 4. \$9,155 "*Relationship between lumbar spine kinematics with 3D motion capture and magnetic resonance imaging*," University Grants Program, **Principal Investigator**, SDSU, 1/2014-12/2015.
- 5. \$1,500 Faculty Scholarship & Innovation Grant, PI, Nazareth College, 5/2012-5/2013.
- 6. \$5,000 Research Designated Fund, PI, New York Physical Therapy Association, 8/2010-1/2012.
- 7. \$1,750 Faculty Scholarship & Innovation Grant, PI, Nazareth College, 5/2010-8/2010.
- 8. \$1,675 Faculty Scholarship & Innovation Grant, PI, Nazareth College, 5/2009-8/2009.
- 9. \$2,000 Faculty Research & Scholarship Grant, PI, Nazareth College, 5/2008-8/2008.
- 10. \$15,000 Promotion of Doctoral Scholarship II, PI, Foundation for Physical Therapy, 2006-2007.
- 11. \$15,000 Promotion of Doctoral Scholarship II, PI, Foundation for Physical Therapy, 2005-2006.

12. \$7,500 – Promotion of Doctoral Scholarship I, PI, Foundation for Physical Therapy, 2004-2005.

13. \$7,500 – Promotion of Doctoral Scholarship I, PI, Foundation for Physical Therapy, 2003-2004.

Research Grants Submitted

- \$1,199,895 "MS-ADAPT: Multi-Sensor Adaptive Data Analytics for Physical Therapy," Farcas E (PI), Gombatto SP (Co-PI, SDSU subcontract PI), Loh K (Co-PI), Patrick K (Co-PI), submitted to NSF 21-530: Smart Health and Biomedical Research in the Era of Artificial Intelligence and Advanced Data Science (SCH), submitted February 16, 2021, application not funded.
- \$338,371 "Spine Health Improvement Program Monitoring, Assessment, Test and Evaluation System (SHIP-MATES)" SBIR to DOD-USAMRDC in collaboration with NexGen Aeronautics; Role: SDSU Principal Investigator, submitted in November 2019, application not funded.
- NSF Engineering Research Center for Prehabilitation and Rehabilitation Engineering: the Digital-twin and Innovations in Cyber Technologies (PREDICT); Application preparation funded through NSF planning grant; ERC Director: Loh K; Role: **Co-Principal Investigator**, pre-proposal submitted January 2019, not invited for full application.
- \$916,371 "Injury Prevention: Evidence-based sports biomechanics screening for injury prevention using Swift-SPORT mobile sensor system", Pac-12 Student-Athlete Health and Well-Being Grant Program; PI: Sangram Redkar, PhD (ASU); 3-years; Role: SDSU Principal Investigator, submitted in October 2018, application not funded.
- \$2,025,000 "Strategies and Sensors for Musculoskeletal Injury Risk Assessment and Mitigation Training (SMART)," Medical Technology Enterprise Consortium (MTEC), submitted to RPP MTEC-17-08-Multi-Topic "Military Operational Medicine" in collaboration with NexGen Aeronautic; 3-years; Role: SDSU Principal Investigator, submitted in October 2017, application not funded.
- 6. \$413,875 "Patterns of Posture and Movement Behavior in People with Chronic Recurrent Low Back Pain," NICHD R21, **Principal Investigator**, submitted June 2017, application not funded.
- \$525,000 "Multisensor system for accurate 3D measurement of lumbar spine posture/movement with a closed-loop feedback system for rehabilitation of low back pain," NSF-NIH Smart and Connected Health Program, **Principal Investigator**, submitted December 2016, application not funded.
- \$2,900,000 "The Use of Psychologically Informed Care and Trunk-Focused Movement Re-Education for Treatment of Low Back Pain after Lower Limb Amputation," submitted to DOD, CDMRP, PRORP Clinical Trial Award in collaboration with Lead PI Dr. Shawn Farrokhi, NMCSD, Role: Site Principal Investigator; pre-application accepted, full application submitted December 2016, application not funded.

