## Thomas Jefferson University College of Rehabilitation Sciences Department of Occupational Therapy

# FACULTY SCHOLARSHIP AGENDA 2019-2022

**INTRODUCTION:** The Scholarship Agenda includes research and scholarship activities across all faculty in the areas of teaching, research, and service. Faculty are engaged in academically relevant work that reflects the *Department and University Mission and the Jefferson Enterprise Mission and Vision*. In addition, faculty research and scholarship activities reflect program curricula and needs of the department.

## **MISSION & VISION**

## **Department Mission**

Reimagining Health through Occupation

The Jefferson Department of Occupational Therapy promotes the health and well-being of people through their participation in occupation by developing practitioners who can dynamically respond to changing demands in healthcare, community and environments; and engage in service, practice, advocacy, leadership, scholarship and research.

## **University Mission**

We are a university with preeminence in transdisciplinary, experiential professional education, research and discovery, delivering exceptional value for 21st century students with excellence in architecture, business, design, engineering, fashion & textiles, health, science and social science – infused with the liberal arts.

### **Enterprise Mission**

We Improve Lives

## **Enterprise Vision**

Reimagining health, education and discovery to create unparalleled value.

The Faculty Research and Scholarship activities focus on the following domains:	
1. Collaborative Design & Technology	5. Inclusive Community Practice
2. Meaningful Living across the Lifespan	6. Promoting Health and Wellness
3. Multidimensional Environments & Occupational Engagement	7. Autism
4. Innovative Teaching and Learning	

#### **KEY TO ABBREVIATIONS:**

- Volunteer opportunity (Volunteer)
- ° Graduate Assistantship (GA)
- <sup>o</sup> Student Occupational Therapy Association (SOTA)
- Embedded in East Falls or Center City Course (Course)
- ° Capstone Areas of Study (Capstone)
- Occupational Therapy Doctorate Program (OTD)
- Masters in Occupational Therapy Program (MSOT)
- Post Professional Occupational Therapy Doctorate Program (PPOTD)
- ° Fieldwork Area of Study (FW)

#### Centers

- Autism Center of Excellence
- ° Center for Hand and Upper Limb Rehabilitation
- <sup>o</sup> Center for Outcomes and Measurement

#### Jefferson Elder Care

#### **COLLABORATIVE DESIGN & TECHNOLOGY**

The Use of 3D Printing in Healthcare Mollo, Avery Course

Inclusive Playground Design Mollo, Avery Course

Inclusive Toys and Games Design Mollo, Avery Course

Designing with the Caregiver in Mind Mollo, Avery OTD, Capstone

Healthcare and Industrial Design Mollo, Avery

Course

Workplace Ergonomics

Mollo, Avery <sub>Course</sub>

Pharmaceutical Packaging for the Elderly Mollo, Avery, Chabot OTD, Capstone

Student Collaborations with Landscape Architecture, Interior Design, Architecture, and Graphic Design Chabot Volunteer, GA, SOTA, MSOT, OTD

The Impact of Smart Technology on Living in Place Chabot Volunteer, GA, SOTA Occupational Therapy/Industrial Design Assistive Technology Project Chabot, Avery Course, MSOT

**Telerehab in Stroke** Funded By: NIH *Grampurohit* 

Mixed Reality to Incorporate Object Use in Gaming Grampurohit Volunteer, GA, SOTA

Virtual Reality Based Rehabilitation Using Game-Based Systems for Improving Function in Conditions such as Stroke, Parkinson's Disease, Dementia, and Chronic Pain Funded By: NIH Grampurohit

Eye Gaze in Children with Developmental Disabilities Grampurohit Volunteer, GA, SOTA

Telerehabilitation Intervention for Upper Limb Training for Individuals with Parkinson's Disease *Grampurohit, Chabot* 

#### MEANINGFUL LIVING ACROSS THE LIFESPAN

Pivotal Trial of a Neuronetwork for Upper Limb Function in Persons with Spinal Cord Injury Mulcahey Outcomes and Measurement Center of Excellence

#### **Neuroimaging Biomarkers for Spinal Cord Injury** *Mulcahey*

Outcomes and Measurement Center of Excellence, Volunteer, GA, SOTA

#### Natural History of Neuromuscular Scoliosis and Impact on Activity in Youth Spinal Cord Injury Mulcahey Outcomes and Measurement Center of Excellence

#### Priorities, Needs and Acceptable Risks of Neurotechnology for the Upper Limb

Funded By: Deans Translational Research Award Mulcahey Volunteer, GA, SOTA, OTD, Capstone

