

ATSU RESEARCH

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Image (nerve fibers near a putative muscle spindle) courtesy of Dr. Keith Elmslie and Dr. Ranuka Ramachandra

“Every discovery opens a new field for investigation of facts, shows us the imperfection of our theories.” ~Sir Humphry Davy

Publications

Aboul-Enein BH, **Bernstein J**, Kruk J. [Fruits and vegetables embedded in classic video games: a health-promoting potential?](#) Int J Food Sci Nutr. 2019;70(3):377-385.

Baik UB, Mandair S [resident], **Park JH**. [Extraction alternatives in cases with missing lower first molars](#). J Clin Orthod. 2019;53(3):181-182.

Baik UB, Sugawara J, Chun YS, Mandair S [resident], **Park JH**. [Envisioning post-treatment occlusions after space closure using temporary skeletal anchorage devices](#). J Clin Pediatr Dent. 2019;43(2):131-136.

Bain K, Meytes V, Chang GC [student], Timoney MF. [Laparoscopy in penetrating abdominal trauma is a safe and effective alternative to laparotomy](#). Surg Endosc. 2019;33(5):1618-1625.

Bijaoui NJ [alum], **Bernstein J**, Markham C, Aboul-Enein BH. [Can dream science be used to elicit healthy behaviors?](#) Int J Dream Res. 2019;12(1):34-41.

Breitenbach E. [Evaluating a model to increase doctorate program complete rates: a focus on social connectedness and structure](#). Int J Dr Stud. 2019;14:217-236.

Brewster BD [student], **Welch Bacon CE**, **Valovich McLeod TC**, Short S. [Management and outcomes of chronic athletic groin pain: a comparison of conservative and surgical intervention](#). Athl Train Sports Health Care. 2019;11(2):60-62.

Buriak SE [alum], **Ayars CL**. [Evaluation of a drug and alcohol safety education program in aviation using interrupted time series and the Kirkpatrick framework](#). Eval Program Plann. 2019;73:62-70.

Ceravolo D, Raines DA [adjunct]. [The impact of a mindfulness intervention for nurse managers](#). J Holist Nurs. 2019;37(1):47-55.

Publications, continued

- Chae JM [visiting scholar], **Park JH**, Kojima Y, Tai K [visiting adjunct], Kook YA, Kyung HM. [Biomechanical analysis for total distalization of the mandibular dentition: a finite element study](#). Am J Orthod Dentofacial Orthop. 2019;155(3):388-397.
- Chamberlain M, **Marshall AN**, Keeler S. [Open water swimming: medical and water quality considerations](#). Curr Sports Med Rep. 2019;18(4):121-128.
- Clark JM [student], Anderson D, Makary MS, Keller EJ. [Understanding bias: a look at conflicts of interest in IR](#). J Vasc Interv Radiol. 2019;30(5):765-766.
- Cuka C**, McDevitt AW, Porter-Hoke A, Karas S. [Spinal manipulation after multiple fusions in an adult with scoliosis: a case report](#). J Man Manip Ther. 2019;27(2):115-124.
- Dishman L**. [Allocating hospital resources to improve patient experience](#). SAGE Bus Cases. 2019.
- Eberman LE, Walker SE, Floyd RT, Covassin T, Nolton E, **Snyder Valier AR**, Phan K, Weiss L, Earl-Boehm J. [The prioritized research agenda for the athletic training profession: a report from the Strategic Alliance Research Agenda Task Force](#). J Athl Train. 2019;54(3):237-244.
- Fairbairn JR [student], **Huxel Bliven KC**. [Incidence of shoulder injury in elite wheelchair athletes differ between sports: a critically appraised topic](#). J Sport Rehabil. 2019;28(3):294-298.
- Gardiner AM, Cuchna JW, Walker SE [adjunct], Clines S, **Welch Bacon CE**, Van Lunen B. [Student perceptions of standardized patient use in athletic training education](#). Athl Train Educ J. 2019;14(1):64-72.
- Glaviano NR, **Marshall AN**, Mangum LC, Hart JM, Hertel J, Russell S, Saliba SA. [Impairment-based rehabilitation with patterned electrical neuromuscular stimulation and lower extremity function in individuals with patellofemoral pain: a preliminary study](#). J Athl Train. 2019;54(3):255-269.
- Goldstein LB**, **Duong ML**, **Levine R**, **Dillenberg J**. [The future of oral cancer diagnosis: merging provider awareness, patient education, and technology to achieve early detection](#). Compend Contin Educ Dent. 2019;40(4):208-213.
- Greenwalt S**, Bogue E, Bologna A, Bowden MA, Goode LY, Wolfe R. [Accuracy of the iPhysioMeter heart rate monitoring application](#). OAlib. 2019;6:e5210.
- Harb CYW [student], Pass LE, De Soriano IC, Zwick A, Gilbert PA. [Motivators and barriers to accessing sexual health care services for transgender/genderqueer individuals assigned female sex at birth](#). Transgend Health. 2019;4(1):58-67.
- Hortz BV, **Falsone S**, Tulimieri D. [Current athletic training educational preparation for dry needling](#). J Sports Med Allied Health Sci. 2019;4(3):13.
- Huxel Bliven KC**, **Picha KJ**. [Improvements in shoulder research and rehabilitation](#). J Sport Rehabil. 2019;28(3):217-218.