Before Tenure

- \$702,921 "The role of tissue, posture and movement, and sensory-affective factors in the development of chronic-recurrent low back pain," NIH-NIAMS (K01), **Principal Investigator**, re-submission 11/2015; priority score of 33, proposals with scores up to 27 were funded.
- \$234,945 "Rehabilitation and biopsychosocial factors associated with low back pain after traumatic lower limb amputation," Bridging Advanced Developments for Exceptional Rehabilitation (BADER) Consortium (DOD, CDMRP, USAMRMC), **Co-Investigator**, submitted 11/2015; the BADER Consortium was not funded.
- 11. \$716,660 "The role of tissue, posture and movement, and pain processing in the development of chronic and recurrent low back pain," NIH-NIAMS (K01), **Principal Investigator**, submitted 10/2014; application not discussed.

Funded Training Grants

Before Tenure

- 1. \$5,690 Summer Undergraduate Research Program, PI, SDSU, 5/2016-8/2016.
- 2. \$3,000 Grants and Research Enterprise Writing Fellowship (GREW), SDSU, 11/2015-12/2015.
- 3. \$3,000 Summer Undergraduate Research Program, PI, SDSU, 5/2015-8/2015.

Scholarly Awards

Before Tenure

- 1. American Physical Therapy Association Emerging Leader Award (2009). The APTA honors physical therapists who have demonstrated extraordinary service early in his or her career and who have made exceptional overall accomplishments and contributions to the APTA and the profession to advance APTA's vision.
- Foundation for Physical Therapy Barnes-Leahy Scholarship (2004). This award is sponsored by the APTA Neurology Section to provide special recognition for a recipient of the Foundation for Physical Therapy Promotion of Doctoral Scholars I scholarship. The award recognizes excellence of a research proposal in the area of neurology, and was awarded for a project related to the motor control mechanisms underlying low back pain.

Participation in Professional Associations Before and After Tenure			
1.	American Society of Biomechanics	Member	2016-present
2.	North American Spine Society	Member	2015-2017
3.	APTA Sports Section	Member	2017-present
4.	APTA Research Section	Member	2003-present
5.	APTA Orthopaedics Section	Member	1999-present
6.	American Physical Therapy Association	Member	1996-present

TEACHING EFFECTIVENESS

Committee Chairperson After Tenure

2021-present	Kerry Simmonds, Alexandra Vonarb, Alyssa Holmes, Stephanie Lenz, Kimberly Whelehon, Juna Bouchekara, Monica Bari, Doctor of Physical Therapy, " <i>Changes in Lumbar Spine Posture and Movement with Physical Therapy Intervention for Low Back Pain.</i> "
2020-present	Patricia Dionicio, PhD Student in Public Health/Health Behavior, "Goal-Oriented Activity in Hispanics/Latinos with Chronic Spine Pain (GOALS)".
2020-present	Santiago Ortega, Leonardo Delloro, Gordon Ip, Benjamin Schmidt, Derek DeLarosa, Daniel Orena, Doctor of Physical Therapy, " <i>Impact Loads during a drop-vertical jump in collegiate athletes</i> ."
2019-2021	Andrew Gabriel, Noah Ingram, Delaney Porter, Nicole Reichenberger, Lindsey Rummings, Alina Wright, Doctor of Physical Therapy " <i>Association Between Jump Loads and Injuries in Collegiate Volleyball</i> ."
2018-2020	Alexis Alcaraz, Jessica Harris, Danielle Postma, Courtney Shutts, Lauren Union, Stephanie Williams, Doctor of Physical Therapy, " <i>Effect of psychological factors on posture and movement behavior in people with chronic-recurrent low back pain.</i> "
2017-2019	Santiago Ortega, Masters in Exercise Science, "Kinematic and Kinetic Relationships to Leg Reach Asymmetry During the Star Excursion Balance Test in Division I Athletes"
2017-2019	Brittany Atkins, Rex Brunner, Alejandra Hernandez, Katy Ransone, Sloane Roeser, Courtney Turner, Mariah Weber, Doctor of Physical Therapy, " <i>Ecological monitoring of</i> <i>lumbar spine posture and movement during daily activities in individuals with chronic low</i> <i>back pain: a case series.</i> "
2016-2018	Stasia Beerbaum, Benjamin Lovell, Sarah Nalbandian, Katie Weisenberger, DPT Research Project, Doctor of Physical Therapy, <i>"Knee varus movement pattern associated with history</i> of lateral ankle sprains in NCAA division I men's basketball players – a case series."
2016-2018	Kelsey Bancells, Jake Fellow, Mackenzie Martens, Michelle Medicke, Doctor of Physical Therapy, <i>"Insufficient flexion movement pattern associated with patellar tendinopathy and</i> <i>low back pain in NCAA division I men's basketball players – a case series."</i>
2015-2017	Lauren Anderson, Grayson Arceo, Katie Mitchell, Brian Montz, Carter Phillips, Madeline Porter, Doctor of Physical Therapy, <i>"Differences in lumbar spine and lower extremity</i> <i>kinematics in people with and without low back pain during a functional step up task, a</i> <i>cross-sectional study."</i>

