

# Scott Bretl, MPO, CPO/LPO

## PROFESSIONAL EDUCATION

2015 – University of Washington, Department of Rehabilitation Medicine

- Master of Prosthetics and Orthotics (MPO)
- Research Proposal: *For Existing Prosthetic Patients Does a New Follow-up Protocol Improve Return Attendance?*
- Critically Appraised Topic: *A Dynamic Alternative to the Denis Browne Bar in the Foot Abduction Orthosis*

2010 – California State University East Bay

- Clear Single Subject Teaching Credential – Mathematics

2009 – University of Washington, Department of Bioengineering

- Bachelor of Science in Bioengineering
- Research Manuscript: *Mathematical and Variable Modeling for Radioindicator Solutes in Myocardial Capillary Flow*

## ACADEMIC EMPLOYMENT

**Alabama State University – Montgomery, AL**

**01/2018-present**

Program Director, MSPO Program; Chair, Department of Prosthetics & Orthotics

- Successfully led for approved continuing accreditation of program
- Developed new courses/assessments/structures to meet program needs
- Continually evaluate curriculum with alignment to updated NCOPE Standards
- Facilitate student learning in multiple modalities
- Guide professional development of faculty
- Maintain budgets and course coverage
- Establish/manage departmental scholarship opportunities and guide program participation in the Hanger Foundation Diversity Scholarship grant

Assistant Professor, Department of Prosthetics & Orthotics

Experience supporting course delivery in a co-teaching environment:

- HSC 5001 – Gross Human Anatomy
- HSC 5006 – Introduction to Research and Evidence Based Practice

Experience organizing content and/or delivering instruction as lead instructor:

- HSC 5011 – Biomechanics
- MPO 5110 – Introduction to Prosthetics & Orthotics
- MPO 5190 – Clinical Rotation I
- MPO 5210 – Lower Limb Orthotics I
- MPO 5290 – Clinical Rotation II
- MPO 5310 – Spinal Orthotics
- MPO 5330 – Introduction to Pediatrics in P&O

- MPO 5340 – Pathology in P&O
- MPO 5390 – Clinical Rotation III
- MPO 6410 – Lower Limb Orthotics II
- MPO 6490 – Clinical Rotation IV
- MPO 6510 – Upper Extremity Orthotics
- MPO 6530 – Practice Management and Administration in P&O
- MPO 6590 – Clinical Rotation V

Experience supporting independent study and management of research projects:

- MPO 6420 – Applied Clinical Research
- HSC 5099 – Capstone

#### Current and Past Committee Roles

##### University

- State Reciprocity Committee, 2020-2023 (coordinator)
- Faculty Salary Wage Review Committee, 2021 (member)
- Commencement Marshalls, 2021 (participant)
- Clinical Rotations/Placement Task Force, 2020 (chair)

##### College of Health Sciences

- DEI Taskforce, ongoing (member)
- Basic Sciences Faculty Search Committee, 2023 (member)
- Associate Dean Selection Committee, 2021 (chair)
- Physical Therapy Faculty Search Committee, 2021 (member)
- Management Team, ongoing (member)
- Clinical Education Committee, ongoing (member)
- Curriculum Committee, ongoing (member)
- Student Research Presentation Planning Committee, 2021 (member)
- Health Information Management Faculty Search Committee, 2020 (member)

##### Department of Prosthetics & Orthotics

- P&O Admissions Committee, ongoing (lead)
- P&O Advisory Committee, ongoing (lead)
- P&O Interview/Search Committees, ongoing (lead)

## RELATED EXPERIENCE

### ***National Commission on Orthotic & Prosthetic Education (NCOPE) 03/2019-present***

Education Summit Planning Committee (member)

- Collaborate to plan a national invite-only conference event seeking to summarize the challenges and opportunities in O&P education and training

ISPO Accreditation Process (P&O Program Representative)

- Work in partnership to complete a self study review process in which the ASU P&O Program represents NCOPE in their international accreditation renewal

Self Study Review Committee (member)

- Review/evaluate self study submission materials for accreditation by various NCOPE-supported educational programs

Accreditation Committee (member)

- Participate in review/revision of accreditation manual to promote high quality P&O programs, manage accreditation processes to assure compliance with Standards, promote effective/efficient communication between programs and NCOPE, and review/assess OPCAS system data collected for past admissions cycles

***Alabama Prosthetic & Orthotic Association (APOA)***

***01/2018-01/2023***

Education Chair

- Assisted in organizing Annual Meeting & Scientific Sessions
- Keep constituents informed about current standards and expectations for students and residents in the field

***O&P Awareness Taskforce***

***01/2021-08/2021***

- Represent academic programs in ongoing national group discussion to identify best practices and initiatives in increasing awareness of the field as a career pathway at all levels

***Creative Technology Orthotic & Prosthetic Solutions – Denver, CO***

***07/2015-01/2018***

Head Clinical Educator

- Created/presented hour-long mini courses for unique clinical presentations and for “Creative Technology Institute,” a CEU program for therapists and physicians
- Created patient-friendly education materials used by company practitioners and their patients
- Leader of bi-weekly staff meetings, facilitating topic discussion and education to further staff professional development

