



Danielle H. Melton, MD

Professor, University of Colorado - Department of Physical Medicine & Rehabilitation

Director of Amputation Medicine & Rehabilitation

Director of Center for Prosthetics

Education

Colleges and universities attended, degrees received, dates.

1988 - 1993	Louisiana State University Bachelor of Science in Mechanical Engineering
1998- 2000	Louisiana State University Medical Center
2000 - 2002	Baylor College of Medicine Doctor of Medicine

Post-doctoral, residency, and further advanced training

2002 - 2003	Baylor College of Medicine Transitional Intern Physician
2003 – 2006	Baylor College of Medicine/University of Texas Alliance Department of Physical Medicine Physician Residency

Academic Appointments

8/2006 – 5/2014	Assistant Professor University of Texas Health Science Center Department of Physical Medicine & Rehabilitation Specialty Houston, TX
6/2014-6/2016	Assistant Professor University of Texas Health Science Center Department of Surgery, PM&R specialty Houston, TX



- 5/2016 – 5/2022 Associate Professor
University of Texas Health Science Center
Department of Orthopedic Surgery
Physical Medicine & Rehabilitation Specialty
Houston, TX

- 6/2022 - Present Adjunct Associate Professor
University of Texas Health Science Center
Department of Orthopedic Surgery
Houston, TX**

- 7/2022 – 7/2024 Associate Professor
University of Colorado School of Medicine
Director of Amputation Medicine & Rehabilitation, Limb Restoration Program
Department of Physical Medicine and Rehabilitation
Aurora, CO

- 7/2024 - Present Professor
(Visiting Associate Professor, 7/2022-7/2024)
University of Colorado School of Medicine
Director of Amputation Medicine & Rehabilitation, Limb Restoration Program
Department of Physical Medicine and Rehabilitation
Aurora, CO**

Hospital, Government, or Other Professional Positions

- 1/1991 – 5/1997 Mechanical Design Engineer Intern, Collegiate Representative for Market Driven Quality
International Business Machines (IBM)
Manassas, Virginia

- 8/1991 – 5/1993 Engineer
Center for Advanced Microstructures & Devices
Baton Rouge, Louisiana

- 8/1993 – 11/1993 Mechanical Engineer
Powers Engineering
Austin, TX



- 1994 - 1997 Mechanical Engineer, Project Manager
Applied Materials
Austin, TX

- 2007 – 2008 Medical Director, Outpatient Clinic
The Assessment Center and Sports Medicine & Rehabilitation

- 2008 Medical Director, Amputee Comprehensive Treatment (ACT) Clinic
The Institute of Rehabilitation and Research - Memorial Hermann

- 2008 – 2022 Medical Director – Amputee, Orthotics and Prosthetics Program
The Institute of Rehabilitation and Research - Memorial Hermann Hospital

- 2011 – 7/2022 Medical Consultant
Medical Life Care Planning

- 2014 – 2016 Clinical Advisory Board Consultant
Physician Leader, Medical Advisory Board (2013 – 2016)
Ossur Americas

- 2017 - Present Medical Director, Paradigm Corporation**

- 2020 – 2022 Clinical Advisory Consultant for Targeted Muscle Reinnervation (TMR)
Checkpoint Surgical

Hospital Affiliations

- 2006 – 2010 Lyndon B. Johnson Hospital (Houston, TX)
- 2006 – 2022 The Institute of Rehabilitation and Research – Memorial Hermann (Houston, TX)
- 2018 – 2022 Memorial Hermann Orthopedic Spine Hospital (Bellaire, TX)
- 2022 – Present University of Colorado Hospital (Aurora, CO)**

Honors, Special Recognitions & Awards

- 2007 Strong, Smart and Bold Certificate of Recognition, Girls Inc.
- 2008 Physician of the Year Nominee, The Institute of Rehabilitation and Research - Memorial Hermann (TIRR-MH)
- 2009 – 2021 Best Doctors in America, (top 5% in specialty, consensus of peers)
- 2010 – 2012 Who’s Who Among Executives and Professionals
- 2010 – 2018 America’s Top Physicians, Consumer Research Council of America
- 2013 Texas Super Doctors Rising Star (top 5% in region)
- 2014 – 2022 Texas SuperDocs Award
- 2014 – 2022 Houston’s Top Docs Award
- 2015 International Physician Leaders of the World
- 2020 Alumnus of the Year-E.D. White Catholic High School



2024 Paradigm Medical Director Impact Award
2025 UCHealth Impact Award for Osseointegration

Membership in Professional Organizations

2017 – Present **American Congress of Rehabilitation Medicine**
Co-Chair Limb Restoration, 2017 - 2021

2013 – Present **American Orthotics and Prosthetics**

2010 - Present **American Academy of Orthotics and Prosthetics**
2010 – 2013 American Academy of Disability Evaluating Physicians
2009 – 2018 Association of Academic Physiatrists
2006 - 2022 Harris County Medical Society
2006 – 2022 Texas Medical Association

2005 – Present **American Academy of Physical Medicine, and Rehabilitation**
Medicine Council, 2006
Moderator, *Post-Polio Syndrome*, Annual Assembly Meeting, 2012
Organizer of Amputation Medicine group, 2012

2005 – 2012 American Medical Association

Major Committee and Service Responsibilities

Departmental

2006 – 2014 Residency Program Committee
UT Department of PM&R, Houston, TX

2010 - 2022 Residency Program Committee
UT Department of Orthopedics – Trauma Service, Houston, TX

University

2007 – 2018 University of Texas Health Science Center Continuing Medical Education Committee
2007 – 2011 Member
2010 Vice Chairman
2011 – 2018 Chairman

2007 – 2008 Member and Organizer of Resident Rotation Schedule, Outpatient Clinic
UT PM&R/BCOM Alliance, Houston, TX

2007 - 2009 Member, Endowment Committee
UT PM&R/BCOM Alliance, Houston, TX

2010 – 2015 Fellowship Director, Amputee Trauma Rehabilitation Fellowship



UT Department of PM&R/BCM Alliance

2013 – 2016 Chairman, Continuing Medical Education Committee
University of Texas (UT)

2024—Present University of Colorado Center for Prosthetics, Medical Director

Hospital

2009 – 2011 Physician Leader and Organizer, Amputee Core Group
TIRR-MH, Houston, TX

2010 – 2013 Physician Leader, Disability Resources for Information, Vocation & Education (DRIVE)
Amputee Support Group
TIRR-MH, Houston, TX

2010 – 2011 Member, Outpatient Clinic Quality Improvement Committee
TIRR-MH, Houston, TX

2012 – 2018 Moderator and Director, Orthotics and Prosthetics Clinical Case Conference
The Institute of Rehabilitation and Research - Memorial Hermann (TIRR-MH) Hospital,
Houston, TX

2018 – 2022 Director, Trauma Amputee Fellowship
The Institute of Rehabilitation and Research - Memorial Hermann (TIRR-MH), Houston, TX

2022—Present UCHealth Amputation Rehabilitation Program, Medical Director

State, National & International

2008 – 2009 Attending Physician & Resident Mentor
Houston Challengers

**2010 – Present Board of Directors
Spine Extremity Tumor Research Endowment Foundation**

2010 – Present Amputee Coalition
Member, Scientific Medical Advisory Committee (2010-2019)
Chairman (2013 - 2016, 2018 – 2019)
Boad of Directors (2024-Present)

2010 Medical Missionary, Haiti Earthquake

2010 – Present Amputee Director



Rehabilitation Services Volunteer Project, Houston, TX

- 2012 – 2018 Physician Leader, Medical Record Documentation for Prosthetic Coverage Center for Medicare Medicaid Services
- 2013 – 2016 Physician Leader, Medical Advisory Board Ossur
- 2013 – 2015 Steering committee, Model Systems of Amputee Medicine Limb Loss Prevention Task Force III
- 2013 – 2016 Physician Leader Orthotics & Prosthetics Educational Research Foundation
- 4/1/2013 Discussion Moderator, Warrior Champions Film Reel-abilities Houston Disabilities Film Festival
- 8/2013 Clinical Practice Guidelines for Orthotic Management in Stroke American Orthotics and Prosthetics Association (AOPA)
- 10/2013 Clinical Practice Guidelines for Trans-tibial Prosthetic Management American Orthotics and Prosthetics Association (AOPA)
- 2014 – 2018 Physician, Activities Based Support Group Houston Amputee Alliance
- 2015 – 2019 Steering Committee, Model Systems for Amputation Medicine Steering Committee, Research Strategy for Limb Loss Limb Loss Prevention Task Force IV
- 10/23 – 25/2015 Planning Committee and Co-Medical Director Skills for Life 4: Workshop for Bilateral Upper Limb Amputees International Symposium The Institute of Rehabilitation and Research – Memorial Herman (TIRR-MH) Hospital and International Society of Prosthetics and Orthotics
- 9/2016 Planning Committee, 2016 State of the Science Conference for Upper Limb Prostheses American Academy of Orthotics and Prosthetics
- 2017 – Present Board of Directors, Fundraiser for physically challenged individuals in endurance sports and athletics. Catapult**
- 2017 – 2018 Board of Directors, Physician Advisory Panel Restorix Health, Amputation Prevention Center