Before Tenure

2014-2016	Natalie D'Arpa, Sarah Landerholm, Cassandra Mateo, Ryan O'Connor, Jana Tokunaga, Doctor of Physical Therapy, " <i>Differences in kinematics of the lumbar spine and lower</i>
0040 0045	extremities between people with and without low back pain during a pick up task."
2013-2015	Julianne Stewart, Gail Bachman, Clarissa Cooper, and Farzana Boman, Doctor of Physical Therapy, <i>"Relationship between sleep and circadian dysfunction and gait initiation impairment in Parkinson's disease."</i>
2012-2014	Tricia Brock, Anthony DeLork, Glynis Jones, Erin Madden, Chelsea Rinere, Doctor of Physical Therapy (Nazareth College), <i>"Lumbar spine kinematics during walking in different subgroups of people with low back pain and people without low back pain."</i>
2011	Ron Wood, Transitional Doctor of Physical Therapy (Boston University), " <i>Physical Therapy management of a patient with chronic lower back pain: a case-based analysis of clinical characteristics and outcomes of multiple intervention approaches.</i> "
2010-2012	Michael Ellis, Chris Joyce, Garrett Linske, Polly Muelenkamp, Doctor of Physical Therapy, "Validity and Reliability of a Multisegmental, 3-D Biomechanical Model of the Lumbar Spine."

2009-2011	Taryn Bader, Karen Bartlett, Ashley Clinton, Stephanie Hayduke, Jessica Parsons, Laura
	Perkins, Jenna Siracuse, Doctor of Physical Therapy, "Lumbar and hip kinematics and EMG
	in lacrosse players with and without low back pain."
2008-2010	Michelle Fuller, Lindsay Gonzalez, Courtney Jamieson, Daniel Lewis, Doctor of Physical
	Therapy, "Differences in lumbopelvic rotation between people with and without low back pain
	during locomotion."
2007-2009	Mark Kroll, Kara McCallum, Melissa Schiffer, Doctor of Physical Therapy, "Lumbar Region
	Movement Patterns During a Clinical Test and a Functional Activity."

Committee Member

After Tenure

- 2020-present Allie Boehmer, Alyssa Burkitt, Hannah Louis, Bess Pierson, Melissa Schulz, Annalise Thompson, Doctor of Physical Therapy, "*Factors related to sexual function across the lifespan.*"
- 2020-2021 Rosa Cobian Aguilar, Masters in Psychology, "Assessment of the psychometric properties of a new Spanish translation of the Pain Catastrophizing Scale among Spanish-speaking Mexican Americans."
- 2020 Kayla Fewster, PhD Thesis (University of Waterloo), External Examiner, "*Exploring low to moderate velocity motor vehicle rear impacts as a viable injury mechanism in the lumbar spine.*"
- 2019-2021 Rachel Jalanivich, Chad Rocha, Jessica Wagner, Brianna Ward, Shane Zuiker, Doctor of Physical Therapy, "Concentric vs. Isometric exercise training for women with fecal incontinence."
- 2018-2020 David Dellaserra, Matt Friedman, Paige Kettenburg, Brenna Lewman, Sydney Stuber, Jaime Zinn, Doctor of Physical Therapy, "*Factors influencing pain sensitivity in people with and without chronic pain conditions.*"
- 2017-present Chelsea Chapman, PhD in Public Health/Health Behavior, "Role of patient-provider communication on clinical outcomes of rehabilitation for chronic pain."
- 2017-2019 Katherine Anscheutz, Maya Ayala, Allison Granzella, Amy Morgan, Raelynn Quiambao, Sarah Shaw, Doctor of Physical Therapy, "*Resistance training and biofeedback for treatment of anal incontinence: A case series.*"
- 2017 Peter James Window, PhD Thesis (The University of Queensland, Australia), External Examiner, "The refinement and validity evaluation of a 2-Dimensional motion capture method to quantify lumbo-pelvic-hip complex motion in chronic low back pain."
- 2016-2018 Sarah McCabe, Bailey O'Brien, Alfredo Ruiz, Emmy Tayour, Doctor of Physical Therapy, "Consequences of single sport specialization vs. multi-sport participation in adolescent runners."
- 2015-2017 Allison Keller, Milan Patel, Chelsea Saville, Rose Schlaff, Alicia Walker, Doctor of Physical Therapy, *"Postpartum Diastasis Recti Abdominis: Treatment and Functional Implications."*

