Research and Scholarship Activities
Building Knowledge to Promote Participation

Thomas Jefferson University
Department of Occupational Therapy
901 Walnut Street, 6th Floor
Philadelphia, PA 19107
Phone: 215-503-8010
Fax: 215-503-2950
Dear Current and Future Colleagues,

Welcome to the Occupational Therapy Programs at Thomas Jefferson University in Philadelphia!

Our community of learners is vibrant and our opportunities for scholarship and research are many. We encourage you to participate fully with other members of the learning community in these research and academic activities.

This guide is designed to help you become familiar with the Faculty in the Department of Occupational Therapy and their work. It describes programs of research and scholarship in the Department and illustrates the many projects open to student participation. Many of our Faculty are leaders in their respective fields. Working in their laboratories will not only expose you to their work and enrich your learning, it will also give you a chance to contribute to research aimed at advancing the practice and teaching of occupational therapy. Students can choose to participate as part of their graduate assistantship and/or work in the laboratories as volunteers. For those of you who are matriculating in the Occupational Therapy Doctoral Programs (Occupational Therapy Doctorate or Post-professional Occupational Therapy Doctorate), the Laboratories provide rich environments for fellowship and capstone experiences.

Our programs of research are grouped into 2 areas: 1) research laboratories, and 2) laboratories for the scholarship of teaching and learning (SoTL). The research laboratories offer students an opportunity to participate in programs of research in specific topic areas. The laboratories for the SoTL offer students an opportunity to study teaching methodologies and pedagogies and to participate in research related to learning outcomes. While a Laboratory experience is not required as part of your curriculum, we encourage you to speak with your advisor about your interests and to define what laboratories are best suited to your interests and learning/professional goals.

It is our hope that all occupational therapy students are exposed to varied and important areas of scholarship in which our Faculty work. Please feel free to explore Faculty interests further by linking to their profiles on our Web pages. Here, you will find additional information about each member of the Faculty, including a full list of their publications. As students in the Thomas Jefferson University Occupational Therapy Programs, you have the opportunity to work alongside of and learn from a group of highly talented Faculty who are individually and collectively committed to education, scholarship, and research. On behalf of them, I welcome you to our programs.

Roseann C. Schaaf, PhD, OTR/L, FAOTA
Professor and Chair

And

The Department of Occupational Therapy, Jefferson College of Health Professions Faculty
Faculty and Researchers

Roseann C. Schaaf, PhD, OTR/L, FAOTA
Professor and Chair
Roseann.Schaaf@jefferson.edu

MJ Mulcahey, PhD, OTR/L
Professor, Director of Research
Maryjane.Mulcahey@jefferson.edu

Susan Toth-Cohen, PhD, OTR/L
Professor, Director, OTD Program
Director, Scholarship of Teaching & Learning Lab
Susan.Toth-Cohen@jefferson.edu

Alison Bell, MS, OTR/L
Assistant Professor
Alison.Bell@jefferson.edu

Teal Benevides, PhD, OTR/L
Assistant Professor
Teal.Benevides@jefferson.edu

Christina Calhoun, MSPT
Clinical Research Project Manager
Christina.Calhoun@jefferson.edu

Philippa H. Campbell, PhD, OTR/L, FAOTA
Professor, Director of Child & Family Studies Research Programs
Philippa.Campbell@jefferson.edu

Amy Carroll, OTD, OTR/L
Teaching Associate
Amy.Carroll@jefferson.edu
Tina DeAngelis, EdD, OTR/L
Associate Professor, Director of Occupational Therapy Doctoral Program – Entry Level
Tina.DeAngelis@jefferson.edu

Cynthia Haynes, OTD, OTR/L
Adjunct Instructor
Cynthia.haynes@jefferson.edu

E. Adel Herge, OTD, OTR/L, FAOTA
Associate Professor, Director, BS/MS Occupational Therapy Program
Edel.Herge@jefferson.edu

Caryn R. Johnson, MS, OTR/L, FAOTA
Associate Professor & Fieldwork Coordinator
Caryn.Johnson@jefferson.edu

Stephen B. Kern, PhD, OTR/L, FAOTA
Associate Professor, Director, Entry-level Master’s Occupational Therapy Program
Stephen.Kern@jefferson.edu

Laura Krisa, PhD
Assistant Professor
Laura.Krisa@jefferson.edu

Arlene Lorch, OTD, OTR/L, CHES
Assistant Professor, Co-Director, Scholarship of Teaching and Learning Lab
Arlene.Lorch@jefferson.edu