Publications, continued

Ikonne US, Vann PH, Wong JM, Forster MJ, Sumien N. [Supplementation with N-acetyl cysteine affects motor and cognitive function in young but not old mice](#). J Nutr. 2019;149(3):463-470.

Jackson TM [alum], **Ostrowski TD**, **Middlemas DS**. [Intracerebroventricular Ghrelin administration increases depressive-like behavior in male juvenile rats](#). Front Behav Neurosci. 2019;13:77.

Kim KJ, **Park JH**, **Bay RC**, Lee MY, Chang NY, Chae JM [visiting scholar]. [Authors' response. Determining condylar bone density in adolescents: an inconclusive cone-beam computed tomographic study](#). Am J Orthod Dentofacial Orthop. 2019;155(3):307-308.

Lam KC, Harrington KM [alum], Cameron KL, **Snyder Valier AR**. [Use of patient-reported outcome measures in athletic training: common measures, selection considerations, and practical barriers](#). J Athl Train. 2019;54(4):449-458.

Li C, Miao X, Li F, Adhikari BK, Liu Y [student], Sun J, Zhang R, Cai L, Liu Q, Wang Y. [Curcuminoids: implication for inflammation and oxidative stress in cardiovascular diseases](#). Phytother Res. 2019;33(5):1302-1317.

Lohman Bonfiglio CM, **Huxel Bliven KC**, Raffoul AJ, Gilmer LK. [Multiple left accessory renal vessels](#). Int J Anat Var. 2019;12(1):021-023.

Nepon-Sixt BS, **Bryant VL**, Alexandrow MG. [Myc-driven chromatin accessibility regulates Cdc45 assembly into CMG helicases](#). Commun Biol. 2019;2:110.

Park JH, Kook YA, Kojima Y, Yun S, Chae JM [visiting scholar]. [Palatal en-masse retraction of segmented maxillary anterior teeth: a finite element study](#). Korean J Orthod. 2019;49(3):188-193.

Patel S, Kim S, Allen C. [Metoprolol-induced pemphigus-like reaction](#). Clin Adv Periodontics. 2019;9(1):24-28.

Swann JA, Matthews MR, **Bay C**, Foster KN. [Burn injury outcome differences in Native Americans](#). Burns. 2019;45(2):494-501.

Teruel A, **Patel S**. [Burning mouth syndrome: a review of etiology, diagnosis, and management](#). Gen Dent. 2019;67(2):24-29.

Tjong E [student], **Keane JF**, **Goldstein L**. [Managing pain in adults with intellectual disabilities](#). Pract Pain Manag. 2019;19(2):33-36.

Vargo RJ, Hossino KH, Clark A, Bouquot JE. [Symmetrical palatal fibromatosis: five new cases and a review of the literature](#). Oral Dis. 2019;25(3):781-787.

Wells J, Schoenecker P, Petrie J, Thomason K [student], Goss CW, Clohisy JC. [Are complications after the Bernese periacetabular osteotomy associated with subsequent outcomes scores?](#) Clin Orthop Relat Res. 2019;477(5):1157-1163.

Wolfe J [adjunct], Patil G. [Emergency department utilization for non-traumatic oral health conditions by rural Texas residents in 2016](#). Tex Public Health J. 2019;71(2):2-3.

Publications, continued

Yang JH, Cha BK, Choi DS, **Park JH**, Jang I. [Time and pattern of the fusion of the spheno-occipital synchondrosis in patients with skeletal Class I and Class III malocclusion](#). *Angle Orthod.* 2019;89(3):470-479.

Presentations and abstracts

Ahmad Z. ATP synthase: a potential molecular drug target. Poster presented at: Experimental Biology 2019; April 6-9, 2019; Orlando, FL.