Before Tenure

2015-2017 Sadie Henderson, Kaiti Jarratt, Imelda Rodriguez, Doctor of Physical Therapy, "Effects of Bihemispheric Transcranial Direct Current Stimulation (tDCS) on Locomotor Adaptation in People Post-Stroke."
 2015-2016 Pragna Paladugu, Masters in Engineering, "Body Area Network for Studying Upper Body

 Kinematics."
 Kirithika Sathyamoorthy, Masters in Engineering, "Power Management in Wearable Sensors."
 Andrew Opett, Transitional Doctor of Physical Therapy (SUNY Upstate Medical College), "Use of the STAR excursion test to determine readiness to return to sport after an acetabular labral repair."

2010	Matt Landon, Transitional Doctor of Physical Therapy (SUNY Upstate Medical College), "Physical therapy management for an individual with chronic LBP utilizing the MSI classification system."
2009-2011	Amanda Gatch, Megan Goetz, Nicole Nolan, Brooke Redding, Doctor of Physical Therapy (Nazareth College), "Diagnostic labels for patients with shoulder and low back pain – a survey of orthopaedic clinical specialists."
2009-2011	Julie Flannery, Katie Mancuso, Cassie Merrill-Blew, Courtney Pilc, Doctor of Physical Therapy (Nazareth College), <i>"Locomotion in Typically Developing Children during Obstacle Walking."</i>
2008-2010	Jennifer Bacon, Jillian Collins, Nicole Mayotte, Meghan Purdy, Doctor of Physical Therapy (Nazareth College), <i>"Factors predicting falls in the home care population."</i>

Special Study Projects

After Tenure

Fall 2018 Spring 2018	Kayla Kotake, Undergraduate Student, "Sports Biomechanics Laboratory Experience". Santiago Ortega, Master's Student, "Sports Biomechanics Laboratory Experience"
Fall 2017 Fall 2017	Santiago Ortega, Master's Student, "Sports Biomechanics Laboratory Experience" Tonatiuh Rodriguez, Master's Student, "Rehabilitation Biomechanics Laboratory Experience"
Fall 2016 - Spring 2017	Noah Ingram, Undergraduate Student, "Development of an Evidence-Based Sports Biomechanics Program."
Fall 2016 - Spring 2017	Katy Schneider, Undergraduate Student, <i>"Rehabilitation biomechanics laboratory experience.</i> " & <i>"Spine Motion Monitor Testing and Implementation"</i>
Before Tenure	
Spring 2016	Katy Schneider, Undergraduate Student, "Rehabilitation biomechanics laboratory study."
Fall 2015	Karlie Gross, Undergraduate Student, "Rehabilitation biomechanics laboratory experience."
Spring 2015 – Fall 2015	Alejandra Hernandez, Undergraduate Student, "Lumbar spine kinematics during functional activities."
Spring 2015	Jenna Rubin, Masters Student, Undergraduate Student, " <i>Relationship between spine kinematics with motion capture and magnetic resonance imaging</i> ."
Spring 2014	Grayson Arceo, Undergraduate Student, "Clinical Examination Data using the Movement System Impairment Classification System for Patients with Low Back Pain."