- 4/24/2017 Museum of Health and Medicine Sponsor
“Never Count Us Out” Empowerment Luncheon with Heather Abbott
- 5/2018 Planning Committee and Attendee: Creating a Research Strategy for Limb Loss
Limb Loss Task Force IV
- 2018 Ad Hoc Committee to Organize an Extremity War Injury Rehabilitation Forum
METRC III and the Orthopedic Trauma Association, Bethesda, MD
- 2018 – Present** **Major Extremity Trauma Research Consortium (METRC) III**
Executive Committee
Publications and Presentations Committee
Outcomes Committee (Co-Chair)
Mentoring and Emerging Investigator Awards Committee
Planning Committee, Discussant – 2018 Rehabilitation Symposium, Bethesda, MD
- 1/2019 Planning Committee, Invited representative
VA Hospital Coordinated Studies Program Conference “A Prospective Pivotal Study to
Characterize the Efficacy and Safety of a Percutaneous Osseo-integrated Prosthesis”
Boston, MA
- 3/7/2019 Planning Committee, Prosthetic Abandonment
2019 State of the Science Symposium - Upper Limb Society
American Academy of Orthotics & Prosthetics (AAOP) and Walter Reed Medical Center,
Orlando, FL
- 2018 – 2024** **Limb Loss Prevention Registry**
External Advisory Panel, Science Chair
Sub-committee Chair—NIH External Collaborative Panel, Mayo Clinic
- 5/2015 – Present** **Medical Director, Planning Committee**
Skills for Life
- 11/7/2020 Medical Professionals Panel
Hanger EmpowerFest
- 2/22/2021 Discussion Moderator, The Rider
Reel-abilities Houston Disabilities Film Festival
- 5/2023 – Present** **Advisory Committee, “Improving Prosthetic Outcomes in Osseointegration: Establishing
a Prescription Consensus” Delphi Study**
University of Colorado



Licensure and Board Certification

Board Certification

2008, 2018 American Board of Physical Medicine & Rehabilitation

State Licensure

2022	Arizona
2022	Colorado
2022	Idaho
2022	Kansas
2022	Louisiana
2022	Mississippi
2022	Montana
2022	Nebraska
2022	Nevada
2022	Oklahoma
2022	South Dakota
2005	Texas
2022	Utah
2022	Washington
2022	Wyoming

Review & Referee Work

2007 – 2008	National Board Review Course
2007 – 2019	Moderator, <i>Orthotics & Prosthetics</i>
	Mock Oral Exam Facilitator
	UT/BCOM Alliance, Houston, TX

2012 – Present	Invited Reviewer
	Journal of Physical Medicine and Rehabilitation

2012 – Present	Invited Reviewer
	Journal of Rehabilitation Research and Development



2013 – 2015	White paper reviewer Limb Loss Prevention Task Force III
2015 – Present	Invited Reviewer Journal of Pain Research and Management
9/9/2016	Thranhardt Lectures Judge American Orthotics and Prosthetics Association National Assembly
2017 – 2018	Invited Reviewer - Evidence Based Practice Center Program: Lower Limb Prosthesis Systematic Review Agency for Healthcare Research & Quality
5/2018	Oral Board Examiner Part 2 American Board Physical Medicine and Rehabilitation

Invited Extramural Lectures, Presentations, and Visiting Professorships

Local

1. 63rd Annual Edward T. Smith Orthopedic Lectureship, “Foot and Ankle Rehabilitation.” Houston, TX. January 25, 2020.
2. Alumnus of the Year Ceremony, “Guiding Principles of Living Your Best Life.” Edward Douglas White Catholic High School, Thibodaux, La. January 31, 2020.
3. The Institute of Rehabilitation and Research - Memorial Hermann (TIRR-MH), “Medical Management of Amputations, Course Faculty.” Houston, TX. February 9, 2020.
4. The Institute of Rehabilitation and Research - Memorial Hermann (TIRR-MH) “In-Service Lecture: Acute Management of Amputations.” Houston, TX. November 5, 2020.
5. Limb Preservation Society webinar “Osseointegration Program.” Denver, CO. July 19, 2022.
6. UHealth Trauma meeting “Amputation Rehabilitation Program” Aurora, CO. August 16th, 2023

Regional

1. Case Management Southwest Association Lecture Series, “Lower Extremity Amputations and Prosthesis.” Houston, TX. July 1, 2007.



2. Orthotics & Prosthetics Lecture Series presented by Dynamic Orthotics and Prosthetics, "Rehabilitation Needs for Amputees after the Haiti Earthquake." Houston, TX. May 1, 2010.
3. Orthotics and Prosthetics Clinician Conference presented by the Orthotics and Prosthetics Group and The Institute of Rehabilitation and Research – Memorial Herman (TIRR-MH) Hospital, "Pain Management of Amputations." Houston, TX. February 1, 2013.
4. The Institute of Rehabilitation and Research - Memorial Hermann (TIRR-MH) Hospital Therapy Continuing Education Course, "Team Approach to Comprehensive Limb Loss Rehabilitation, Medical Management." Houston, TX. September 18, 2015.
5. TIRR-MH Hospital and University of Texas (UT) Orthopedics Lecture Series, "Moderator, Dr. Munjed Al Muderis on Osseo-Integration." Houston, TX. November 4, 2015.
6. TIRR-MH Hospital: Rehab Solutions, "Rehabilitation of Amputations & Limb Salvage." Houston, TX. March 10, 2016.
7. Amputee Coalition Limb Loss Education Day, "Using a Team Approach to Limb Loss: An Amputee Model System of Care." Houston, TX. March 26, 2016.
8. Arkansas Trauma Rehab Conference, "Team Approach to Traumatic Amputations: From Injury to Living with Limb Loss." Little Rock, AR. May 19, 2016.
9. TIRR-MH Hospital, "Phantom Limb Pain Webinar." Virtual. December 8, 2016.
10. TIRR-MH Hospital, "Panelist: Osseo-Integration FDA Trial Information Session." Houston, TX. January 31, 2017.
11. Amputation Prevention Center at TIRR-MH Hospital with Restorix Summit, "Limb Salvage: Is Amputation a Failure?" Houston, TX. February 23, 2018.
12. Pennsylvania State Limb Loss Conference, "Osseo-Integration: Direct Skeletal Attachment for Amputees." Hershey, PA. April 2018.
13. TIRR-MH & the University of Texas Trauma Symposium, "Amputation Considerations." Houston, TX. July 27, 2019.
14. Limb Preservation Society webinar: Empowering Recovery: The Transformative Role of Movement and Adaptive Sports. October 24, 2024

National



1. American Physical Therapy Association: Amputee Care for Physical Therapists Course, Course Faculty. Salt Lake City, UT. June 1, 2013.
2. Ossur Prosthetic Center of Excellence Lecture Series, "Amputees in Today's ACO Healthcare Model - How Clinicians Must Work Together." Orlando, FL. March 6, 2014.
3. Hanger Education Fair, "The Role of the Physiatrist in the Care of the Patient with Limb Loss." Las Vegas, NV. February 4, 2015.
4. Hanger Education Fair, "Post-Operative Amputee Care." Las Vegas, NV. February 4, 2015.
5. Orthopedic Trauma Association Annual Conference, "Peg Leg versus the \$6 Million Prosthesis." Tampa, FL. October 4, 2015.
6. American Academy of Orthotics and Prosthetists Annual Scientific Meeting, "Perioperative Care for the Lower Limb Amputee." New Orleans, LA. February 21, 2015.
7. Amputee Coalition (AC) Annual Conference, "Managing Upper Limb Loss Secondary Conditions." Tucson, AZ. July 23, 2015.
8. AC Annual Conference, "Fighting Insurance Denials Panel Discussion." Tucson, AZ. July 23, 2015.
9. Skills for Life: Bilateral Upper Limb Loss Workshop, "Moderator: Skills for Life Lecture Program." Houston, TX. October 23, 2015.
10. Skills for Life, "Pain Management in Upper Limb Loss." Houston, TX. October 24, 2015.
11. Amputee Coalition Annual Conference, "Rehabilitation Considerations for Individuals with Bilateral Upper Limb Loss." Greensboro, NC. June 8, 2016.
12. American Orthotics and Prosthetics Association National Assembly, "Role of Self-Management." Boston, MA. September 9, 2016.
13. AAOP State of the Science Conference, "Modeling Good Behavior: How you can help create a Model System of Interdisciplinary Amputee Care." Orlando, FL. September 16, 2016.
14. American Academy of Orthotics and Prosthetics (AAOP) State of the Science Conference, "Physiatrist Panel Member: Myoelectric versus Body-Powered Upper Limb Prosthesis." Orlando, FL. September 16, 2016.
15. Hanger Education Fair, "Osseo-Integration Update." Las Vegas, NV. February 2, 2017.