Zoe Mailloux, OTD, OTR/L, FAOTA
Adjunct Associate Professor
Zoe.Maggio@jefferson.edu
# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welcome</td>
<td>1</td>
</tr>
<tr>
<td>Faculty and Researchers</td>
<td>2</td>
</tr>
<tr>
<td>Mission</td>
<td>6</td>
</tr>
<tr>
<td>Research Laboratories</td>
<td>7</td>
</tr>
<tr>
<td>• Measurements and Outcomes Instruments</td>
<td>8</td>
</tr>
<tr>
<td>• Autism</td>
<td>11</td>
</tr>
<tr>
<td>• Child and Family Studies</td>
<td>13</td>
</tr>
<tr>
<td>• Jefferson Elder Care and Caregiving</td>
<td>15</td>
</tr>
<tr>
<td>• Health Services Research</td>
<td>17</td>
</tr>
<tr>
<td>• Intellectual and Developmental Disabilities</td>
<td>19</td>
</tr>
<tr>
<td>• Environment</td>
<td>21</td>
</tr>
<tr>
<td>The Scholarship of Teaching and Learning Laboratory</td>
<td>24</td>
</tr>
<tr>
<td>• Simulations</td>
<td>29</td>
</tr>
<tr>
<td>• Interprofessional Education</td>
<td>30</td>
</tr>
<tr>
<td>• Faculty Professional Development</td>
<td>31</td>
</tr>
<tr>
<td>• Fieldwork Education</td>
<td>32</td>
</tr>
<tr>
<td>• Evidence-based Practice</td>
<td>33</td>
</tr>
<tr>
<td>• PrEMO: Promoting Environments that Measure Outcomes</td>
<td>34</td>
</tr>
</tbody>
</table>
Mission Statement
Department of Occupational Therapy
Thomas Jefferson University
College of Health Professions

“Reimagining Health through Occupation”

The Thomas Jefferson University Department of Occupational Therapy promotes the health and well-being of people through their participation in occupation. Our mission is accomplished by developing practitioners who are dynamically responsive to changing demands in healthcare, community, and educational environments; engaging in service, practice, advocacy, leadership, and scholarship and; conducting research.
Occupational Therapy Research Laboratories
Each research Laboratory is uniquely focused on specific topic areas that are important for participation in everyday living. The intersections among the laboratories represent the shared interests and collaborations among the laboratories.
Measurement and Outcomes Instruments
MJ Mulcahey, PhD, OTR/L
Stephen B. Kern, PhD, OTR/L, FAOTA
Laura Krisa, PhD
Roseann C. Schaaf, PhD, OTR/L, FAOTA
Catherine Verrier Piersol, PhD, OTR/L, FAOTA
Rebecca Sinko, OTD, OTR/L
Christina Calhoun, MSPT
Zoe Mailloux, OTD, OTR/L, FAOTA

Mission
To advocate for the use of psychometrically sound instruments that generate data that inform occupational therapy treatment, build evidence in support of interventions and engage clients in shared decision-making about treatment and outcomes.

General Laboratory Description
Projects in or associated with the Measurement and Outcomes Instruments Laboratory focus on the development and testing of outcome measures. Work within the Laboratory builds upon the expertise of core Faculty and is strengthened by strategic partnerships with collaborating investigators, research centers and universities. The research program within the Laboratory involves a range of studies, including 1) developing and validating new instruments; 2) establishing psychometric properties (e.g., reliability, validity and responsiveness) of existing instruments; 3) examining how measurement and instruments help to inform data-driven decisions and shared decision making; and 4) investigating patient-reported outcomes and their uses.

Some of the measurement methods and instruments under investigation include functional magnetic resonance imaging; advanced magnetic resonance imaging (i.e., diffusion tensor imaging), computer adaptive tests and the evaluation of Ayres Sensory Integration®. Work linking pediatric and adult instruments is underway and environmental assessment is planned.

General Description of Student Activities
Every occupational therapist has an ethical obligation to understand the properties of outcomes instruments. Participation in this Laboratory provides students with opportunities to administer existing and new instruments to children, youth, adults, and older adults with varying chronic conditions and to participate in validity and reliability testing. Students may be involved in assessment interpretation in a way that informs practice. Students will analyze psychometric data, conduct cognitive testing to evaluate patient-reported outcomes, analyze assessment and survey data and enter data. They will also be encouraged to write abstracts and peer-review publications and to create user manuals for new instruments. Students will be exposed to imaging techniques, computer adaptive tests, performance measures, patient-reported outcomes and common data elements.