Teaching Awards

After Tenure

Outstanding Faculty Award, Most Influential Faculty Member in Exercise and Nutritional Sciences *Teaching Significant Item #1* Spring 2021

Teaching Training

After Tenure

Flexible Course Design Summer Institute, Instructional Technology Services, San Diego State July 2020 University Teaching Significant Item #4

Before Tenure

2013-2014 Center for Teaching and Learning – 6 Workshops

Curriculum Development and Teaching Innovations

After Tenure

January 2017 **Physical Therapy Student Experience in Kerala, India.** Developed an international experience, specifically tailored to doctor of physical therapy students, to experience ancient approaches to alternative medicine, physical therapy education and practice, and cultural experiences in India. Implemented the program and supervised 15 DPT students for the experience. <u>Teaching Significant Item #3</u>

Before Tenure

2013 **Curriculum Diagram, SDSU DPT Program.** Designed a curriculum diagram to reflect the formative nature of the curriculum, as well as the horizontal and vertical integration of courses. This diagram was used to communicate the curricular organization to students, faculty, administrators, clinical instructors, and for accreditation (CAPTE).

2013-2014 Evidence-Based Practice Course Restructuring, SDSU DPT Program

- Restructured the Evidence-Based Practice courses (DPT 881 and DPT 882) to facilitate a continuum, prepare students to answer clinical questions using the current evidence, and facilitate early involvement in the Doctoral Research Projects.
- Developed 2 new syllabi, created 3 new exams using the format of the FSBPT Licensing Examination, developed 3 new assignments in EBP I and 4 new assignments in EBP II.
- 2013-2015 **Doctoral Research Projects, SDSU DPT Program.** Worked collaboratively with DPT faculty at San Diego State to re-structure the process and products for the Physical Therapy Doctoral Research Projects.
- 2010-2013 **Gross Anatomy Lab Manual, Nazareth College PT Department.** Worked with Dr. Andrew Opett and Dr. Richard Doolittle at Nazareth College to develop a *Gross Anatomy Lab Manual* specifically targeted for physical therapy students. This manual is currently used at Nazareth College.
- 2007-2008 **Research Curriculum Development, Nazareth College PT Department.** Developed a new research curriculum at Nazareth College and coordinated Doctoral Research Projects, with the goal of increasing faculty-student research products for publication and presentation.
- 2007-2009 **Kinesiology Course and Lab Manual Development, Nazareth College PT Department.** Restructured kinesiology course to include an emphasis in biomechanics and movement impairment. Incorporated the most up-to-date evidence for kinesiology and pathokinesiology for each body region. Developed a laboratory manual with a focus on observation of movement and experiential learning of kinesiology concepts. Developed laboratory videos including relevant assessment techniques to serve as reference for students.
- 2009 **Orthopaedics Module, Nazareth College PT Department.** Developed didactic and casebased lecture and laboratory module on the Movement System Impairment approach (developed by Shirley Sahrmann) for students in an entry-level DPT curriculum.

2008 **Curriculum Diagram, Nazareth College PT Department.** Developed a curriculum diagram to reflect the vertical and horizontal integration of courses and curricular threads. This diagram was used to communicate the curricular organization to students, faculty, administrators, clinical instructors, and for accreditation (CAPTE).