16. American Congress of Rehabilitation Medicine (ACRM) Annual Conference, "Contributions of Treatment Theory and Enablement Theory to Rehabilitation Research and Practice." Atlanta, GA. October 26, 2017.
17. ACRM Annual Conference, "Translating the VA/Department of Defense Clinical Practice Guidelines to a Civilian Population: Toward an Amputation Model System." Atlanta, GA. October 27, 2017.
18. ACRM Annual Conference, "Standardized Outcome Measures in Lower Limb Prosthetics." Atlanta, GA. October 27, 2017.
19. Paradigm Outcomes Annual Conference, "Osseo-Integration: How Direct Skeletal Attachment of a Prosthesis Affects the Amputees." Nashville, TN. October 28, 2017.
20. American Academy of Orthotics and Prosthetics Annual Conference, "Amputation Pain Management." New Orleans, LA. February 2018.
21. American Academy of Orthotics and Prosthetics: Upper Limb Symposium, "Prosthetic Abandonment." Orlando, FL. March 7, 2019.
22. Walter Reed State of the Science Symposium: Recent Advances in Osseo-Integration Rehabilitation, "Rehab Outcomes Tracking Evidence." Walter Reed National Military Medical Center, Bethesda, MD. May 17, 2019.
23. Amputee Coalition Annual Conference, "Help Your Doctor Help You (with Stephen Wegener, PhD)." San Antonio, TX. July 26, 2019.
24. Paradigm Outcomes Annual Conference, "Osseo-Integration Update." Austin, TX. October 26, 2019.
25. American Congress of Rehabilitation Medicine Annual Conference, "Therapy-based Pain Program." Chicago, IL. November 4, 2019.
26. Extremity War Injury 15th Symposium, "Pushing the Rehabilitation Envelope." Washington D.C., January 22, 2020.
27. American Academy of Orthotics and Prosthetics Annual Meeting, "Targeted Muscle Re-innervation (TMR)." Chicago, Illinois. March 4, 2020.
28. Association of Children's Prosthetic-Orthotic Clinics Annual Conference, "Presidential Guest Speaker: Osseo-integration (OI): How Direct Skeletal Attachment Affects Amputees." Online (Portland, OR). May 20, 2020.



29. ACRM Annual Conference, “Medical Management and Prosthetic Prescription.” Online. October 20, 2020.
30. ACRM Annual Conference, “Clinical Practice Guidelines CPG—Lessons Learned.” Online. October 22, 2020.
31. American Academy of Physical Medicine & Rehabilitation Virtual Conference, “Limb Loss Preservation Registry: Challenges to Implementation.” Virtual. October 22, 2020.
32. Hanger EmpowerFest Annual Conference, “Post Amputation Pain.” Virtual. November 6, 2020.
33. Skills for Life 5 ½ Virtual Conference, “COVID 19 & The Bilateral Upper Limb-Limb Loss Community.” Virtual. January 27, 2021.
34. AmpUtek Osseointegration Workshop, “A Physiatrist’s Perspective on OI.” Las Vegas, NV. February 12, 2022.
35. American Orthotic & Prosthetic Association Annual Conference “Hospital Focus Groups for the Limb Loss Preservation Registry” San Antonio, TX. September 29, 2022.
36. Skills for Life Conference for Bilateral Upper Limb Loss “Post Amputation Pain”, Houston, TX. October 5, 2022.
37. Skills for Life Conference for Bilateral Upper Limb Loss “Expected Functional Outcomes” Houston, TX. October 6, 2022.
38. Hanger Live, “Clinical Management of Prosthetic Patients with Cognitive, Visual, Auditory and Balance Difficulties” Dallas, TX. January 24, 2023.
39. Stepping Strong & Spaulding Rehabilitation Grand Rounds: Innovations in Trauma Rehabilitation—Stronger Steps Through Teamwork, Boston, MA. April 12, 2024.
40. AAPM&R National Grand Rounds: Rehabilitating Hope—Physiatrists on the Frontlines of Disaster Relief. May 8, 2024.
41. American Academy of Orthotics & Prosthetics: State of the Science of Osseointegration/Bone Anchored Limb—Curiosity, Consultation, Candidacy. Chicago, July 26-27, 2024.

International

1. International Symposia for Quanta Risk and Safety Conference, “Rehabilitation of Traumatic Amputations from Electrocutions.” The Woodlands, TX. October 23, 2014.



2. 2nd Combined Meeting of the Association for the Study and Application of the Methods of Ilizarov and Bone Reconstruction (ASAMI-BR), “Bringing Osseo-Integration to the United States: FDA approval of implant and procedure.” Brisbane, Australia. September 21, 2016.
3. OPIE Keynote Speaker for Annual Training Conference, “Amputation Medicine: Integrating Care & Overcoming Barriers.” Punta Cana, Dominican Republic. January 2018.
4. 14th International Society of Physical Rehabilitation Medicine World Congress, “A Model Center for Limb Loss Restoration & Rehabilitation Translating Military to Civilian.” Orlando, Florida. March 7, 2020.
5. OTWorld Connect, “A Physician’s Perspective on Best Practices In Interdisciplinary Treatment of Upper Limb Amputees.” Virtual (Leipzig, Germany). October 27, 2020.
6. American Academy of Orthopedic Surgeons - North America Osseo-Integration Conference, “Osseo-Integration—Perspectives from a Physiatrist: Treater, Medical Director and Researcher.” San Diego, CA. September 1, 2022.
7. Global Collaborative Conference for Osseointegration, “Post-OI Amputation Pain”, Charlotte, SC. November 5, 2022.
8. Global Collaborative Conference on Osseointegration “The How and the What during the Conference” Charlotte, NC. November 3rd, 2023
9. Bionic Reconstruction Conference: The Future of Integrated Upper Limb Surgical and Prosthetic Intervention “Pain, Rehab and Pharmacology” New York, NY. November 30th, 2023.
10. Bionic Reconstruction Conference: The Future of Integrated Upper Limb Surgical and Prosthetic Intervention: “Moderator for Panel on Reimbursement” New York, NY. December 1, 2023.
11. Range of Motion Project Conference, Keynote Speaker—Restoring Limbs & Providing Ideal Amputee Care, Guatemala City, Guatemala. October 12-13, 2024.
12. Global Collaborative Congress on Osseointegration: Weight Management in the OI/BAL Patient, Charlotte, NC. November 5, 2024.

Teaching Record

Major Presentations to Faculty, Fellows, Residents and Medical Students



1. University of Texas (UT) Department of Physical Medicine & Rehabilitation/Baylor College of Medicine (BCOM) Alliance Grand Rounds, "Documentation, Coding and Billing." Houston, TX. August 1, 2006.
2. UT Department of Physical Medicine & Rehabilitation (PM&R)/BCOM Alliance Grand Rounds, "Acute Management of Lower Extremity Amputations." Houston, TX. August 1, 2006.
3. UT Department of Orthopedics Grand Rounds, "Lower Extremity Amputations: A Step Ahead." Houston, TX. September 1, 2009.
4. UT Department of Rheumatology Grand Rounds, "Lecture Series – Orthotics and Bracing." Houston, TX. 2009-2013.
5. The Institute of Rehabilitation and Research – Memorial Hermann (TIRR-MH) Hospital and Research Rehab Solutions Lecture Series, "Life After Amputation: What can we learn from the Military?" Houston, TX. January 1, 2010.
6. UT Department of Cardiovascular Surgery Grand Rounds Lecture, "Peri-operative Amputation Management." Houston, TX. August 1, 2010.
7. UT Department of Orthopedic Surgery - Didactic Resident Lecture, "Lower Limb Amputations." Houston, TX. August 1, 2012.
8. UT Department of General Surgery Grand Rounds, "Lower Extremity Amputations: From a Trauma Perspective." Houston, TX. October 1, 2012.
9. UT Department of Orthopedics Grand Rounds, "Managing Lower Limb Amputations: Admission, Through Discharge & Beyond." Houston, TX. October 1, 2012.
10. UT Department of Orthopedics & Orthopedic Surgery - Didactic Resident Lecture, "Pain Management in Amputations and Board Review." Houston, TX. July 30, 2013.
11. UT Department of Cardiovascular Surgery Grand Rounds, "Rehabilitation of the Vascular Amputee." Houston, TX. April 17, 2015.
12. UT Department of Orthopedics - Didactic Resident Lecture, "Orthotics and Bracing." Houston, TX. July 1, 2015.
13. BCOM Department of PM&R Grand Rounds, "The 5 PC-As of Limb Loss: Acute-care, Authorization, Acceptance, Advances and Advocacy in Amputee Medicine." Houston, TX. January 22, 2016.