Examples of Projects
- Evaluate adult spinal cord injury clinical trials instruments in children with spinal cord injury
- Develop links between child and adult computer adaptive tests
- Assess responsiveness of computer adaptive tests of function to orthopedic surgery and rehabilitation
- Develop diffusion tensor imaging for evaluation of pediatric spinal cord injury
• Analyze common data elements for pediatric spinal cord injury
• Validate pediatric use of the International Spinal Cord Injury Data Sets
• Develop short forms for the evaluation of function and participation in children with chronic conditions
• Link disease-specific measures with generic measures of health-related quality of life
• Assess reliability and validity of a new instrument designed to evaluate neurorecovery
• Pilot test screening tools of executive function in a busy orthopedic spine practice
• Review psychometric testing of the Functional Capacity Card Sort to objectively measure caregiver appraisal of functional capacity in individuals with dementia
• Pilot test evaluation in Ayres Sensory Integration
• Identify objective outcome measures for occupational therapy using Ayres Sensory Integration

Selected Publications of Faculty


Funding Sources
• National Institute of Neurological Disorders and Stroke, National Institutes of Health
• Craig H. Neilsen Foundation
• Shriners Hospitals for Children
• United States Department of Defense
• Regional Spinal Cord Injury Center of the Delaware Valley
• National Institute on Disability and Rehabilitation Research
• American Occupational Therapy Foundation
• Rick Hansen Institute

Collaborators
- Thomas Jefferson University, Department of Physical Medicine and Rehabilitation Rothman Institute
- Shriners Hospitals for Children
- Boston University
- Temple University
- University of Delaware
- University of California, Davis
- University of Louisville
- Magee Rehabilitation Hospital
- University of Maryland
- University of Louisville
- Drexel University
- Albert Einstein Medical Center at Yeshiva University
Mission
To enhance participation in children with autism and their families through occupational therapy intervention studies. The goal of the program is to understand the neural mechanisms of sensory processing in children with autism and their impact on function and participation.

General Laboratory Description
This Laboratory focuses on children with autism and specifically, occupational therapy interventions for children with autism. The aim is to increase participation in daily activities. This Laboratory has a unique focus on the ability to process and integrate sensory information and its impact on functional skills and participation in activities in home, school, and community environments. Partnering with clinical sites, the Autism Laboratory tests the implementation of a manualized program of occupational therapy using sensory integration principles. The Laboratory measures its outcomes on activity performance and participation.

A second major focus of this Laboratory is the evaluation of sensory reactivity and multisensory integration using psychophysiological measurement, imaging, and multisensory integration-evoked related potentials. Here, we collaborate with partners external to and within Jefferson. The Laboratory collaborates with the Measurement and Outcomes Instrument Laboratory in two new areas of study: 1) development of measures to evaluate sensory functions in children (EASi); and 2) identification and testing of outcome measures for occupational therapy using sensory integration.

General Description of Student Activities
Students who exhibit an interest in autism and/or sensory integration are invited to participate in the activities of this Laboratory. These students are highly motivated with strong academic achievement. Students need to develop an understanding of autism and its unique features and considerations, and therefore, are expected to complete directed readings to achieve minimum competencies associated with occupational therapy in the field of autism in addition to gaining experience and practice with research related to pediatrics and neuroscience. Projects are varied and may include analysis of existing data (i.e., video-analysis of treatment sessions, cluster analysis of patterns of sensory difficulties), collection of prospective data (i.e., administration of the Sensory Challenge Protocol) and data entry.

Examples of Projects
- Enhance the manual for occupational therapy using sensory integration for children with autism
- Determine patterns of sensory differences (both behavioral and physiological) in children with autism by using a tested algorithm
- Study the feasibility of interprofessional tailored interventions for children with autism and chronic insomnia
• Compare effectiveness of occupational therapy using sensory integration and behavioral intervention for improving functional skills in children with autism
• Categorize common goals of parents for children with autism and sensory differences using a grounded theory approach
• Assess resting state connectivity during sensory stimulation in children with autism using Inter-Regional Connectivity
• Pilot test evaluation in Ayres Sensory Integration
• Examine impact of dynamic sitting on arousal and task completion

Selected Publications of Faculty


Schaaf RC. The issue is—creating evidence for practice using Data-Driven Decision Making. *Amer J Occup Ther. 2014;69; 6902360010.* http://dx.doi.org/10.5014/ajot.2015.010561


Funding Sources
• United States Department of Defense
• VIRCO Corporation
• American Occupational Therapy Foundation

Collaborators
• Drs. Sophie Molholm, John Foxe, Elizabeth Rigeway – Einstein Medical Center
• Dr. Joanne Hunt, Dr. Elke van Hooydonk, Dr. Patricia Faller – Children’s Specialized Hospital
• Dr. Alison Lane – University of New Castle, Australia
• Dr. Shelly Lane – Virginia Commonwealth University
Mission
To help families with preschool, kindergarten and primary school-aged children to learn how to better function in the world around them. This Laboratory does that through scholarly research, data-based training programs, practical demonstration projects, and implementation science. These activities result in best practice protocols for families and their infants and young children. These best practice guidelines examine children with disabilities (or those who are at risk for developmental disabilities). The Laboratory then uses these activities to create viable care models for families.