Bradbury M, Sheffield M. From the basic concept of pH to complex acid-base disorders in two hours using self-directed learning. Poster presented at: 7th International Conference of the Association of Biochemistry Educators; May 5-9, 2019; Tucson, AZ.

Campbell AM, Ikonne US, Whelihan KE, Lewis JH. Faculty perspectives on student attendance. Poster presented at: Experimental Biology 2019; April 6-9, 2019; Orlando, FL.

Carrasco-Labra A, Abt E, Nevius A, **Gold J.** Incorporating research into clinical practice and teaching evidence-based dentistry. Presented at: 2019 American Dental Education Association Annual Session; March 16-19, 2019; Chicago, IL.

Chang Y, Worley EL. β 3-Adrenergic receptor stimulation enhances bFGF-induced migration and proliferation of rat aortic smooth muscle cells. Poster presented at: Vascular Discovery: From Genes to Medicine Scientific Sessions 2019; May 14-16, 2019; Boston, MA.

Choi L [student], Chokdee D [student], **Perry M.** Measuring the effects of didactic and clinical environments of behavioral intent among dental students in special care dentistry. Poster presented at: 2019 American Dental Education Association Annual Session; March 16-19, 2019; Chicago, IL and at: 31st Annual Meeting in Special Care Dentistry; April 12-14, 2019; Atlanta, GA.

Cofran Z, **VanSickle C**, García-Martínez D, Walker CS, Piercy B. Assessing hominin hips using ilium cross-sectional shape. Poster presented at: American Association of Physical Anthropologists 88th Annual Meeting; March 27-30, 2019; Cleveland, OH. Abstract published in: *Am J Phys Anthropol.* 2019;168(S68):45-46.

Dishman L, Fick J. How does consuming high-fructose corn syrup made from genetically-engineered corn link to obesity and diabetes in the United States? Presented at: 2019 Annual Conference of the Michigan Academy of Science, Arts, and Letters; March 1, 2019; Alma, MI.

Fick J, Dishman L, Adler K, Williams L. What health administration leadership competencies are important to the United States hospital industry? Presented at: 2019 Industry Studies Association Conference; May 30-June 1, 2019; Nashville, TN.

Presentations and abstracts, continued

Finch C, **Makin IRS**, Sellers J. Clinically-based point of care ultrasound procedures for the primary care physician. Presented at: Arizona Osteopathic Medical Association 97th Annual Convention; April 10-14, 2019; Scottsdale, AZ.

Flood T, Koskan A, **Patel S, Spolarich A**, Engaging oral health providers in vaccinating teens for HPV. Presented at: Arizona Oral Health Coalition and Arizona Public Health Association 2019 Spring Summit; April 30, 2019; Phoenix, AZ.

Gohlke E, Fallone K, Spolarich A. Training dental hygiene students to care for individuals with special needs through didactic and clinical experiences. Poster presented at: 31st Annual Meeting in Special Care Dentistry; April 12-14, 2019; Atlanta, GA.

Hintz M [student], Brannen D [student], Helman A [student], Oney K [student], **Pazdernik VMK, Houser JJ, Kondrashov P**. Predictors of success in a medical gross anatomy course. Poster presented at: Experimental Biology 2019; April 6-9, 2019; Orlando, FL.

Howell S, Perry M, Motahari M, Spolarich A. IPE through the lens of oral health: a new curriculum. Presented at: 2019 American Dental Education Association Annual Session; March 16-19, 2019; Chicago, IL.

Howell WD [student], Shank SC, Glogoza AJ [student], **Sexton WL**. Dietary nitrate supplementation attenuates fatigue in rat skeletal muscle. Poster presented at: American College of Sports Medicine 66th Annual Meeting; May 28-June 1, 2019; Orlando, FL.

Kasamatsu TM, Nottingham SL, Eberman LE, Neil ER, **Welch Bacon CE**. Unique challenges and needs for patient care documentation in the secondary school setting. Poster presented at: 2019 Far West Athletic Trainers' Association Annual Meeting; April 25-28, 2019; San Diego, CA. *Free Communications Program 1st Place Peer-Reviewed Track Award Winner*

Knoche L [student], **Young B, Kondrashova T**. The influence of gravitational gradients on American alligators (*Alligator Mississippiensis*). Poster presented at: Experimental Biology 2019; April 6-9, 2019; Orlando, FL.

Komro J [student], Gonzales J [student], **Marberry K, Main C, Kondrashov P**. Histological study of the anterior cruciate ligament in patients with osteoarthritis. Poster presented at: Experimental Biology 2019; April 6-9, 2019; Orlando, FL.