14. UT Department of Orthopedic Surgery - Didactic Resident Lecture, "Trauma and Limb Salvage." Houston, TX. November 29, 2016.
15. UT Medical School Multidisciplinary Grand Rounds, "Panelist: Limb Salvage vs. Amputation with Visiting Professor Doug Smith." Houston, TX. December 1, 2016.
16. UT/BCOM Alliance Didactic Lecture Series, "Limb Loss and Amputation Medicine." Houston, TX. August 24, 2017.
17. UT Departments of Orthopedics & Trauma Combined Educational Series Grand Rounds, "Limb Loss: Surgical Implications affecting Rehabilitation of Amputees." Houston, TX. August 2018.
18. UT Department of PM&R Grand Rounds Lecture, "Direct Skeletal Attachment." Houston, TX. January 2019.
19. UT Department of Plastic Surgery Grand Rounds, "Amputee Care using an Interdisciplinary Model: Creating a team to Restore and optimize limbs." Houston, TX. November 11, 2021.
20. UT Department of PM&R - Didactic Lecture Series, "Amputation Medicine." Houston, TX. January 20, 2022.
21. University of Colorado Department of Physical Medicine & Rehabilitation (PM&R) Grand Rounds, "Restoring Limb using an Interdisciplinary Model." Aurora, CO. January 4, 2023.
22. University of Colorado Department of Orthopedics – Didactic Lecture Series, "Amputation Rehabilitation." Aurora, CO. March 8, 2023.
23. University of Colorado Department of Orthopedic—Grand Rounds: The 3 Ps of Patient-Center Care for Amputees—Preserving Function, Pain Management & Providing Prosthetics, February 7, 2024.
24. University of Colorado Department of Physical Medicine & Rehabilitation: Resident Didactic Series: Post Amputation Pain and Limb Optimization, December 4, 2024.

Courses

1. UT Department of PM&R/BCOM Alliance: Medical School Course, "Life After Amputation: What can we learn from the Military?" Lecturer and Course Faculty. Houston, TX. April 1, 2010.
2. UT Department of PM&R/BCOM Alliance: Preparing for Psychiatry Practice Workshop, Course Faculty. Houston, TX. August 1, 2011.



3. TIRR-MH Limb Loss Education Course for Occupational and Physical Therapists, Course Faculty. Houston, TX. September 18, 2015 and November 12, 2016
4. American Academy of Physical Medicine & Rehabilitation Annual Conference, "Upper Limb Course, Panel Instructor." Virtual. November 11, 2020.
5. American Congress of Rehabilitation Medicine (ACRM) Annual Conference, "Innovations in Limb Loss Rehabilitation Instructional Course, Course Faculty." Virtual. October 20, 2020.
6. 49th American Academy of Orthotists and Prosthetists Annual Meeting and Scientific Symposium, "Clinical Management and Treatment of Patients with Osseointegrated Protheses, Course Faculty." Nashville, TN. March 1-4, 2023.
7. American Congress of Rehabilitation Medicine, "Team Approach to Osseointegration/Bone Anchored Limb" Atlanta, GA. November 2nd, 2023
8. Limb Preservation Foundation. "Upper Limb Panel—Medical and Rehabilitation Management" April 19, 2024.
9. 4th Johns Hopkins Limb Loss and Restoration Symposium: "Who is the right candidate for Osseointegration vs. Socket?" April 4, 2024.

Lectures to Residents

1. Annual didactic block for O&P core lecture series

Lectures to Medical Students

1. Annual Transition to Residency (3rd year medical school) 2009-2021
2. Annual Problem Based Learning (1st year medical school) 2009-2012

Lectures to Allied Health Students

1. Baylor College of Medicine Orthotics and Prosthetics: Medical Management of Amputees 2013-2016

Clinical Attending Duties

1. Inpatient rehabilitation unit and consult service
Supervision of residents and fellows for daily bedside teaching rounds
2008 to 2010
2. Outpatient clinic for Limb Loss
Supervision of rotating residents



2008 to 2010 (2 days a week)

3. Outpatient Clinic for Amputee Care and Bracing
Supervision of medical students, residents, fellows, and allied health students
2010 to 2022 (4 days a week)
Inpatient Consults in Acute Hospitalization
Supervision of medical students, residents, and fellows
2010 to 2022 (1 day a week)

List of Specific Accomplishments

1. Director of the Limb Loss Program at The Institute of Rehabilitation and Research: medical director for the educational course for Limb Loss to allied health professionals 2015-2021
2. Organized the resident rotation schedule 2007-2008
3. Created the Amputee Fellowship 2010-2015
4. Created the Amputee Trauma Fellowship and received accreditation from the Texas Medical Board 2018
5. Instituted the Orthotics and Prosthetics Clinical Case Presentation series.

Key Administrative Positions

1. PM&R Residency program committee 2006-2014
2. Orthopedics Residency program committee 2010-2022
3. Fellowship Director for the Amputee Trauma Fellowship
4. Director for the O&P Clinical Case Series

Teaching Awards

1. The Institute of Rehabilitation and Research – Memorial Hermann (TIRR-MH) Teaching Award, 2017

Grant Support

2/1/2023 –present **Department of Defense, Award Number OP220013**
“Transfemoral osseointegrated prosthesis limb load symmetry training (TOPLOAD)” \$349,939 (CO-I)
Goals: determine the feasibility of a 40-week limb-load biofeedback training intervention, determine if there is an intervention signal of efficacy, and identify functional movement priorities for people with transfemoral osseointegrated prostheses.

Congressionally Directed Medical Research Programs, Grant OR210169



- 8/10/2022 – Present** **“Improving Functional Performance in Transfemoral Amputees by Somatosensory Augmentation” \$1,500,000 (Subcontract \$80,000) (PI – oversight)**
- 8/21/2020 – 2022 National Institute on Disability, Independent Living, and Rehabilitation Research, Field-Initiated Projects Research of Administration for Community Living
“A non-invasive intervention (Bre-EStim) for management of phantom limb pain (PLP) after traumatic amputation” 3% of \$250,000 (Co-I)
- 9/2019 – 06/2022 National Institute on Nursing Research, Award Number 1R01NR018684
“Measuring Symptom Clusters in People with Sudden-Onset Disabilities,” \$598,075 (CO-I)
Goal: to understand the complex patterns of symptoms displayed after acquired injuries to the brain, spine, or limb, so that clinical care can be improved.
- 7/1/2019 – 2021 McGovern Medical School Summer Research Program (sponsoring Komal Luthral), Dean’s Office Stipend, with matched funds from the Orthopedics Department
"10-week Pain Program in Patients with Amputations or Limb Salvage Procedures," \$2,000 (PI, Faculty Mentor)
Goal: Reduce pain medication using other modalities and education.
- 1/2018 – 1/2020 Texas Women’s University. Mirror Tool Research Project #1
“Validation of the mirror image comfort & acceptance scale (MICAS) for veterans: A tool to measure the experience of viewing self in the mirror” \$30,000 (I)
Goal: evaluate the effects of self-image post-amputation for veterans while viewing through a mirror and how that may impact healthcare providers including nurses, therapists, and physicians in approach to patients in the acute care process.
- 2018 – 2022 Department of Defense United States Army Medical Research, Major Extremity Trauma Research Consortium (METRC) III, University of Texas Department of Orthopedics
5% salary (CO-I)
Goal: This multi-center consortium was established in 2009 as a collaboration of 4 Military Facilities, 22 Core Civilian Centers and 30 Satellite Centers.



- 8/11/2017 –
7/31/2019 The Institute for Rehabilitation and Research – Memorial Hermann (TIRR-MH) Hospital, Innovations Grant
“Establishing Clinical Practice Guidelines for Limb Loss Measuring Function and Quality of Life with model system of care Amputation Medicine,” \$10,000 (Medical Assistant Salary, Conference Presentation) (PI)
- 7/31/17 – 2022 TIRR-MH Hospital
“Cognitive Behavioral-Based Physical Therapy”, 2% salary (PI)
Goal: Cost effective therapy delivered over the telephone for lower limb traumatic injury.
- 5/2017 – 12/2021 Department of Defense/Broad Agency, Award W81XWH-16-R-BAA1
“Assessing Rehabilitation Outcomes after Severe Neuromusculoskeletal Injury: Development of Patient Reported Outcomes Assessment Instruments”, \$50,000, Co-I
Goal: to create valid, standardized, psychometrically robust, and clinically useful PRO measures for traits and symptoms that are of critical importance to understanding the health and rehabilitation outcomes of Wounded Warriors and civilians with neuromusculoskeletal trauma. Furthermore, this study developed clinical score reports in an actionable format to improve the clinical workflow and standard of care for individuals with traumatic limb injuries.
- 5/2017 – 5/2021 Texas Women’s University, Mirror Tool Research Project #2
“Validation of the mirror image comfort & acceptance scale (MICAS) for amputees: A tool to measure the experience of viewing self in the mirror” \$30,000 (I)
Goal: evaluate the effects of self-image post-amputation when viewing through a mirror and how that may impact healthcare providers including nurses, therapists, and physicians in approaching patients in the acute care process.
- 1/1/2017 –
12/31/2018 BIONX Medical Technologies, Ottobock (Industry Sponsored)
“Empowering Active Seniors with Energy EASE BiOM ankle”, \$45,000 (PI)
Goal: to investigate the powered ankle with a cross-over pilot.
- 4/1/2016 –
6/30/2018 National Institutes of Health, National Institute of Child Health and Human Development, and the National Center for Medical Rehabilitation Research



10/16/2016 –
12/31/2018

“Combined peripheral Breathing-controlled electrical stimulation (BreStim) and Central electrical stimulation for neuropathic pain management after traumatic amputation”, 3% salary (CO-I)
Goal: to explore the newly developed intervention in managing phantom limb pain.