General Laboratory Description
The research at this Laboratory focuses on infants and preschoolers who are at risk for disabilities or delays in development. Studies focus on families and other caregivers. Research within the Laboratory focuses on multiple-discipline service providers who work to improve child and family outcomes. Within this framework, the Laboratory develops evidence-based practices that impact treatment systems that help improve children’s participation and learning and strengthen families’ own competence in raising their children. When family members learn from professionals and then use these strategies to support children’s participation and learning within the context of family activities and routines, children improve and these expanded outcomes for families can be observed.

At the systems level, research examines and explores implementation strategies designed to result in therapists’ adoption of evidence-based practices within a typical community, such as children’s homes or childcare settings; for example, day cares programs. The goal is to change systems of care so that all children and their families receive high-quality services. At the child level, the research explores the promotion of children’s participation in everyday activities and routines by examining therapy roles at work with young children and families. In particular, the Laboratory is interested in identifying caregiver-child-therapist roles that optimally improve child participation and learning.

This Laboratory also specializes in environmental intervention practices, their use, interaction with adult-provided (i.e., hands-on) practices, and effects on children’s participation and learning. The focus is on the use of assistive technology, in particular. A family’s competence in raising children is central to positive child outcomes and integral to care systems. The research focuses on family-centered contexts in which services are provided. Then, family partnerships are used to ensure that the focus is on identifying, examining, and addressing issues that are important to families.

General Description of Student Activities
In one of the Laboratory’s primary activities students look at and assess videos from databases, which contain approximately 1500 early intervention home visits. Some of the studies that students have engaged in during past semesters have included 1) examination of therapist-family interactions; 2) assessment of how therapists provide occupational therapy services; 3) descriptions of what
therapists do to teach children; and 4) assessment of how therapists teach families to help their children participate and learn within activities/routines at home.

Other activities involve placement in community child-care programs. The Laboratory collects data about program/teacher use of inclusive practices and helps teachers apply inclusive practices in their classrooms. The use of environmental practices, such as modifying the environment or materials, using visual supports, or creating low-tech assistive technology—is especially emphasized in both child-care and home settings.

Other activities are also available (i.e., developing and providing professional development, creating Web-based resources for use by families and professionals, and assisting in data analysis and writing publications). Each student is viewed as an individual. The Program attempts to match a student’s unique interests and learning goals with Laboratory activities.

**Examples of Projects**
- Review types of caregiver teaching strategies used by early intervention providers
- Describe the use of environmental versus instructional versus combined practices during early intervention home visits
- Detail the use and effectiveness of assistive technology in children with physical disabilities and in children with autism spectrum disorder, based on caregiver reports
- Examine the use of verbal interactions among therapists, caregivers, and children with autism spectrum disorder in racially matched or mismatched pairs
- Analyze home-visit content when therapists are teaching caregivers at high levels and when they are not teaching at all
- Organize focus groups with parents concerning the use of assistive technology and analysis of data from focus groups
- Analyze differences in the strategies used to teach children mealtime skills
- Study tactics that promote inclusion of siblings in home visits

**Selected Publications of Faculty**
Campbell PH, Milbourne SA. Together is better: blending teaching practices to support ALL children’s learning. Young Exceptional Children Monograph Series No.16: Blending Instructional Practices. 2014;21-38.

Campbell PH, Fortunato L, Wilcox MJ. Assistive technology training for early intervention service providers. (paper under review). *Topics Early Child Spec Educ.*


Mission
To improve participation and safety in daily routines and meaningful activities for older adults through occupational therapy consultations, including caregiver education/training and home safety recommendations. This Laboratory looks at enhanced care for older adults and their families by advancing practitioner knowledge through cutting-edge developments in research and practice in gerontology. It is the goal of this Laboratory to contribute to evidence that supports best practices for older adults and their families through research and program development activities in current and emerging areas.

General Laboratory Description
The Jefferson Elder Care and Caregiving Laboratory hopes to improve the daily lives of older adults and their families. The Laboratory supports home-based occupational therapy and physical therapy in the community, provides specialized training to healthcare professionals and consultation to agencies/institutions, and engages in research and program development activities. These research-based services improve caregiver knowledge and skills and reduce the need for assistance. It also helps those with neurocognitive disorders, including Alzheimer’s disease, to perform daily activities; and to enhance the safety and participation of older adults living at home. This work is exemplified by our Skills2Care® program.

General Description of Student Activities
Students with a specific interest in the area of gerontology and caregiving are invited to join the Jefferson Elder Care and Caregiving Laboratory. Through collaborative projects with Laboratory faculty, students develop an understanding of the occupational performance and participation needs of older adults and their caregivers. Projects may include analysis of existing data; collection and analysis of prospective qualitative and quantitative data; and development, implementation, and evaluation of interventions. Students gain experience in service delivery, training and consultation, and research while working on projects that highlight the unique contribution of occupational therapy to the interprofessional support team for older adults and their caregivers.