Certified Prosthetist/Orthotist

- Treated patients daily for mobility impairment of all levels, including participation in gait clinics and amputee clinics specific to local rehabilitation hospitals
- Published patient education and physician note guidelines paperwork for distribution
- Worked with interdisciplinary healthcare team to address patient needs

Resident Practitioner

- Trained under supervision of senior practitioners and gained increasing patient load with each quarterly review of competency

***Regis University – Denver, CO***

***09/2016-10/2017***

Guest Instructor

- Developed and led four days of relevant prosthetic curriculum for physical therapy students for two consecutive years

- Lauded by lead physical therapy instructor for comprehensive curriculum design and instructional expertise using multiple modalities
- Worked with lead faculty to scale an educational program to private practice use with physical therapists

***Teach For America – San Francisco Bay Area***

***06/2009-06/2013***

Corps Member and Active Alumni Member

- Participated in continuous professional development to improve service to unique learners such as those with disabilities and second-language learners
- Developed such skills as culturally relevant pedagogy, restorative justice techniques, and curriculum design for application in the classroom

***West Contra Costa USD, Richmond High School – Richmond, CA***

***08/2009-06/2013***

Teacher Coach

- Worked with math department teachers in their classrooms to develop skills and improve outcomes based on repeated conferences and observations
- Actively participated on school instructional leadership team to design and implement school- and department-wide professional development
- Advocated and supported implementation of a new block instructional schedule to meet the needs of a diverse student population
- Led for equitable and culturally relevant practices, modeling lessons and strategies to the school and department

Head of Mathematics Department

- Developed curriculum calendar and priorities based on published standards and coordinated with other department heads to support math competency in all classes
- Worked with teachers to evaluate/reflect on continual collective progress

Soccer Coach

- Organized nightly school practice/training sessions to develop players' individual skills and teamwork on the soccer field

Math Teacher

- Taught multiple subjects in a Title I, underserved school and community, requiring self-revised curriculum and self-made coursework as well as assessments to provide proper scaffolding and organization to meet student needs
- Created engaging project-based learning units that were shared and used by other teachers within the school and district
- Trained in and implemented research-based instructional methods used to support second-language learners, students with disabilities, and a highly diverse student population

***American Orthotic & Prosthetic Assoc. Policy Forum – Washington, DC***

***05/2014***

Elected UW Student Representative

- Spoke with elected officials and staff to lobby on behalf of the P&O field and their patients

### ***Various Clinical Rotations Experiences***

**07/2012-06/2015**

Douglass Prosthetics & Orthotics – Seattle, WA  
Harborview Medical Center Prosthetics & Orthotics Clinic – Seattle, WA  
Center for Prosthetics & Orthotics – Bellevue, WA  
Gillette Children’s Specialty Healthcare – Minneapolis, MN  
Cornerstone Prosthetics & Orthotics – Everett, WA  
Hanger Clinic – Oakland, CA

### **CERTIFICATION/TRAINING/PROFESSIONAL ASSOCIATIONS**

Association of College and University Educators (ACUE)

- *Certificate in Effective College Instruction – 04/2022*
  - *Designing an Effective Course and Class*
  - *Establishing a Productive Learning Environment*
  - *Using Active Learning Techniques*
  - *Promoting Higher Order Thinking*
  - *Assessing to Inform Instruction and Promote Learning*

International Association of Medical Science Educators (IAMSE)

- *Spring 2021 Seminar Series – Strategies for Promoting Inclusivity in Health Sciences Education*

Alabama State Board of Prosthetists and Orthotists

- *Alabama Licensed Prosthetist/Orthotist (License #871)*

American Board of Certification

- *Certified Prosthetist/Orthotist (CPO03876; obtained 4/1/2017, expires 12/31/2027)*

American Academy of Orthotists and Prosthetists (AAOP), member

Alabama Orthotic and Prosthetic Association (APOA), member

Volunteer Participation

- *Seattle Adaptive Sports*
- *Vail Veterans Program*
- *Breckenridge Ski Spectacular*
- *No Barriers USA*

## RESEARCH/PRESENTATIONS

### ***Evaluator/Reviewer***

- *NCOPE – Education Bridge Committee/Education Grants (2024)*
- *AAOP – Free Paper Abstract Reviewer (2022)*
- *NIDILRR – Field Initiated Projects Grant Competition (2022)*
- *Prosthetics & Orthotics International – single manuscript (2020)*

### ***Research Advisor to Graduate Student Projects***

- *An Investigation of Gait Speed and Efficiency for an Able-Bodied User When Using the NeuroSwing AFO Compared to a Conventional AFO Design.* L Lake, A Datri. (2023)
- *A Preliminary Feasibility Study: Designing, Fabricating, and Fitting a Custom Orthosis for a Captive Giraffe.* A Dinkins, C Fronk, S Poole, V Wilson. (2022)
- *Diversity and Inclusion: Exploring Orthotics and Prosthetics and the Experiences with the Field.* L Brown, P Gentry, J Greely, A Leibold. (2021)
- *Baseline Analysis of Distracted Walking Compared to Non-Distracted Walking.* C Arnold, H O’Dell, S Pittman. (2020)