4/6/2016 –
12/31/2018

Major Extremity Trauma Research Consortium
“Measuring the alignment of TOAS patients with Smart Pyramid on the prosthesis (ProFit)”, 2% salary (CO-I)

1/30/2015 –
12/31/2018

Walter Reed National Military Medical Center
“Phantom Limb Pain Genetics Study” 0% (Medical Assistant Salary) (On-site P-I)
Goal: Identify the Genetic Variations Associated with Phantom Limb Pain.

12/1/2016 – 2016

Major Extremity Trauma Research Consortium
“Transtibial Amputation Outcomes comparing Ertl (tibia-fibula synostosis) with standard (TAOS)”, 2% salary (CO-I)

12/1/2013 –
12/31/2014

National Institutes of Health, Award 1R21HD087128-01
“Breathing-controlled electrical stimulation for phantom pain management”, \$275,000, 0.60 calendar (CO-I)
Goal: use breathing-controlled E-Stimulation and the effects on phantom limb pain in the amputee patient population.

7/26/2012 –
6/30/2018

Texas Women’s University
“The Experience of Viewing Self in Mirror after Amputation of a Limb”, \$30,000 (CO-I)
Goal: evaluate the effects of self-image post-amputation when viewing through a mirror and how that may impact healthcare providers including nurses, therapists, and physicians in approaching patients in the acute care process.

2011 – 2014

Major Extremity Trauma Research Consortium
“Outcomes Following Severe Distal Tibia, Ankle and/or Foot Trauma (OUTLET)”, 0% salary (CO-I) (UT on study 7/26/2012)

2010 – 2014

Centers for Disease Control and Prevention, Amputee Coalition
“Well, Being Initiative for Persons with Limb Loss to Develop BMI Calculator”, \$7,500 (CO-I)
Goal: create and validate a Body Mass Index calculator for people with limb loss in establishing an ideal weight post amputation.

University of Texas Medical School, TIRR-MH Hospital



“Modification of Electrical Pain Threshold by Voluntary Breathing-Controlled Electrical Stimulation (Bre-E-Stim) in Healthy Subjects” (CO-I)
Goal: use Breathing Controlled Electrical Stimulation to establish normal values for healthy subjects in comparison to patients with neuropathic pain.

2009 – 2010

University of Texas Medical School, TIRR-MH Hospital
“Radiofrequency Ablation for the Treatment of Amputation Neuromas”, \$0 (PI)

Bibliography

Peer-Reviewed Articles

1. Meier RH, **Melton D**. Ideal functional outcomes for amputation levels. *Phys Med Rehabil Clin N Am*. 2014 Feb;25(1):199-212. PMID: 24287248 <https://pubmed.ncbi.nlm.nih.gov/24287248/>
2. Li S, **Melton DH**, Berliner JC. “Breathing-controlled electrical stimulation could modify the affective component of neuropathic pain after amputation: a case report.” *J Pain Res*. 2012;5:71-5. doi: 10.2147/JPR.S31036. Epub 2012 Apr 12. PMID: 22536094; PMCID: PMC3333797. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3333797/>
3. Li S, Berliner JC, **Melton DH**, Li S. “Modification of electrical pain threshold by voluntary breathing-controlled electrical stimulation (BreEstim) in healthy subjects.” *PLoS One*. 2013 Jul 24;8(7):e70282. doi: 10.1371/journal.pone.0070282. PMID: 23894632; PMCID: PMC3722161. <https://pubmed.ncbi.nlm.nih.gov/23894632/>
4. Li S, **Melton D**, Li S. “Tactile, thermal, and electrical thresholds in patients with and without phantom limb pain after traumatic lower limb amputation.” *J Pain Res*. 2015;8:169-174 <https://doi.org/10.2147/JPR.S77412>
5. Cannada, Lisa K. MD; **Melton, Danielle H. MD**; Deren, Matthew E. MD; Hayda, Roman A. MD, Col (ret); Harvey, Edward J. MD, MSc, FRCSC. “Dealing With Catastrophic Outcomes and Amputations in the Mangled Limb.” *Journal of Orthopaedic Trauma*: December 2015 - Volume 29 - Issue - p S39-S42 doi: 10.1097/BOT.0000000000000468 <https://pubmed.ncbi.nlm.nih.gov/26584265/>
6. Freysteinson, Wyona PhD, MN; Thomas, Lisa MS, APRN, CNS, CRRN; Sebastian-Deutsch, Amy DNP, APRN, CNS, AOCNS; Douglas, Denika PhD; **Melton, Danielle MD**; Celia, Tania MSN, RN; Reeves, Kristin MSPT; Bowyer, Patricia EdD, MS, OTR, FAOTA. “A Study of the Amputee Experience of Viewing Self in the Mirror.” *Rehabilitation Nursing*: 1/2 2017 - Volume 42 - Issue 1



- p 22-32. doi: 10.1002/rnj.256

https://journals.lww.com/rehabnursingjournal/fulltext/2017/01000/a_study_of_the_amputee_experience_of_viewing_self.5.aspx

7. Bosse, Michael J. MD; Morshed, Saam MD, PhD; Reider, Lisa PhD; Ertl, William MD; Toledano, James MD; Firoozabadi, Reeza MD; Seymour, Rachel B. PhD; Carroll, Eben MD; Scharfstein, Daniel O. ScD; Steverson, Barbara RN, MHA; MacKenzie, Ellen J. PhD; METRC. Collaborator: **Melton, Danielle H. MD.** "Transtibial Amputation Outcomes Study (TAOS): Comparing Transtibial Amputation With and Without a Tibiofibular Synostosis (Ertl) Procedure." *Journal of Orthopaedic Trauma*: April 2017 - Volume 31 - Issue - p S63-S69. doi: 10.1097/BOT.0000000000000791 <https://pubmed.ncbi.nlm.nih.gov/28323804/>
8. **Melton, Danielle H. MD.** "Physiatrist Perspective on Upper-Limb Prosthetic Options: Using Practice Guidelines to Promote Patient Education in the Selection and the Prescription Process." *Journal of Prosthetics and Orthotics*: October 2017 - Volume 29 - Issue 4S - p P40-P44. doi: 10.1097/JPO.0000000000000157 https://journals.lww.com/ipojournal/Fulltext/2017/10001/Physiatrist_Perspective_on_Upper_Limb_Prosthetic.8.aspx
9. Archer KR, Davidson CA, Alkhoury D, Vanston SW, Moore TL, Deluca A, Betz JF, Thompson RE, Obremskey WT, Slobogean GP, **Melton DH**, Wilken JM, Karunakar MA, Rivera JC, Mir HR, McKinley TO, Frey KP, Castillo RC, Wegener ST; METRC. "Cognitive-Behavioral-Based Physical Therapy for Improving Recovery After Traumatic Orthopaedic Lower Extremity Injury (CBPT-Trauma)." *J Orthop Trauma*. 2022 Jan 1;36(Suppl 1):S1-S7. doi: 10.1097/BOT.0000000000002283. PMID: 34924512. <https://pubmed.ncbi.nlm.nih.gov/34924512/>
10. Raquel Madroñero-Mariscal, Natalia Palmero-Valdez, Emilio González-Parra, Raúl Ramos Izquierdo, Ricardo Marcelino, María Pérez-Cuesta Llaneras, Barbara Nasarre, Almudena Fernández-Bravo Rueda, Elisa López-Dolado and **Danielle H Melton.** "Design of a Challenging Prosthetic Fitting Process and Rehabilitation Training Program to Achieve Functionality in a Complex Quadruple Amputee." *Archives of Clinical and Medical Case Reports* 7 (2023): 44-57. ISSN: 2575-9655
11. Nicholas W. Vandenberg, Jason W. Stoneback, Hope Davis-Wilson, Cory L. Christiansen, Mohamed E. Awad, **Danielle H. Melton**, Brecca M.M. Gaffney. "Unilateral Transfemoral Osseointegrated Prostheses Improve Joint Loading during Walking." *Journal of Biomechanics*. 2023 May 22. doi: 10.1016/j.jbiomech.2023.111658. Epub ahead of print.
12. Major Extremity Trauma Research Consortium (METRC). Development of a prosthetic fit and alignment assessment (ProFit) in persons with post-traumatic transtibial amputation. *Prosthet Orthot Int*. 2023 Dec 1;47(6):599-606. doi: 10.1097/PXR.0000000000000237. Epub 2023 Apr 4. PMID: 37052578.