Examples of Projects
- Implement dementia service for low-income elders and their caregivers
- Improve Medication Adherence in Older African Americans with Diabetes, Randomized Control Trial
- Translate COPE for Publicly-Funded Home Care Clients and Their Families
• Engage in the Veteran’s In-Home Program (VIP) for Veterans with TBI and Families; Randomized Control Trial
• Examine the Non-pharmacologic Management of Challenging Behaviors in Veterans with Dementia; Randomized Control Trial
• Assess the Low Vision Depression Prevention Trial for Age-related Macular Degeneration (VITAL), Randomized Control Trial
• Participate in the Home Safety Assessment Program for community dwelling elders affiliated with the Delaware County Office of Services for the Aging
• Replicate and evaluate Stepping On fall prevention program (Clemson, Swann, Mahoney; 2011) in a skilled nursing facility environment (Kuczynski, Piersol; 2014)
• Review psychometric testing of the Functional Capacity Card Sort to objectively measure caregiver appraisal of functional capacity in individuals with dementia
• Assess program evaluation of Best Practice in Dementia Care, a customized skill-building training program for formal caregivers of individuals with dementia that provides care for organizations, agencies, and facilities
• Develop and evaluate the Let’s Go Program for Community Participation, an OTD student developed program for older adults (Mulry, Piersol; 2014)

Selected Publications of Faculty

Funding Sources
• The Pew Charitable Trust
• National Institutes of Health
• United States Veterans Affairs
Mission
To examine how people get access to healthcare, how much care costs, and what happens to patients as a result of this care. In particular, to identify barriers to accessing services and improve service provision for underserved populations. Areas of focus are equity research, autism spectrum disorders, and healthcare delivery.

General Laboratory Description
This Laboratory focuses on individual, environmental and contextual, and system-level barriers, and supports that impact a client's ability to access and participate in services. Faculty members focus on a wide range of populations, including access for children and adolescents with autism-spectrum disorder, access and utilization of services by families in early intervention systems, and adults with chronic health conditions. Research approaches used to accomplish the mission of this Laboratory include qualitative inquiry, population-based survey research, and comparative effectiveness research on system interventions to improve access for underserved populations.

General Description of Student Activities
Students engage in literature review, data entry, data analysis (i.e., qualitative and quantitative), and assist with publication and presentation development.

Examples of Projects
- Investigate access to therapy services for children with autism
- Document verbal interactions of racially-concordant and nonconcordant provider-parent dyads in early intervention
- Produce descriptive studies of caregiver-professional-client interactions
- Analyze effect of autism insurance mandates on access to therapy and cost burden of parents of children with autism spectrum disorder

Selected Publications of Faculty:
Benevides TW, Carretta HJ, Mandell D. Disparities in perceived need for medical, therapeutic, and family support services among children with ASD: a population based study (under review).
Notable 2013-2014 Presentations
Benevides TW, Carretta HJ, Lane SJ. Access to Therapy Services for Children with Autism. Poster presentation at the International Meeting for Autism Research, Atlanta, GA. May 15, 2014.
Benevides TW, Carretta HJ, Lane SJ. Access to Therapy Services for Children with Autism. Oral presentation at the Occupational Therapy Scholars Summit. Philadelphia, PA; May 9, 2014.

Funding Sources
Health Resources and Services Administration of the U.S. Department of Health and Human Services

Collaborators
- Henry Carretta, PhD
- Shelly Lane, PhD, OTR/L, FAOTA
Mission
To develop customized approaches that support persons with intellectual and developmental disabilities to fully participate in life roles in home, work, and community. The aim is to collaborate with community partners to implement and evaluate evidence-based interventions for caregivers and persons with intellectual and developmental disabilities. This Laboratory also provides opportunities for students to participate in evidence-based practice and research projects facilitating participation of caregivers and persons with intellectual and developmental disabilities.

General Laboratory Description
The focus of this Laboratory is on supporting persons with intellectual and developmental disabilities to fully participate in home and community through tailored interventions based on the individual’s needs, caregiver support and training, and evidence-based program development. An interprofessional team of practitioners, educators, and researchers provide clinical services and professional training and consultation, and engage in research and scholarship activities. Partnering with community-based providers and professional organizations, this Laboratory develops, implements, and evaluates evidence-based interventions that builds on the knowledge and skills of family and paid caregivers and facilitates participation of persons with intellectual and developmental disabilities.

General Description of Student Activities
Students with a specific interest in intellectual and developmental disabilities are invited to join this Laboratory. Through collaborative projects with Faculty, students develop an understanding of occupational performance and participation needs of persons with intellectual disability and dementia across the life span as well as caregiving issues. Projects may include analysis of existing data; collection and analysis of prospective qualitative and quantitative data; and development, implementation, and evaluation of interventions. Students engage in specific activities to gain experience in service delivery, training, and research, which highlight the unique contribution of occupational therapy to the inter-professional support team.