## Interventions for the Neurological Impaired Upper Limb

Funded By: NIDILRR Spinal Cord Injury Model System Mulcahey Volunteer, GA, SOTA, OTD, Capstone

#### Understanding the Experiences with Activity Based interventions in Individuals with Spinal Cord Injury Funded By: NIDILRR Spinal Cord Injury Model System Grampurohit GA

Feasibility Study of Transcranial Magnetic Stimulation and Activity Based Therapy in Adults with Spinal Cord Injury *Grampurohit* 

Kinesiotaping for Improving Function in People with Stroke in Collaboration with Iran Research Team *Grampurohit* 

#### Instrument Summaries and Tearsheets of Outcome Measures through Rehab Measures Task Force of the American Congress of Rehabilitation Medicine Grampurohit Outcomes and Measurement Center of Excellence

Enhancing Inpatient Rehabilitation Outcome Measures Through Integration with Electronic Health Records Grampurohit Outcomes and Measurement Center of Excellence

To Study the Reliability and Validity of the Tool: Serial Assessment of Function in Dementia In Collaboration with American Association for Developmental Medicine and Dentistry *Grampurohit, Herge, Keller GA* 

#### Understanding the Priorities, Needs, Facilitators and Barriers to Adoption of Neurotechnologies by Patients, Caregivers, and Healthcare Providers Funded By: Dean's Transformational Science Award Mulcahey, Grampurohit, Fedorcyzk, Serruya Outcomes and Measurement Center of Excellence, Volunteer, GA, SOTA, OTD, Capstone

Serial Assessment of Function in Dementia Funded By: Foundation WITH Grampurohit, Herge, Keller Volunteer, GA, SOTA

Hand and Arm Test of Timed Task Completion for Person with Neurological Condition Grampurohit, Gerhardt, Mulcahey

Outcomes and Measurement Center of Excellence Volunteer, GA, SOTA

#### Activity Based Neurorehabilitation for Individuals with Spinal Cord Injury Funded By: NIDLIRR Spinal Cord Injury Model System Grampurohit, Marino, Mulcahey, Bell Volunteer, GA, SOTA, OTD, Capstone

#### Linking Outcome Measures Across the Continuum of Care and Age Grampurohit, Mulcahey Outcomes and Measurement Center of Excellence

Partnership for Developmentally Supportive Care in India Carroll

Innovative OT Programming to Support Health and Wellness for All Populations in Morocco Chabot Volunteer, Course, MSOT, OTD

Collaborations with the Local Village Network to Support Productive Aging in the Community Chabot Volunteer, GA, SOTA, Course

Project ImPACT for Children with Social and Communication Challenges Muhlenhaupt

EuREKA Project Coaching in Context for College Success Program Potvin

After School Program for Underserved Children with Autism Thomas, Schaaf

Normative Values of Spine Motion and Flexibility in Typically Developing Girls Funded By: Pediatric Spine Foundation Mulcahey Outcomes and Measurement Center of Excellence, Volunteer, GA, SOTA

Development of the Spinal Cord Injury Functional Index Performance Measure Funded By: Craig H. Neislen Foundation Mulcahey Outcomes and Measurement Center of Excellence, Volunteer, GA, SOTA, OTD, Capstone

#### Development and Validation of the Coaching

Intervention Fidelity Measure

Funded By: Craig H. Neislen Foundation *Mulcahey Outcomes and Measurement Center of Excellence, Volunteer, GA, SOTA, OTD, Capstone* 

## The Pediatric Measure of Participation:

A Replenishment and Staging Study Funded By: Shriner's Hospital for Children Mulcahey Outcomes and Measurement Center of Excellence

## Development of a Spinal Cord Injury Module for the PedsQL

Funded By: Craig H. Neislen Foundation Mulcahey Outcomes and Measurement Center of Excellence

#### Manual Development for Task Specific Training for Inpatient Rehabilitation

Grampurohit, Bozac, Mulcahey Outcomes and Measurement Center of Excellence, Volunteer, GA, SOTA, PPOTD

#### Mapping Hand Functions Assessed within Upper Extremity Outcome Measures using ICF Grampurohit, Morina, Charles

Outcomes and Measurement Center of Excellence

#### Surface Electromyography for Muscle Activity Profile in Individuals with Spinal Cord Injury Grampurohit, Graves, Mulcahey Outcomes and Measurement Center of Excellence