13. Voigt JD, Potter BK, Souza J, Forsberg J, **Melton D**, Hsu JR, Wilke B. Lifetime cost-effectiveness analysis osseointegrated transfemoral versus socket prosthesis using Markov modelling. *Bone Jt Open*. 2024 Mar 15;5(3):218-226. doi: 10.1302/2633-1462.53.BJO-2023-0089.R1. PMID: 38484760; PMCID: PMC10949340.
14. Awad ME, **Melton D**, Shaw KG, Lev G, Gaffney BMM, Christiansen CL, Stoneback JW. How Comprehensive and Efficient Are Patient-Reported Outcome Measures for Individuals with Lower Extremity Amputation Undergoing Implantation of Osseointegrated Bone Anchored Limbs? *JBJS Rev*. 2024 Mar 15;12(3). doi: 10.2106/JBJS.RVW.23.00235. PMID: 38489397.
15. Major Extremity Trauma Research Consortium (METRC). Cognitive-Behavioral-Based Physical Therapy for Improving Recovery After a Traumatic Lower-Extremity Injury: The Results of a Randomized Controlled Trial. *J Bone Joint Surg Am*. 2024 Jul 17;106(14):1300-1308. doi: 10.2106/JBJS.23.01234. Epub 2024 May 23. PMID: 38781313.
16. Tracy JB, Gaffney BMM, Thomsen PB, Awad ME, **Melton DH**, Christiansen CL, Stoneback JW. Dynamic gait stability and stability symmetry for people with transfemoral amputation: A case-series of 19 individuals with bone-anchored limbs. *J Biomech*. 2024 Jun;171:112208. doi: 10.1016/j.jbiomech.2024.112208. Epub 2024 Jun 25. PMID: 38941842; PMCID: PMC11251498.
17. Roda GF, Awad ME, **Melton DH**, Christiansen CL, Stoneback JW, Gaffney BMM. The Amputated Limb Gluteus Medius is Biomechanically Disadvantaged in Patients with Unilateral Transfemoral Amputation. *Ann Biomed Eng*. 2024 Mar;52(3):565-574. doi: 10.1007/s10439-023-03400-0. Epub 2023 Nov 9. PMID: 37946055; PMCID: PMC10922424.
18. Gaffney BMM, Davis-Wilson HC, Awad ME, Tracy J, **Melton DH**, Lev G, Stoneback JW, Christiansen CL. Daily steps and stepping cadence increase one-year following prosthesis osseointegration in people with lower-limb amputation. *Disabil Rehabil*. 2024 Apr;46(7):1432-1437. doi: 10.1080/09638288.2023.2200036. Epub 2023 Apr 19. PMID: 37073780; PMCID: PMC10584988.
19. Major Extremity Trauma Research Consortium (METRC). Cognitive-Behavioral-Based Physical Therapy for Improving Recovery After a Traumatic Lower-Extremity Injury: The Results of a Randomized Controlled Trial. *J Bone Joint Surg Am*. 2024 Jul 17;106(14):1300-1308. doi: 10.2106/JBJS.23.01234. Epub 2024 May 23. PMID: 38781313.
20. Major Extremity Trauma Research Consortium (METRC). Outcomes Following Transtibial Amputation with and without a Tibiofibular Synostosis Procedure: A Multicenter Randomized Clinical Trial (TAOS Study). *J Bone Joint Surg Am*. 2024 Dec 2. doi: 10.2106/JBJS.23.01408. Epub ahead of print. PMID: 39621789.



21. Gaffney BMM, Gimarc D, Thomsen-Freitas PB, Pattee J, Wong C, Milius DW, **Melton DH**, Christiansen CL, Stoneback JW. Associations Between Skeletal Alignment and Biomechanical Symmetry Before and After Transfemoral Bone-anchored Limb Implantation. *Clin Orthop Relat Res.* 2024 Dec 24. doi: 10.1097/CORR.0000000000003344. Epub ahead of print. PMID: 39745233.

Book Chapters

1. Robert Meier, MD and **Danielle H Melton, MD**. Ideal Functional Outcomes for Amputation Levels. In: *Physical Medicine and Rehabilitation Clinics of North America*. Elsevier. 2014. Pg. 199-212.
2. Josef Butkus, **Danielle Melton, MD**. Chapter 9: General Rehabilitation Principles and Strategies for the Upper Limb Amputee. In: *Atlas of Amputations and Limb Deficiencies 5th Edition*. American Academy of Orthopaedic Surgeons and Wolters Kluwer. (*In review*)
3. LeRoy Oddie, MBA, CP, CLCP, **Danielle H Melton, MD**. Chapter 15: Amputations. In: *Handbook of Medical Aspects of Disability and Rehabilitation for LCP*. (*In review*)

Other Publications

1. *Medical Council Networker*, American Academy of Physical Medicine, and Rehabilitation. Article (Summer 2011, Volume 3, Issue 3). "Paving the Road to Preventing Limb Loss & Improving Amputee Care."
2. *O&P Business News*. Article (October 2012). Joseph M. Czerniecki, MD et al. "The Effect of Rehabilitation in a Comprehensive Inpatient Rehabilitation Unit on Mobility Outcome After Dysvascular Lower Extremity Amputation."
3. *In-Motion Magazine*. Article (September/October issue 2015). "Abuse/Misuse of Pain Medications: Is the treatment of pain after amputation at risk?"
4. *In-Motion Magazine*. Article (January/February 2015 issue). "Stepping into the Ring: Advocating is a great way to get involved in the fight for amputee rights."

Other Products of Scholarship

1. *Amputee Coalition*. Online Patient Education Resources (2015). "Management of Residual Limb Pain" and "Managing Phantom Pain."



2. *Amputee Coalition*. Online Patient Education Resource – Video Series (August 2015). “[Amputee Rehabilitation Series #1-6.](#)”
3. *University of Texas and The Institute of Rehabilitation and Research - Memorial Hermann*. Continuing Education Webinar Series (2016). “[Webinar #2: Post-Amputation Pain.](#)”
4. *Amputee Coalition*. Patient Education Booklet (2017). “[First Step: A Guide for Adapting to Limb Loss](#)”.
5. *Paradigm Corporation*. Position Paper (2018). “[Osseointegration in Amputees](#)”
6. *Paradigm Corporation*. Position Paper (April 2022). “[Osseointegration in Amputees](#)”
7. *University of Texas Department of Orthopedics*. Patient Education Resource (May 2022). “Pain Management for Patients with Limb/Amputation or Salvage.”
8. *Limb Preservation Foundation*. Online Patient Education Webinar (June 2022). “[Learn About Osseointegration.](#)”
9. *American Orthotic and Prosthetic Association and American Academy of Orthotists and Prosthetists*. Members-Only online education webinar (May 31, 2023). “[Data Drives Improved Patient Care.](#)”

Scientific Abstracts Published/Presented at Scientific Meetings

1. **Melton D**, Khalifa A, Steen, D. Radiofrequency Ablation for Amputation Neuromas. Poster presented at the Association of Academic Physiatrists National Conference, Fort Meyers, FL. April 1, 2010.
2. Awad ME; Davis-Wilson H; Gaffney BM; Christiansen CL; **Melton D**; Stoneback JW. Bone-Anchored Leg Prostheses Improve Patient-Reported Outcomes in Transfemoral Amputation: A Stratified Meta-analysis. Poster presented at the 31st Annual meeting of Limb Lengthening and Reconstruction Society, Portland, OR. July 31, 2022.
3. Awad ME; Davis-Wilson H; Gaffney BM; Christiansen CL; **Melton D**; Stoneback JW. The Sensitivity and Specificity of Frailty Indices in Predicting the Mortality and Complications following Lower-Limb Amputation. Poster presented at the 31st Annual meeting of Limb Lengthening and Reconstruction Society, Portland, OR. July 31, 2022.
4. Shaw K, Awad ME, Gaffney BMM, Christiansen CL, **Melton D**, Stoneback JW; Patient-Reported Outcomes of Pain and Related Quality of Life One-Year Following Osseointegration in Patients with Lower-Extremity Amputations. Podium presentation at the Orthopedic Research and



Education Foundation-Central West Region Resident Research Symposium, Aurora, CO.
September 28, 2022. **2022 OREF Top Presenters (2nd Place) Award.**