### ***Presentations***

American Orthotic and Prosthetic Association (AOPA) National Assembly – Poster Presentation

- *Racial Bias in Orthotics and Prosthetics.* (09/2023)

National Society of Allied Health (NSAH) Annual Conference – Platform Presentations

- *Racial Bias in Orthotics and Prosthetics.* (04/2023)
- *Tackling Test Anxiety: A Proposal for Meaningful Assessment and Organization in an Allied Health Program.* (03/2019)

American Association of Orthotists and Prosthetists (AAOP) Annual Meeting and Scientific Symposium – Poster Presentations

- *A Preliminary Feasibility Study: Designing, Fabricating, and Fitting a Custom Orthosis for a Captive Giraffe.* A Dinkins, C Fronk, S Poole, V Wilson. (2022)
- *Diversity and Inclusion: Exploring Orthotics and Prosthetics and the Experiences with the Field.* L Brown, P Gentry, J Greely, A Leibold, S Bretl. (2021)
- *Baseline Analysis of Distracted Walking Compared to Non-Distracted Walking.* C Arnold, H O’Dell, S Pittman, S Bretl. (2020)

Alabama State University Faculty and Staff Institute

- *Formative vs. Summative Assessment: Continuous Evaluation in the Classroom* (08/2021)

Alabama State University College of Health Sciences – Faculty Development Presentations

- *Best Teaching Practices.* (11/2019)
- *Improving Performance, Accountability, and Time-Savings with Examsoft.* (08/2019)

University of Colorado Anschutz Medical Center Nursing Conference – Clinical Presentation

- *Clinical Application of High Activity Prosthetic Designs and Componentry.* (01/2017)

Children’s Hospital of Aurora Pediatric Prosthetics Clinic – Clinical Presentation

- *Pediatric Options for Prosthetic Hand and Partial Hand Restoration.* (09/2016)

### **Publications**

Challenges of and Opportunities for O&P Education and Training: Envisioning Future Needs – Foreword. S Spaulding, M Madden, S Sachs, J Ljung, J Utay, S Bretl. *Journal of Prosthetics and Orthotics* 35(3S): p2-4, July 2023.

The Impact of the Social Determinants of Health in Orthotics and Prosthetics. C McDonald, S Bretl. *Journal of Prosthetics and Orthotics* 35(3S): p16-23, July 2023.

Manuscript in progress: *Implicit and Explicit Racial Bias in Orthotics and Prosthetics.* S Bretl, L Mitsou, A Hoffmanfinitis, J Brinkmann, C McDonald.

Manuscript in progress: *Diversity and Inclusion: Exploring Orthotics and Prosthetics and the Experiences with the Field.* S Bretl, L Brown, P Gentry, J Greely, A Leibold.

### **Current/Proposed Externally Funded Research Projects**

Title: Implicit and Explicit Racial Bias in Orthotics and Prosthetics

Role: Co-Investigator (PI: Cody McDonald, PhD)

Agency: American Orthotic and Prosthetic Association (AOPA)/Center for Orthotic and Prosthetic Learning and Outcomes/Evidence-Based Practice (COPL)

Type: One-year pilot project (EBP-043021)

Dates: 2021-2022

Amount: \$26,805 in direct costs/\$29,486 in total costs, funded

Title: Measuring Trunk Stability and Range of Motion for Wheelchair Basketball Classification

Role: Co-Investigator (PI: Jared Rehm, PhD)

Agency: National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR)

Dates: 2021-2024

Amount: \$600,000, funded

Title: Partnering School and Professional Communities Through Standards-Based, Real-World Applications: A Scalable, Interdisciplinary Approach to Combating Underrepresentation in Health Fields

Role: Primary Investigator

Agency: National Institutes of Health (NIH)

Dates: 2021-2026

Amount: \$918,919, not funded

## **COMMUNITY INVOLVEMENT**

### ***Consulting Roles***

- Alabama Health Professions Advisors (AHPA) – program/career awareness (2023-present)
- Loma Linda University O&P – Advisory Board member (2022-present)
- Orthotics Prosthetics Canada – key informant interview for strategic contextual analysis of the O&P profession in Canada (2022)
- Alabama State Department of Education – highlighting O&P career pathway at the middle and high school levels (2022)
- University of Washington O&P – Advisory Board member (2014-2015)

### ***Educational Programming/Exposure***

- ASU Upward Bound Camp (2024-present)
- Breakthrough Birmingham Summer Camp visit (2023-present)
- ASU GEAR UP Camp (2022-present)
- Brewbaker Middle School Career Fair (2021-present)
- Maxwell Air Force Base “Beyond the Horizon” Air Show – exhibitor (2024)
- Pelham High School visit to College of Health Sciences (2023)
- Brewbaker Technology Magnet High School Medical Academy/Robotics (2020-2021)
- Walter McKee Middle School Career Fair (2020)
- Discovery MedCamp (2018)