Examples of Projects
- Analyze experiences of formal caregivers, providing support to individuals with intellectual disability and dementia
- Translate Skills2Care™ program for formal caregivers (support staff) of individuals with intellectual disability and dementia
- Collaborate with the National Task Group to develop, implement, and evaluate a dementia-capable national training curriculum for direct support staff providing services to persons with intellectual disability and dementia
Review field-test evaluation of the usability of a training manual approach in occupational therapy consultation with caregivers of individuals with intellectual disability and dementia

Participate in National Task Group G to establish guidelines for community-based group homes for persons with intellectual and developmental disabilities and dementia

Selected Presentations of Faculty
Herge EA, Piersol CV. In their own words. Oral presentation at the Montgomery County Association for Excellence Conference, Langhorne, PA; March, 2014.
Herge EA, Piersol CV, Earland TV. Improving Lives through Caregiver Skill-building: Two Case Stories of Adults with Intellectual Disability and Dementia Living in the Community. Poster presentation at the American Occupational Therapy Association Annual Conference and Exposition, Indianapolis, IN; April, 2012.
Piersol CV, Herge EA. Improving Lives of Individuals with ID and Dementia. Oral presentation at the Pennsylvania Occupational Therapy Association Annual Conference, Pittsburgh, PA; November, 2013.

Collaborators
National Task Group on Best Practices on Intellectual Disabilities and Dementia
Mission:
To study environmental influences on participation occupation.

General Laboratory Description:
The research of this Laboratory explores the impact of the environment on occupation. In a broad sense, the Laboratory examines environment and context from physical, social, cultural, political, and economic perspectives. By understanding how the environment impacts health and participation, the goal is to inform and improve individual client- and/or patient-centered healthcare practice, health professions education, and health policy. One focus is the exploration of lived experiences of underserved populations and individuals with chronic health conditions, such as spinal cord injury, and their changing healthcare needs including access to health-promoting occupations. Research explores the dynamic interaction between the human and non-human environment and access and participation in health-promoting occupations.

A second major area is interdisciplinary design collaboration between the Occupational Therapy Department at Jefferson and the Industrial Design Department at the University of the Arts. Students collaborate to research, design, prototype, test, and evaluate a client-centered product that utilizes universal design principles, promotes increased environmental access, and improves occupational engagement for individuals living with a disability. Final outcomes are collected at student, instructor, and client levels to evaluate the inter-disciplinary experience and product effectiveness.

A third area of this Laboratory is the Innovative Design for Engaged Attention and Learning (IDEAL) projects. IDEAL projects aim to further understanding of how to promote and utilize environmental sensory supports, such as active sitting to facilitate attention and classroom learning. Students may be involved in 1) collecting data on outcomes of classroom adaptations, including changing static classroom furniture to dynamic, active, sitting options; 2) exploration of various sensory elements in classrooms and their effects on learning and attention; and 3) perceptions of teachers, school administrators, and school business officials about classroom environmental supports.

A fourth area of this Laboratory is the Sensory Aware and Friendly Environments (SAFE) program. SAFE is a program through which businesses and organizations receive support for understanding, respecting, and supporting people with sensory differences. Businesses that aim to improve their customer’s experiences commit to

- Provide access to education and training for their employees/staff about sensory differences
- Make some accommodations in their place of business to support people with sensory differences
- Participate in increasing awareness of sensory differences efforts

Students may participate in collaborating with businesses and organizations to develop and implement an individually tailored plan to address these three areas, and/or be involved in collecting and analyzing data on the outcomes of SAFE implementation.

**General Description of Student Activities**

Students participate in all phases of research from literature review, research design, data collection and analysis, and dissemination of results through manuscript preparation and presentation at professional conferences. In one current study, after receiving training, students collected data by interviewing older individuals living with spinal cord injury and their caregivers about their changing healthcare needs and access to services as they age with this condition.

Students who participated in global health service exchanges in Cuba and Nicaragua have performed environmental analyses in order to understand, analyze, and compare United States healthcare systems to those of other countries. Studies currently under development incorporate Geographic Information System Technology to enhance an understanding of the environment by adding quantitative data to qualitative data.