Lee V, **Dishman L**, Xiong F. At the intersection of technology, ethics, and agribusiness: the case of U.S. sugar consumption enhanced by genetic-engineered crop (1970-2016). Presented at: 2019 Industry Studies Association Conference; May 30-June 1, 2019; Nashville, TN.

Miller JR, Evans CM [student], Chouinard DM [student], **Welch Bacon CE, Valovich McLeod TC, Marshall AN**. The association between psychological readiness to return to sport and self-perceived function after anterior cruciate ligament reconstruction. Poster presented at: 2019 Rocky Mountain Athletic Trainers' Association Symposium; April 11-14, 2019; Phoenix, AZ.

Presentations and abstracts, continued

Moore H [student], **Dishman L**. Exploring the effects of succession planning on leadership attrition in medical groups across the United States. Presented at: 2019 Annual Conference of the Michigan Academy of Science, Arts, and Letters; March 1, 2019; Alma, MI.

Nottingham SL, Kasamatsu TM, Eberman LE, Neil ER, **Welch Bacon CE**. Aspects of technology that influence athletic trainers' current patient care documentation strategies in the secondary school. Presented at: 2019 Rocky Mountain Athletic Trainers' Association Symposium; April 11-14, 2019; Phoenix, AZ.

Raheem S [student], **Ahmad Z**. Significance of the highly conserved α VISITDG sequence in the catalytic sites of ATP synthase. Poster presented at: Experimental Biology 2019; April 6-9, 2019; Orlando, FL.

Reddy A, Vij A, Davis JM. Using digital impressions to fabricate space maintainers: an instructional module. Poster presented at: 2019 American Dental Education Association Annual Session; March 16-19, 2019; Chicago, IL.

Reimann RM [student], Abner TN [alum], **Valovich McLeod TC, Welch Bacon CE**. Differences among post-professional athletic training students' knowledge and confidence of evidence-based practice. Poster presented at: 2019 Rocky Mountain Athletic Trainers' Association Symposium; April 11-14, 2019; Phoenix, AZ.

Richter SD, Welch Bacon CE, Huxel Bliven KC. Differences in spatial ability and mental effort among health professions students. Poster presented at: 2019 Rocky Mountain Athletic Trainers' Association Symposium; April 11-14, 2019; Phoenix, AZ.

Spann S, Wilson H, Rudd D, **Makin I**, Finch C. Preliminary evaluation of an integrated ultrasound curriculum at the Arizona College of Osteopathic Medicine. Poster presented at: 2019 American Institute of Ultrasound in Medicine Convention; April 6-10, 2019; Orlando, FL.

Takeshima N, Kohama T, Kusunoki M, Okada S, Fujita E, **Brechue WF**. Using a Kinect sensor to develop an objective quantification of the 20s-march test for ADL assessment in older individuals. Poster presented at: American College of Sports Medicine 66th Annual Meeting; May 28-June 1, 2019; Orlando, FL.

Tauseef M, Patel R, Yadav C, Shahid M, Faridi H, Siddiqui MR, Newaz M, **Ahmad Z**. Metformin prevents high glucose induced disruption of coronary artery endothelial barrier function and accelerates wound healing via regulating junctional protein, VE-cadherin. Poster presented at: Experimental Biology 2019; April 6-9, 2019; Orlando, FL.

Theobald RJ, Han BH. Cognition assessment in APPPS1 transgenic mice. Poster presented at: Experimental Biology 2019; April 6-9, 2019; Orlando, FL.

Thomas K [alum], **Dishman L, Fick J**. Examining the relationship among hospitalist continuing education, hospitalist communication competency, and stroke patient outcomes: a discussion of study implications. Presented at: 2019 Annual Conference of the Michigan Academy of Science, Arts, and Letters; March 1, 2019; Alma, MI.

Presentations and abstracts, continued

VanSickle C, Cofran Z. Effect of sampling bias in endocast volume comparisons between Neandertals and recent modern humans. Poster presented at: American Association of Physical Anthropologists 88th Annual Meeting; March 27-30, 2019; Cleveland, OH. Abstract published in: *Am J Phys Anthropol.* 2019;168(S68):255.

Vargo RJ, Haribabu PK. Clinical manifestations leading to a diagnosis of HIV infection: a case report. Presented at: 2019 American Academy of Oral Medicine Annual Conference; May 21-25, 2019; New Orleans, LA.

Velasquez T [student], **Spolarich A, Perry M.** Recall of oral hygiene education among patients with special needs. Poster presented at: 31st Annual Meeting in Special Care Dentistry; April 12-14, 2019; Atlanta, GA.