#### Development of a Performance-Based Measure for Upper Limb Function for Individuals with Multiple Sclerosis

Mulcahey, Grampurohit, Sinko Outcomes and Measurement Center of Excellence, GA

#### Use of Graphic Novels for Health Literacy in Morocco Funded By: EF Nexus Grant *Chabot Volunteer, GA, SOTA, Course*

**Skills2Care: Intellectual Disabilities** Herge Jefferson Eldercare Center of Excellence, Course, OTD, Capstone

# MULTIDIMENSIONAL ENVIRONMENTS & OCCUPATIONAL ENGAGEMENT

Incorporating Advocacy into Interprofessional Education: Jefferson Health Mentors Program Earland Volunteer, GA, SOTA, Course, MSOT, OTD

Refugee Health: Understanding Environmental Supports and Barriers to Participation and Meaningful Occupation Through Participatory Action Research Kern Volunteer, GA, SOTA, MSOT, OTD, FW

#### Outcomes of Participatory Occupational Justice Framework in Refugee Resettlement and Employment Kern Volunteer, GA, SOTA, MSOT, OTD, FW

Environmental Mapping Using Geographic Information Systems in Refugee Communities Kern Volunteer, GA, SOTA, OTD, Capstone

**City of Philadelphia Parks and Recreation** *Mollo, Avery Volunteer, GA, SOTA, Course, OTD, Capstone, MSOT, PPDOT, FW*  Designing Active Learning Classroom for a Neurodiverse Student Body Funded By: Industry Sponsored Potivin, Chabot GA

#### **INNOVATIVE TEACHING & LEARNING**

PrEMO Partnerships: Promoting Environments that Measure Outcomes Carroll FW

Interprofessional and Intra-professional Service Learning in Morocco Chabot GA

**FWI Experience in Morocco** *Chabot FW* 

Use of a Sensory Based Relaxation Cart to Assist in Stress Reduction of University Students Funded By: EF Nexus Grant Chabot, Zane Volunteer, GA, SOTA, Course

OTD Capstone: Transforming Practice While Impacting the Community DeAngelis, Navarro-Walker Course, OTD, Capstone

Strategies to Enhance a Diverse and Inclusive OT Workforce Earland Volunteer, GA, SOTA, OTD, Capstone, MSOT, PPOTD, FW

Building Core Competencies to Ensure Collaborative, Team-Based Care in Future Practitioners Earland Volunteer, GA, SOTA, Course, MSOT, PPOTD, FW PrEMO Site Project at AVS/Merakey and RHD Herge Course, FW, MSOT, OTD

Involving Students in Knowledge Translation and Program Development Activities that Promote Quality Care Herge, Carroll Volunteer, SOTA

Partnerships to Integrate Best Practice into Fieldwork Sites Using Approaches Targeting Client, Program and Organization Levels Herge, Kern, Schaaf, Carroll

Fieldwork Experience Encompassing Occupational Justice Practice Framework in Refugee Resettlement Kern MSOT, FW

Innovative and Meaningful Fieldwork Experiences Navarro-Walker, Leonard Course, OTD, Capstone, MSOT, FW

#### Changing Practice: Impact of FWII Students on FW Educator Practice

Navarro-Walker, Leonard Course, OTD, Capstone, MSOT, FW

OT Students Perception of the Usefulness of Different Class Preparatory Activities Potvin GA

Note-Taking Abilities and Preferences in OT Students Funded By: NF Nexus Learning Grant Potvin, Chabot, Zane GA OT and OTA Students' Perception of Fieldwork Learning Activities that Promotes Clinical Reasoning Skills Development Funded By: EF Faculty Research Grant Potvin, Thomas, Coviello, Zane GA

Increasing Student Success in Anatomy and Kinesiology Sinko Course, OTD, Capstone, MSOT, PPOTD

Creating Professional Identity and Leadership through Reflection and Mentorship Sinko, Wallock GA, OTD, Capstone, MSOT

Facilitating Student Clinical Confidence and Competence through Service Learning Sinko, Wallock GA, OTD, Capstone, MSOT

Alzheimer's Virtual Interprofessional Training (AVIT) Funding By: M.H. Bruder Foundation Toth-Cohen, Earland

Using Best Practice Simulation Instructional Methods to Advance Training and Education of OT Students: Incorporating Standardized Assessments as part of the Simulation Encounter Zapletal GA, Course

Developing Effective Teaching Teams for Learner-Centered Instruction Zapletal, Sinko GA, Course, Capstone, MSOT