**Examples of Projects**

- Interview older individuals with spinal cord injury and their caregivers about changing healthcare needs and access to healthcare as they age
  - Transcribe and analyze thematically interview data
- Analyze physical, cultural, and political environments on play with children with neurodevelopmental conditions in Cuba and Nicaragua
- Collaborate with Jefferson Faculty and Staff to learn Geographic Information System Technology
- Participate in focus groups and interviews with individuals experiencing chronic health conditions about environmental supports and barriers to health-promoting participation
- Collaborate on a variety of classroom redesign projects aimed at exploring the effects of sensory supports on attention and learning
- Participate in efforts to increase awareness of sensory needs and supports through the Sensory Aware and Friendly Environment initiative
- Participate in Project Inclusive: An inter-disciplinary collaboration between occupational therapy and industrial therapy to design and develop client-centered product designs to enhance occupational performance and participation
- Enhance overnight camping experiences for children with physical disabilities

**Selected Publication of Faculty**


**Funding Sources**

- National Institute on Disability and Rehabilitation Research, Spinal Cord Injury Model Systems
Collaborators
• Regional Spinal Cord Injury Center of the Delaware Valley
• University of the Arts
• Philadelphia Art Museum
LABORATORY:
THE SCHOLARSHIP
OF TEACHING AND
LEARNING
The Scholarship of Teaching and Learning Laboratory

Overall Mission
The study and disseminate the most effective methods for educating and training health professionals that advance the science, education and delivery of healthcare, based in research evidence and best practice.

Focus of the Scholarship of Teaching and Learning Laboratory:
Ongoing improvement in educational quality and innovation that will empower and teach students, faculty, and practitioners to successfully meet current and emerging needs in the healthcare environment and provide the highest level of care.
The Scholarship of Teaching and Learning Laboratory

Co-Directors
Arlene Lorch, OTD, OTR/L, CHES
Susan Toth-Cohen, PhD, OTR/L

Faculty
Allison Bell, MS, OTR/L
Teal Benevides, PhD, OTR/L
Tina DeAngelis, Ed.D, OTR/L
E. Adel Herve, OTD, OTR/L, FAOTA
Kimberly Mollo, OTD, OTR/L
Mary Muhlenhaupt, OTD, OTR/L, FAOTA
Lydia Navarro-Walker, BS, OTR/L, CBIS
Roseann C. Schaaf, PhD., OTR/L
Tracey Vause-Earland, MS, OTR/L
Shelley Wallock, DrPh, OTR/L
Audrey Zapletal, MS, OTR/L

Mission
To study and disseminate methods for educating and training health professionals that advance the science, education and delivery of healthcare and are based in research evidence and best practices. Areas of focus are simulations and standardized patients; interprofessional education; professional development; fieldwork; evidence-based practice; outcomes measurement.

General Laboratory Description
The focus of the Teaching and Learning Laboratory is ongoing improvement in educational quality and innovation that will empower and teach students, faculty and practitioners to successfully meet current and emerging needs in the healthcare environment and provide the highest level of care.

General Description of Student Activities
Students and collaborators with a specific interest in education can join the Teaching and Learning Laboratory. The Laboratory’s projects and programs focus on aspects of teaching and learning in academic, clinical or fieldwork settings and may include workshops, new course development and/or new approaches to clinical fieldwork. Outcomes of educational projects may include but are not limited to 1) change in clinical practice; 2) increase in knowledge on specific topics; 3) change in attitudes; and 4) student/participant evaluation of learning.

Student Activities
Post Professional Occupational Therapy Department: Sample Projects
- Design and carry out evidence-based practice project at own clinical, educational or management setting
- Conduct a systematic investigation (i.e., qualitative or quantitative), with Faculty researcher, into current status of evidence-based practice

Post-professional Occupational Therapy Department and Entry-level Masters Occupational Therapy
Students with specific interest in academic education within the arena of health professions may participate in the Professional Development Laboratory. Research activities include conducting literature reviews, attending research planning meetings, providing support in data collection and
coding processes, participating in educational outcome analysis, assisting with the development of educational and training resources, providing support for workshops/presentations and contributing to the writing of scholarly reports appropriate for presentation or for publication.

**Examples of Student Projects**
- Infuse Evidence-based Practice into School Based Settings (Paula Costello, OTD; 2014)
- Develop and Implement a Health Literacy Education Program for Physical Medicine and Rehabilitation Staff (Sharon Montgomery, OTD; 2015)
- Engage in Beyond Research Literature: Clinicians’ Perceptions of “Evidence” in Everyday Practice (Deborah Dougherty, OTD; 2014)
- Review Culturally Responsive Care in Occupational Therapy: An Entry-Level Educational Model Embedded in Service-Learning (Pamela Talero-Cabrejo, OTD; 2013)
- Develop and pilot test an Online Educational Resource for Caregivers of Persons with Traumatic Brain Injury (Michelle Marshina, OTD; 2013)