SERVICE

	vice for the De er Tenure	partment	
		SDSU DPT Student Affairs Committee	Member
2.	Spring, 2018	SDSU DPT Program Clinical Faculty Search Committee	Member
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	ore Tenure		
3.	2015-present	SDSU DPT Program Assessment Committee	Chair (2015-2020), Member
5. 6. 7. 9. 10 11 12 13 14 Ser	2015-present 2015-2016 2013-2015 2014-2015 2010-2013 2009-2013 2007-2013 2007-2013 2008-2009 2006-2007 2004-2007 vice for the Co er Tenure	SDSU Rehabilitation Biomechanics Laboratory ENS Faculty Search Committee (AoE) SDSU DPT Program Accreditation Committee SDSU DPT Program Faculty Search Committee Nazareth College PT Dept Assessment Committee Nazareth College PT Dept Task Force for International Study Nazareth College Movement Analysis Laboratory Nazareth College PT Dept Faculty Search Committee Nazareth College PT Dept Faculty Search Committee	Co-Director Chair Member Member Member Director Member Chairperson Member Member
1.	2021-present	CHHS Research and Scholarly Activity Committee	Member
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	ore Tenure		
	2016-2018 2016-present	CHHS Dean Search Committee CHHS HealthLINK Population Health and Health Disparities Research Endowment, Internal Advisory Committee	Member Member
	2011-2012 2007-2008	Nazareth College OT Program Appeals Committee Nazareth College OT Curriculum Development Committee	Member Member
			Monibol
	vice for the Un er Tenure	Iversity	
1.	2021-present	Mentor for SDSU HealthLINK Pilot Project (Asst Professor PI)	Mentor
2.	Spring 2020	SDSU Women's Volleyball Head Coach Search Committee	Member
3.	Spring 2019	SDSU Shared Governance Faculty Leadership Institute	Participant

²⁰⁰⁸ **Teaching Innovation Grant, Nazareth College.** I was awarded \$2,150 to develop activities that integrated the use of the Movement Analysis laboratory into the Kinesiology course.

4.	2018-present	HealthLINK Center Community Engagement Core (NIH- NIMHD funded U54) <u>Service Significant Item #5</u>	Co-Investigator
5.	2018-present	Intercollegiate Athletics Council (and Academic Integrity Committee; AIC Chairperson Jan 2021-present) <u>Service</u> <u>Significant Item #2</u>	Member
6.	2017-present	University Research Council Service Significant Item #1	Member
7.	2017-2018	SDSU Faculty Senate	Senator
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Before Tenure

8. 2015-present	Smart Health Institute, Area of Excellence (AoE)	Founding Member
9. 2015-2016	Engineering Faculty Search Committee (AoE)	Member
10. August 2014	SDSU Faculty Panel for New Faculty Orientation	Member
11. 2004-2005	Washington University Grad School of Arts & Sciences Graduate Student Senate	Member

Service for the Profession

After Tenure

1. April 2021	National Science Foundation Scientific Review Committee <u>Service Significant Item #4</u>	Member
2. 2021-present	Foundation for Physical Therapy Scientific Review Committee <u>Service Significant Item #3</u>	Member
3. Feb, 2017	SDSU Big Data Hackathon, "Public Health"	Invited Judge
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Before Tenure

4.	May, 2015	PT Now, Clinical Practice Guidelines	Review Panelist
5.	2008-2013	NYPTA Research Committee	Co-chair, member
6.	2012-2013	NYPTA Research Action Task Force	Member
7.	2009-2012	APTA Ortho Section Research Committee	Member

Abstract and Manuscript Reviewer

After Tenure

- 1. Human Movement Science
- 2. Journal of Applied Biomechanics
- 3. Physiotherapy Theory and Practice
- 4. APTA Research Section, Abstract Reviewer for Combined Sections Meeting

Before Tenure *continued to review after tenure

- 5. PLOS One*
- 6. Musculoskeletal Science and Practice (formerly Manual Therapy)*
- 7. Clinical Biomechanics

- 8. Archives of Physical Medicine and Rehabilitation
- 9. BMC Musculoskeletal Disorders*
- 10. Gait & Posture*
- 11. Physiotherapy
- 12. Journal of Sports Science & Medicine
- 13. Medicine & Science in Sports & Exercise
- 14. APTA Orthopedics Section, Abstracts for Combined Sections Meeting

Service for the Community

After Tenure

1. Fall, 2017. *Allied Gardens Recreation Center*: Head Volleyball Coach for co-ed indoor volleyball team (12U).

Before Tenure

- 2. Fall, 2014. *Girls on the Run*: Head Coach for an elementary school team in the San Diego Unified School District, where I established the program. Girls on the Run is an international physical activity based positive youth development program for girls in 3rd-8th grade.
- 3. July 2010. *Carnival for a Cause*: Co-organizer of event at Dragonfly Tavern which raised \$3,000 to benefit Mt. Hope Family Center and the Africa Yoga Project.