Sun Hae (Sunny) Jang, M.Sc., CO, FAAOP
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Orthotics-Prosthetics Master's Program
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Education

University of Strathclyde, Glasgow, UK
Biomedical Engineering Department,
PhD Candidate in Biomedical Engineering

University of Strathclyde, Glasgow, UK
Biomedical Engineering Department,
National Centre for Prosthetics and Orthotics,
M.Sc., in Rehabilitation Studies (Orthotics)

Kyungpook National University, Daegu, South Korea
B.S., in Chemistry and Teaching Theory

Professional Summary

2018 – present	Associate Professor, Eastern Michigan University, Ypsilanti, MI
2013 – 2018	Assistant Professor, Eastern Michigan University, Ypsilanti, MI
2003 – present	Certified Orthotist (2003-2013), and Research Scientist (2013-present), Gillette Children's Specialty Healthcare, St. Paul, MN
1999 – 2003	Certified Orthotist, including one-year orthotic residency training, Metropolitan Orthotic Laboratory Inc., Minneapolis, MN

Certifications

American Board-Certified Orthotist (CO)

Honors and Awarded Research Grants

2018 – 2019	Center for O&P Learning Research Award, American Orthotic & Prosthetic Association
2017	Everett L. Marshall Award for Teaching Excellence, Eastern Michigan University
2017 – 2018	CHHS-Sponsored Research Award, Eastern Michigan University
2016	Fellowship of the American Academy of Orthotists and Prosthetists
2015 – 2016	Faculty Research Fellowship Award, Eastern Michigan University
2015 – 2016	CHHS-Sponsored Research Award, Eastern Michigan University
2014 – 2015	Provost's New Faculty Research Award, Eastern Michigan University
2014	eFellows Special Call Grant Award, Eastern Michigan University

Other Experience and Professional Memberships

2002 – present	Member, the American Board-Certified Orthotist, USA
2010 – present	Member, American Academy of Orthotists and Prosthetists
2017 – present	Vice Chair, Spinal Orthotics Society of AAOP
2017 – present	Peer Reviewer, Journal of Prosthetics and Orthotics

2015 – 2017	Chair, Spinal Orthotics Society of AAOP
2012 – 2014	Vice Chair, Spinal Orthotics Society of AAOP
2013 – present	Member, International Society on Scoliosis Orthopaedic and Rehabilitation Treatment
2017 – present	Member, International Society for Prosthetics and Orthotics (ISPO)
2016 – 2017	Peer Reviewer, International Society for Prosthetics and Orthotics, "16th World Congress 2017" Cape Town, South Africa, May 8-11, 2017.
2014 – 2015	Peer Reviewer, International Society for Prosthetics and Orthotics, "15th World Congress 2015" Lyon, France. June 22-25 2015.

Research Interests

Optimal 3D corrective forces for rehabilitation of scoliosis
Biomechanical parameter development for successful orthotic treatments
Computerized system development for orthotic outcome measures
3D & 2D gait analysis
Clinical biomechanics of the spine and the lower extremities
Pathomechanics of scoliosis

Specific Presentations/Publications

Jang, S., Tips for Developing O & P Clinical Courses and Fostering an Effective Student Learning Environment, Oral Presentation at Global Educator Meeting 2018, International Society for Prosthetics and Orthotics, Göttingen, Germany. September 2018

Jang, S., Son, E., Rowe, P., Concurrent Validity of 3d Skin Level Spinal Alignment Parameters for Adolescent Idiopathic Scoliosis, Oral Presentation at 44th Academy Annual Meeting & Scientific Symposium of American Academy of Orthotists & Prosthetists, New Orleans, LA, USA. February 2018

Jang, S., Sagittal Misalignment Patterns and Pathogenesis of Adolescent Idiopathic Scoliosis (Newer Data), Oral Presentation at 16th World Congress of International Society for Prosthetics and Orthotics, Cape Town, South Africa. May 2017.

Jang, S., Davis, K., Thach, S., Current Practice in Orthotic Treatment of Adolescent Idiopathic Scoliosis. Oral Presentation at 43rd Academy Annual Meeting & Scientific Symposium of American Academy of Orthotists & Prosthetists, Chicago, IL, USA. March 2017.

Jang, S., How to Determine 3D Optimal Biomechanical Correction and Orthotic Designs. Panelist at 43rd Academy Annual Meeting & Scientific Symposium of American Academy of Orthotists & Prosthetists, Chicago, IL, USA. March 2017.