**Developing Future Educators** 

Zapletal, Sinko GA, Course, Capstone, MSOT Redesigning the Classroom into Hybrid Learning Spaces Zapletal, Sinko GA, Course

Using Best Practice Simulation Instructional Methods to Advance Training and Education of OT Students: Intentional use of SP Experiences to Address Cultural Humility Zapletal, Earland GA, Course

Using Best Practice Simulation Instructional Methods to Advance Training and Education of OT Students: Implementing Electronic Health Records (EHRs) in OT Curriculum Zapletal, Earland, Martinez, Toth-Cohen GA, Course

Faculty Development: Sexual and Gender Minority Education and Training Funded By: Dean's Grant 2019-2020 Zapletal, Earland, Toth-Cohen GA

Using Best Practice Simulation Instructional Methods to Advance Training and Education of OT Students Zapletal, Toth-Cohen GA, Course

#### **INCLUSIVE COMMUNITY PRACTICE**

Life Skills Development: Young Adults Aging Out of Foster Care Funded By: PECO/Exelon Grant & Project HOME Collaborative DeAngelis GA, SOTA, OTD, Capstone Clinical OT Practice: Adults with a History of Chronic Homelessness and Serious Mental Illness DeAngelis GA, OTD, Capstone

Meeting the Needs of the LGBTQ Young Adult Population: Individuals Aging Out of Foster Care DeAngelis GA, OTD, Capstone

Preparing Future Practitioners to Address Complex Health and Social Needs in Communities Earland Volunteer, GA, SOTA, Course, MSOT

Integrating Occupational Therapy Services Earland GA, OTD, Capstone

Understanding the Experiences of Individuals with Dementia and their Caregivers Participating in a Community-Based Arts Program In collaboration with: ARTZ Philly *Grampurohit, Piersol, Navarro-Walker Volunteer, GA, SOTA, OTD, Capstone* 

Refugee Work, Skill Development, and Assimilation into US Culture and Society Kern GA, OTD, Capstone

Scoping Review: Non-Language Based Assessments of Activity and Participation for Non-English Speaking Populations Kern GA, Volunteer, OTD, Capstone

Trauma Informed Care in Occupational Therapy Navarro-Walker Volunteer, GA, SOTA, Course, OTD, Capstone, MSOT, PPOTD Clinical OT Practice: Adults with a History of Chronic Homelessness and Serious Mental Illness Sinko, DeAngelis GA, OTD, Capstone

Promoting Emotional, Health and Media Literacy in Underrepresented Urban Youth Sinko, Wallock GA, OTD, Capstone, MSOT

#### PROMOTING HEALTH & WELLNESS

Coaching Outcomes in Community Dwelling Adults with Chronic Conditions Mulcahey Outcomes and Measurement Center of Excellence, Volunteer, GA, SOTA, OTD, Capstone

Feasibility of Coaching Caregiver of Youth with Spinal Cord Injury Funded By: Craig H. Neislen Foundation Mulcahey Outcomes and Measurement Center of Excellence, Volunteer, GA, SOTA

#### Coaching Families of Children with Autism to Enhance Recreational Participation

Potvin Autism Center of Excellence, Capstone

GOALS2 Program Funded By: Collaboration between OT program and EF Dean of Student office Potvin GA, OTD, Capstone, FW

Early Intervention Best Practices for Infants and Toddlers and Their Families Funded By: Philadelphia County Infant and Toddler Early Intervention Muhlenhaupt Volunteer, GA, SOTA

#### **AUTISM**

Occupational Therapy Using Ayres Sensory Integration in Autism: A Comparative Effectiveness Study Funded By: NIH RO1 Grant Schaaf Autism Center of Excellence, Volunteer, SOTA

Sensory Functions in Autism: A Program Project Grant Funded By: Nancy Lurie Marks Foundation Schaaf Autism Center of Excellence, Volunteer, SOTA

Validation of the Evaluation of Ayres Sensory Integration (EASI) for Autism Funded By: Eagles Autism Challenge Schaaf Autism Center of Excellence, Volunteer, SOTA

Autism Works: Projects to Promote Independent Living and Foundational Employment Skills in Autism Schaaf, Carroll Autism Center of Excellence

Autism Speaker Series, Groothie Pop-Up Events Carroll, Schaaf Autism Center of Excellence, Volunteer, SOTA, GA

Autism at Work: Discovery Week at SEI Carroll Autism Center of Excellence, Volunteer

Program Development for Children and Transition Age Youth with Autism Carroll Autism Center of Excellence, Course, OTD, Capstone, PPOTD