5. Shaw K, Awad ME, **Melton D**, Stoneback JW. Patient-Reported Outcomes of Pain and Related Quality of Life One-Year Following Osseointegration in Patients with Lower Extremity Amputations. Podium presentation at the Orthopedic Research and Education Foundation-Central West Region Resident Research Symposium, Aurora, CO. September 28, 2022. **2022 OREF Top Presenters (2nd Place) Award.**
6. Awad ME, Davis-Wilson HC, Gaffney BMM, Christiansen CL, **Melton D**, Stoneback JW; Osseointegrated Transfemoral Prostheses Implantation Improve Patient-Reported Outcomes in Transfemoral Amputation: A Stratified Meta-analysis. Poster Presentation at the University of Colorado 4th Annual Orthopedic Research Symposium & D'Ambrosia Diversity Lectureship, Aurora, CO, USA. October 5, 2022.
7. Awad ME, Davis-Wilson HC, Gaffney BMM, Christiansen CL, **Melton D**, Stoneback JW; How Comprehensive and Efficient Are Patient-Reported Outcomes for Osseointegrated Prosthesis Implantation in Patients with Lower-Limb Loss? Poster presented at the University of Colorado 4th Annual Orthopedic Research Symposium & D'Ambrosia Diversity Lectureship, Aurora, CO. October 5, 2022.
8. Awad ME, Davis-Wilson HC, Gaffney BMM, Christiansen CL, **Melton D**, Stoneback JW; Limb Reconstruction with Osseointegrated Transfemoral Prosthesis Implantation following Radical Amputation for Lower Extremity Tumors. Poster Presentation at the University of Colorado 4th Annual Orthopedic Research Symposium & D'Ambrosia Diversity Lectureship, Aurora, CO. October 5, 2022.
9. Awad ME, Davis-Wilson HC, Gaffney BMM, Christiansen CL, **Melton D**, Stoneback JW; What is the correlation between Patient-Reported Outcome Measures and Patient Satisfaction following Osseointegrated Transfemoral Prosthesis Implantation? Poster presented at the University of Colorado 4th Annual Orthopedic Research Symposium & D'Ambrosia Diversity Lectureship, Aurora, CO. October 5, 2022.
10. Awad ME, Davis-Wilson HC, Gaffney BMM, Christiansen CL, **Melton D**, Stoneback JW; Minimal Clinically Important Difference for change in Case-Specific Patient Reported Outcome Measures following Osseointegrated Transfemoral Prostheses Implantation. Poster presented at the University of Colorado 4th Annual Orthopedic Research Symposium & D'Ambrosia Diversity Lectureship, Aurora, CO. October 5, 2022. **2022 Patient IQ Improvement Award Finalist.**
11. Awad ME, Davis-Wilson HC, Gaffney BMM, Christiansen CL, **Melton D**, Stoneback JW; Defining the Minimal Clinically Important Difference of Health-Related Quality of Life Measures following Osseointegrated Transfemoral Prosthesis Implantation. Podium presentation at the University of Colorado 4th Annual Orthopedic Research Symposium & D'Ambrosia Diversity Lectureship, Aurora, CO. October 5th, 2022. **Mack Clayton Research Award Finalist.**



12. Awad ME, Davis-Wilson HC, Gaffney BMM, Christiansen CL, **Melton D**, Stoneback JW; The Predictive Ability of Four Frailty Indices to predict Mortality and Complications following Lower-Limb Amputation. Poster presented at the University of Colorado 4th Annual Orthopedic Research Symposium & D'Ambrosia Diversity Lectureship, Aurora, CO. October 5, 2022.
13. Awad ME, Davis-Wilson HC, Gaffney BMM, Christiansen CL, Lev G, **Melton D**, Stoneback JW. Defining the Minimal Clinically Important Difference of Health-Related Quality of Life Measures following Osseointegrated Transfemoral Prosthesis Implantation. Poster presented at the University of Colorado 4th Annual Orthopedic Research Symposium & D'Ambrosia Diversity Lectureship, Aurora, CO. October 5, 2022. **2022 Mack Clayton Trainee Award Finalist.**
14. Shaw K, Awad ME, Gaffney BMM, Christiansen CL, **Melton D**, Stoneback JW; Patient-Reported Outcomes of Pain and Related Quality of Life One-Year Following Osseointegration in Patients with Lower-Extremity Amputations. Poster presented at the University of Colorado 4th Annual Orthopedic Research Symposium & D'Ambrosia Diversity Lectureship, Aurora, CO. October 5, 2022. **2022 Best Scientific Poster-Patient IQ Quality Improvement Award.**
15. Shaw K, Awad M, **Melton D**, Stoneback JW. Patient Reported Outcomes Of Pain And Related Quality Of Life One Year Following Osseointegration In Patients With Lower Extremity Amputations. Orthopedic Research Society 2023 Annual Meeting. Dallas, TX. February 10-14, 2023.
16. Shaw K, Awad ME, Gaffney BMM, Christiansen CL, **Melton D**, Stoneback JW; Patient-Reported Outcomes of Pain and Related Quality of Life One-Year Following Osseointegration in Patients with Lower-Extremity Amputations. Poster presented at the Orthopaedic Research Society 2023 Annual Meeting, Dallas, TX. February 10-14, 2023.
17. Gaffney BMM, Roda GF, Carballido-Gamio J, Awad ME, Christiansen CL, Carpenter RD, **Melton DH**, Strickland CD, Stoneback JW. Feasibility of Quantitative Magnetic Resonance Imaging in Patients with Transfemoral Osseointegrated Prostheses. Poster presented at the Orthopaedic Research Society 2023 Annual Meeting, Dallas, TX. February 10-14, 2023.
18. Vandenberg N, Stoneback J, Christiansen C, Awad M, **Melton D**, Wheatley B, Gaffney B. Predicting Effects of Muscle Strength Changes on Joint Loading after Transfemoral Osseointegrated Prostheses. Poster presented at the Orthopaedic Research Society 2023 Annual Meeting, Dallas, TX. February 10-14, 2023.
19. Ouattas A., **Melton D.**, O'Malley M., Reeves K., Doherty D., Figueroa L.A., Zandiyeh P. Center of pressure asymmetry and static balance deficits in unilateral transfemoral amputees. Presented at the South-Central American Society of Biomechanics (SCASB), Fort Worth, TX. March 31 – April 1, 2023.



20. Awad ME, Davis-Wilson HC, Gaffney BMM, Christiansen CL, Enabulele E; **Melton D**, Stoneback JW. Limb Reconstruction with Osseointegrated Transfemoral Prosthesis Implantation following Radical Amputation for Lower Extremity Tumors. Limb Lengthening and Reconstruction Society 32nd Annual Meeting, Lake Tahoe, CA. July 14-15, 2023.
21. Awad ME, Davis-Wilson HC, Gaffney BMM, Christiansen CL, Lev G, **Melton D**, Stoneback JW. Defining the Minimal Clinically Important Difference of Health-Related Quality of Life Measures following Osseointegrated Transfemoral Prosthesis Implantation. Limb Lengthening and Reconstruction Society 32nd Annual Meeting, Lake Tahoe, CA. July 14-15, 2023.
22. James B. Tracy, Mohamed E. Awad, **Danielle H. Melton**, Jason W. Stoneback, Brecca M. M. Gaffney, Cory L. Christiansen. Balance confidence and walking margin of stability symmetry after lower-extremity prosthesis osseointegration: a case series. Podium presentation at the National American Society of Biomechanics 2023 Annual Meeting, Knoxville, TN. August 8-11, 2023.
23. Vandenberg NW, Wheatley B, Awad ME, **Melton DH**, Christiansen CL, Stoneback JW, Gaffney BMM. Predicting the Effects of Hip Strength Changes on Gait Dynamics in Patients with Transfemoral Amputation. Podium presentation at the National American Society of Biomechanics 2023 Annual Meeting, Knoxville, TN. August 8-11, 2023.
24. Roda GF, Awad ME, **Melton DH**, Christiansen CL, Stoneback JW, Gaffney BMM. Biomechanical Disadvantage of Amputated Limb Gluteus Medius in Patients with Unilateral Transfemoral Amputation. Poster presentation at the National American Society of Biomechanics 2023 Annual Meeting, Knoxville, TN. August 8-11, 2023.
25. Vinson, A.L, Vandenberg, N.W., Awad, M.E., **Melton, D.**, Christiansen, C.L., Stoneback, J.W., Gaffney, B.M.M. Knee Joint Biomechanics Before and After Transtibial Prosthesis Osseointegration. Podium presentation at the National American Society of Biomechanics 2023 Annual Meeting, Knoxville, TN. August 8-11, 2023.
26. Ouattas A., **Melton D.**, O'Malley M., Reeves K., Doherty D., Figueroa L.A., Zandiyeh P. Biomechanical Deficits, and minimal detectable change during gait in unilateral transfemoral amputees. Presented at the 2023 Military Health System Research Symposium, Kissimmee, FL. August 14 – 17, 2023.
27. Ouattas A., **Melton D.**, O'Malley M., Reeves K., Doherty D., Figueroa L.A., Zandiyeh P. Biomechanical Deficits, and minimal detectable change during gait in unilateral transfemoral amputees. Presented at the 2023 Military Health System Research Symposium, Kissimmee, FL. August 14 – 17, 2023.
28. Ouattas A., **Melton D.**, O'Malley M., Reeves K., Doherty D., Figueroa L.A., Lee E., Zandiyeh P. Interlimb load asymmetry and minimal detectable change in unilateral transfemoral amputees



during sit-to-stand activity. Presented at the 2023 Military Health System Research Symposium, Kissimmee, FL. August 14 – 17, 2023.