Jang, S., How to Determine Optimal 3D Orthotic Designs for AIS. Invited guest speaker. Asian Prosthetic and Orthotic Scientific Meeting 2016. Seoul, South Korea. November 2016.

Jang, S., Koop, S., Rowe, P., Radiographic Analysis of Sagittal Misalignment patterns in Adolescent Idiopathic Scoliosis. Oral presentation. 10th SOSORT Annual Meeting of International Conference on Conservative Management of Spinal Deformities. Katowice, Poland. May 2015.

Jang, S., Sagittal Misalignment Patterns in Comparison of Coronal Curve Patterns in Idiopathic Scoliosis. Oral presentation. 41st Annual Meeting and Scientific Symposium. American Academy of Orthotists & Prosthetists. New Orleans, LA, USA. February 2015.

Jang, S., Orthotic Management: Milwaukee CTLSO for Adolescent Idiopathic Scoliosis. Guest speaker. One-day Seminar Certificate Program: Orthotic Management of Adolescent Idiopathic Scoliosis. American Academy of Orthotists & Prosthetists. Chicago, IL, USA. October 2014.

Jang, S., Hutson, J., Techniques for Treating Idiopathic Scoliosis: Achieving a 3D Biomechanical Goal with a Corrective TLSO. The O&P Edge. June 2014 Issue.

Jang, S., How to Apply 3D Biomechanical Corrective Theory during X-ray Analysis in Orthotic Treatment for Idiopathic Scoliosis. Oral presentation. ISPO Canada Symposium 2013. International Society for Prosthetics and Orthotics (Canada). Ottawa, Canada. October 2013.

Jang, S., Analysis of a New Radiographic Evaluation Tool for Idiopathic Scoliosis, the Overall Coronal Trunk Symmetry Index. Oral presentation. 2013 O&P World Congress. American Orthotic & Prosthetic Association. Orlando, FL, USA. September 2013.

Jang, S., and Hutson, J., Current Key Biomechanical Principles in the Orthotic Treatment of Idiopathic Scoliosis. The Academy Today, Summer 2013 Vol 9 No 3, in June 2013 issue. (also listed for ABC, BOC, and CBC continuing education course)

Jang, S., Instructional Course, A Key Biomechanical Corrective Principle Based on the Specific Goals and Techniques used in a Gillette Custom Molded TLSO for Idiopathic Scoliosis. Chair and speaker. 14th ISPO World Congress. International Society for Prosthetics and Orthotics. Hyderabad, India. February 2013

Jang, S., Hutson, J., Latro-posterior Directed Migration of Trunk to the Concave side of the Curve: Biomecahnical Principle in Treating Three-Dimensional Deformity of Idiopathic Scoliosis with a Custom Molded Highprofile TLSO. Poster presentation. 2012 SOSORT Conference. International Society on Scoliosis Orthopaedic and Rehabilitation Treatment. Milan, Italy. May 2012.

Jang, S., Hutson, J., Biomechanical Goals and Techniques Used in Custom Molded TLSOs for the Treatment of Idiopathic Scoliosis. Oral presentation. 2012 ACPOC Annual Meeting. Association of Children's Prosthetic-Orthotic Clinic. Banff, Canada. April 2012

Supervised Student Project Achievements:

DeShaw, M., **Jang, S.,** Case Study: Gait and Functional Analysis of Three Carbon Fiber Ankle Foot Orthoses (AFOs) and Their Effectiveness in Addressing Drop Foot. Oral Presentation at the 2017 AOPA World Congress of American Orthotic & Prosthetic Association, Las Vegas, NV, USA. September 2017.

Huhta, P., **Jang, S.,** Case Study: Gait Analyses of Tuning AFOFC for an Adult with Ankle Plantar-Flexed Contracture. Oral Presentation at the 2017 AOPA World Congress of American Orthotic & Prosthetic Association, Las Vegas, NV, USA. September 2017.

Smith, G., **Jang, S.,** *A Mass Reduction of TLSO Gypsum Cast: An Experimental Case Study.* The Academy Today, Spring 2017, Volume 13, No. 2, 9. Online Link: https://www.oandp.org/page/CapstonePapers

Brown, D., Bouwhuis, A., **Jang, S.,** A Qualitative and Quantitative Comparison of CAD/CAM Modified and Plaster Cast Modified TLSOs: A Case Study. The Academy Today, Spring 2016, Volume 12, No. 2, 7-8.

Peurach, J., **Jang, S.,** Standing Postural Changes While Wearing a Lumbar Sacral Orthosis with Varying Degrees of Lordosis. “Academy Society Spotlight” section of “The O & P Edge”, May 2016 Issue, 54-60.