Vicente MC, Gargaglioni LH, **Ostrowski TD.** The CO₂/pH chemosensitivity of locus coeruleus neurons is increased in the streptozotocin-model of Alzheimer's disease. Poster presented at: Experimental Biology 2019; April 6-9, 2019; Orlando, FL.

Weaver C, Adhikari S, Heath DM, Makin IRS, Hanamaikai K, Kanumalla RN [alum], Matsushita S [alum], Chatta P. Effects of a focused ultrasound training session on first year osteopathic medical students' ability to incorporate point-of-care ultrasound in clinical assessment of the anterior knee. Presented at: 2019 American Institute of Ultrasound in Medicine Convention; April 6-10, 2019; Orlando, FL.

Welch Bacon CE, Williams B, Gaither K. 9 Ways to drive campus-wide adoption. Presented at: 2019 Qualtrics X4 Experience Management Summit; March 5-8, 2019; Salt Lake City, UT.

Wilbers J [alum], **Dishman L, Fick J.** Can 30-day readmission-rates predict patient satisfaction of United States inpatient acute-care hospitals? Presented at: 2019 Industry Studies Association Conference; May 30-June 1, 2019; Nashville, TN.

Wilbers J [alum], **Dishman L, Fick J.** Do 30-day readmission-rates matter to patient satisfaction of inpatient acute-care hospitals in the United States? Presented at: 2019 Annual Conference of the Michigan Academy of Science, Arts, and Letters; March 1, 2019; Alma, MI.

Wilbers J [alum], **Dishman L, Fick J.** Do United States inpatient acute-care hospitals with lower 30-day readmission rates have more satisfied patients? Presented at: 11th Annual Forum on Advances in Healthcare Management Research; March 4-7, 2019; Chicago, IL.

Sorry we missed you last time

Chaffin J. Dental insurance value and quality. Presented at: 2019 American Institute of Dental Public Health Annual Colloquium; January 25, 2019; San Antonio, TX.

Diamant R, Pitonyak JS, Corsilles-Sy C, James AB. [Examining intraprofessional competencies for occupational therapist and occupational therapy assistant collaboration](#). *Occup Ther Health Care*. 2018;32(4):325-340.

Root HJ [adjunct], Frank BS, Denegar CR, Casa DJ, Gregorio DI, Mazerolle SM, DiStefano LJ. [Application of a preventive training program implementation framework to youth soccer and basketball organizations](#). *J Athl Train*. 2019;54(2):182-191.

Saito T [alum], **Park JH, Bay C.** [A survey of pediatric dentists on the treatment timing and modalities for white spot lesions in the United States](#). *J Clin Pediatr Dent*. 2019;43(1):27-33.

Simon JE, **Snyder Valier AR,** Kerr ZY, Djoko A, Marshall SW, Dompier TP. [Changes in patient-reported outcome measures from the time of injury to return to play in adolescent athletes at secondary schools with an athletic trainer](#). *J Athl Train*. 2019;54(2):170-176.

Snyder Valier AR, Welch Bacon CE, Kucera KL, Williams RM. [Implementation science: lessons learned from evaluating practice recommendations for the care of patients with spine injuries](#). *J Athl Train*. 2019;54(2):192-197.

Takahashi M, **Park JH,** Uzuka S, Tai K [visiting adjunct]. [Modified surgical stent for accurate TAD placement](#). *J Clin Pediatr Dent*. 2019;42(6):465-468.

Valovich McLeod TC, Cardenas JF. [Emergency preparedness of secondary school athletic programs in Arizona](#). *J Athl Train*. 2019;54(2):133-141.

Wasserman EB, Register-Mihalik JK, **Sauers EL,** Currie DW, Pierpoint LA, Knowles SB, Dompier TP, Comstock RD, Marshall SW, Kerr ZY. [The first decade of web-based sports injury surveillance: descriptive epidemiology of injuries in US high school girls' softball \(2005-2006 through 2013-2014\) and National Collegiate Athletic Association women's softball \(2004-2005 through 2013-2014\)](#). *J Athl Train*. 2019;54(2):212-225.

Wasserman EB, **Sauers EL,** Register-Mihalik JK, Pierpoint LA, Currie DW, Knowles SB, Dompier TP, Comstock RD, Marshall SW, Kerr ZY. [The first decade of web-based sports injury surveillance: descriptive epidemiology of injuries in US high school boys' baseball \(2005-2006 through 2013-2014\) and National Collegiate Athletic Association men's baseball \(2004-2005 through 2013-2014\)](#). *J Athl Train*. 2019;54(2):198-211.

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