29. Tracy JB, Christiansen CL, Awad ME, **Melton DH**, Gaffney BMM, Stoneback JW. Balance Confidence and Walking Margins of Stability after Lower-Extremity Prosthesis Osseointegration: A case series. Poster presentation at the 2023 Military Health System Research Symposium, Kissimmee, FL. August 14 – 17, 2023.
30. Gaffney BMM, Vandenberg NW, Awad ME, **Melton DH**, Tracy JB, Thomsen PB, Christiansen CL, Stoneback JW. Effects of Transfemoral Prosthesis Osseointegration on Cumulative Hip Joint Loading in Civilian Adults. Podium presentation at the 2023 Military Health System Research Symposium, Kissimmee, FL. August 14 – 17, 2023.
31. Shaw KG, Awad ME, **Melton D**, Gaffney BMM, Christiansen CL, Stoneback JW. Patient-Reported Outcomes of Pain and Quality of Life Following Implantation of Bone-Anchored Limb. 2024 Western Orthopedic Association (WOA) Annual Meeting; Huntington Beach, CA; August 2024. [Podium Presentation].
32. Shaw KG, Awad ME, Gaffney BMM, **Melton D**, Stoneback JW. Diagnostic Criteria for Infection After Bone-Anchored Limb Implantation. 2024 Western Orthopedic Association (WOA) Annual Meeting; Huntington Beach, CA; August 2024. [Podium Presentation]
33. Gaffney BMM, Ekdahl M, Awad ME, **Melton DH**, Christiansen CL, Stoneback JW. Dynamic Hip Muscle Force Symmetry is Improved with Transfemoral Bone-Anchored Limb Use. 2024 Global Collaborative Congress on Osseointegration. November 2-3, 2024. Charlotte, NC. [Podium Presentation]
34. Thomsen PB, Stoneback JW, Tracy JB, Gaffney BMM, Awad ME, **Melton DH**, Christiansen CL. Cumulative Joint Loads and Loading Symmetry during Sit-to-Stand Transitions for Transfemoral Bone-Anchored Limb Users. 2024 Global Collaborative Congress on Osseointegration. November 2-3, 2024. Charlotte, NC. [Podium Presentation]
35. Earley EJ, Milius D, Awad ME, **Melton DH**, Delphi Steering Committee, Christiansen CL, Gaffney BMM, Stoneback JW. Consensus via the Delphi Method on Transfemoral Prosthesis Prescription for Bone-Anchored Limbs. 2024 Global Collaborative Congress on Osseointegration. November 2-3, 2024. Charlotte, NC. [Poster Presentation]
36. Ekdahl M, Vandenberg NW, **Melton DH**, Christiansen CL, Stoneback JW, Gaffney BMM. Hip Muscle Force Changes after Transfemoral Bone-Anchored Limb Implantation. 2024 Annual Meeting of the American Society of Biomechanics. August 5-8, 2024. Madison, WI. [Thematic Poster Presentation]
37. Tracy JB, Gaffney BMM, Thomsen PB, Awad ME, **Melton DH**, Christiansen CL, Stoneback JW. Changes in Between-Limb Kinematic Symmetry are Reduced Across a Range of Self-Selected



Speeds when Walking with a Transfemoral Bone-Anchored Limb. 2024 Annual Meeting of the American Society of Biomechanics. August 5-8, 2024. Madison, WI. [Podium Presentation]

38. Gaffney BMM, Gimarc DC, Thomsen PB, Awad ME, **Melton DH**, Christiansen CL, Stoneback JW. The Role of Pre-Operative Skeletal Alignment on Post-Operative Lumbopelvic Biomechanics in Transfemoral Bone-Anchored Limbs. 2024 Military Health System Research Symposium. [Oral Presentation]
39. Christiansen CL, Thomsen PB, Bade MJ, **Melton DH**, Gaffney BMM, Stoneback JW. Transfemoral Osseointegrated Prosthesis Limb-Load Symmetry Training: Study Protocol and 1-Year Progress. 2024 Military Health System Research Symposium. [Oral Presentation]
40. Awad ME, Lev G, Gaffney BMM, **Melton DH**, Christiansen CL, Stoneback JW. Colorado Limb Donning – Timed Up and Go (COLD – TUG) Test: Development and Preliminary Validation in Patients with Lower Limb Amputation Before and After Osseointegrated Prosthesis. American Academy of Orthopaedic Surgeons 2024 Annual Meeting. February 12 – 16, 2024, San Francisco, CA. [In Review]
41. Awad ME, Lev G, Gaffney BMM, **Melton DH**, Christiansen CL, Stoneback JW. The Incidence of Secondary Disabilities, Residual Limb Complications, and Mortality following Lower Limb Amputations in the United States: A Multicenter Database Analysis. American Academy of Orthopaedic Surgeons 2024 Annual Meeting. February 12 – 16, 2024, San Francisco, CA. [In Review]

Media Coverage

1. *Interview, Addressing Prosthetic Research for the Amputee*, Houston 92.1FM Radio, June 1, 2011. Radio.
2. *Interview, Amputation Rehabilitation after Boston Marathon Terrorist Attacks*, Good Morning America, April 16, 2013. Television.
3. *Interview, Rehabilitation of Amputee after the Boston Marathon*, Houston Channel 2 News, April 16, 2013. Television.
4. *Interview responding to “Robotic Leg Control with EMG Decoding in an Amputee with Nerve Transfers”*, New England Journal of Medicine MedPage Today, September 25, 2013. Television.
5. *Coordinating Care from Amputation through Rehabilitation*, Laura Hochnadel for *O&P Edge*, January 2014. Article.
6. *Futuristic Bionic Knee Makes SMUD Worker Feel “whole”*, Edward Ortiz for *Sacramento Bee*, January 19, 2014. Article.



7. *Interview, Amputation Management by Drs. Cardone and Lomas*, SiriusXM Doctor Radio Channel, November 24, 2014. Radio.
8. *Calling All People With Limb Loss in the Houston Area*, Jo-Carolyn Goode for Houston Style Magazine, March 14, 2016. Article.
9. *Interview, Amputation Management by Drs. Steve Yang and Mehul Shah*, SiriusXM Doctor Radio Channel, March 26, 2018. Radio.
10. *A Multiple-Limb Amputee Benefits From TIRR Memorial Hermann's Strong Continuum of Care*, The Institute for Rehabilitation Research – Memorial Hermann Journal. Winter 2018 issue. Article.
11. *Michael Choo, MD Joins National Limb Loss, and Preservation Registry*, Paradigm Corporation, June 19, 2019. Press Release.
12. *Memorial Hermann Orthopaedic and Spine Hospital, Texas, USA, introduces Osseointegration Program with Integrum's OPRA™ Implant System*, Integrum, September 18, 2020. Press Release.
13. *2021 Festival Outcomes*, ReelAbilities Film Festival, April 20, 2021. Press Release.
14. *The new Limb Loss and Preservation Registry provides a framework for O&P data analysis and evidence-based patient care*, Michel Coleman for *O&P Almanac*. September 2022 issue. Article.
15. *CU School of Medicine Faculty Member Leads Efforts to Contribute Data to Limb Loss Registry*, Greg Glasgow for the University of Colorado Anschutz Medical Campus. February 6, 2023. Article.
16. *First Hospital System Joins LLPR*, The O&P Edge, February 10, 2023. Article.
17. *Interview, Phantom Limb Syndrome Documentary*, Steffan Tubbs of KNUS 710 Mountain Time Media, March 30, 2023. Radio.
18. *Interview, Latest Updates on Osseointegration for Amputees & the Limb Loss Preservation Registry*, The Prosthetic Paradigm Podcast, April 4, 2023. Podcast.
19. *LLPR Kicks Amputee Data Collection Into High Gear*, Larry Borowsky for Living with Amplitude. May 2023. Article.
20. *Spotlight: Novel Mobility Survey Taps Prosthesis Users' Perspectives to Guide Care*, Eunice Kennedy Shriver National Institute of Child Health and Human Development. June 5, 2023. Article.
21. <https://prostheticparadigm.libsyn.com/the-osseointegration-series-part-1-dr-danielle-melton-pmnr>, Interview for a podcast with Drew Nutter, CPO. August 20, 2023.



Physical Medicine & Rehabilitation
UNIVERSITY OF COLORADO ANSCHUTZ MEDICAL CAMPUS

12631 E. 17th Avenue
Mail Stop B202, Room 1201
Aurora, CO 80045
(T) 650-350-8530
(E) danielle.melton@cuanschutz.edu

22. <https://blog.amputee-coalition.org> › *education* › *ac-new*. AC News Flash Featuring Danielle Melton, MD – THRIVE Apr 8, 2024.