**Examples of Faculty Projects**
- Peer Review to Enhance Teaching Effectiveness in Occupational Therapy Curricula – Assessment of Outcomes from the Pilot Study of a Faculty-driven and Formative Peer-review Process
  - The focus of the study is the impact of peer review on Faculty self-perception and peer-review consultant perception of teaching effectiveness post-peer review
- Creating an Infrastructure to Support Faculty Outcomes Research on Teaching and Learning.
  - Comprehensive program for building Faculty capacity to design and implement educational research in a school of health professions
- Project Inclusive: An Inter-disciplinary Collaboration Developing Client-Centered Product Designs to Enhance Occupational Performance & Participation
  - The focus of this project brings OT and industrial design students together to promote student interprofessional collaborations and increase critical thinking to enhance innovative client-centered product solutions with universal relevance for those living with disabilities

**Selected Student and Faculty Publications**


**Selected Student and Faculty Presentations:**

Beisbier S, Johnson CR. The impact of collaborative fieldwork models on student experience, professionalism, and clinical capacity. AOTA Education Summit, Atlanta, Georgia; 2013.


DeAngelis T. American Occupational Therapy Association Annual Conference, Baltimore, MD: *The entry level occupational therapy doctorate third fieldwork experiential; 2014.*


Johnson CR, Hanson D, Sauerwald C, Stutz-Tanenbaum P. We build our own future: Managing and maximizing the role of academic fieldwork coordinators. Occupational Therapy Association Annual Conference, Baltimore, MD; 2014.


Santalucia S, DeAngelis T, Mollo K. American Occupational Therapy Association Annual Conference, Baltimore, MD: Bridging the gap, collaborative fieldwork model; 2014


Schaaf RC, Santalucia S. Creating an Evidence-Based, Data-Driven Fieldwork, Experience; 2013.

Schaaf RC, Burke J. Data Driven Decision Making to Enhance OT Education and Practice; 2013.

Toth-Cohen S, Wainwright SF. Creating an Infrastructure to Support Faculty Outcomes Research on Teaching and Learning. AOTA/NBCOT Education Summit, Atlanta, GA; 2013.

Toth-Cohen S. Virtual worlds as social networks and venues for creativity (online invited presentation). School of Social Work and Health Science, University of Haifa, Israel; 2013.
Mission
To study the effectiveness and impact of using robust simulation training methods in occupational therapy education.

General Laboratory Description
The Simulation Laboratory focuses on the ongoing development, implementation and evaluation of simulation methodology as a compliment to other learning activities in the curriculum. This includes discipline-specific and inter-professional simulations.

General Description of Student Activities
Student activities include conducting literature reviews, attending research planning meetings, providing support in data collection and coding processes, assisting with curriculum development, providing support for workshop/presentations and contributing to the writing of scholarly reports for publication and presentation.

Examples of Projects
- Student Clinic Day (OT 552, Interventions: Enhancing Human Performance)
- Conflict Resolution (OT 499, Interdisciplinary Care Planning)
- Clinical Discharge Scenario (OT 499, Interdisciplinary Care Planning)

Teaching and Learning Outcomes: (C3 – comfort, competence, confidence)
- Measure effectiveness of using SP experiences after FW II
- Assess knowledge and perform clinical skills related to occupational therapy evaluation and intervention skills
- Determine students’ perceived comfort and satisfaction of performance with specific clinical skills and use of medical equipment
- Evaluate student clinical skill competence in preparation for FW II
Mission
To create, study and advance innovative learning opportunities that promote collaborative inter-professional practice leading to excellence in healthcare delivery.

General Laboratory Description
The Interprofessional Education Laboratory focuses on the ongoing study of methods to develop inter-professional education and collaborative practice skills among faculty, students and practitioners throughout the Jefferson healthcare community. Activities from the Laboratory include 1) systematic development and evaluation of interprofessional classroom learning activities (Health Mentors Program, IPE short Module Series, Interprofessional Clinical Skills Fair); 2) simulation activities (Team STEPPS); 3) clinical observations (Rehab Team Conference, Falls Prevention Clinic); and 4) collaborative practice initiatives and student leadership activities.

General Description of Student Activities
Students with specific interest in inter-professional education and collaborative practice may participate in this Laboratory. Leadership opportunities include Health Mentor Program Course Liaison, Health Mentors Program Newsletter Editor, JCIPE Advisory Board (student member), Interprofessional Grand Rounds, and Interprofessional Clinical Skills Fair. Students may also serve as co-facilitators in Health Mentors small group activities and participate in Jefferson’s Inter-professional Falls Prevention Clinic.

Additional research activities include conducting literature reviews, attending research planning meetings, providing support in data collection and coding processes, assisting with curriculum development, providing support for workshop/presentations, and contributing to the writing of scholarly reports for publication and presentation.

Examples of Projects
- Evaluate an Interprofessional Geriatric Clinical Skills Fair
- Survey Patient Outcomes and Fear of Falling After Participating in a Falls Prevention Program
- Eastern Pennsylvania-Delaware Geriatric Education Center
- Develop and disseminate interprofessional geriatric educational curriculum to improve the training of health professionals in geriatric care (Department of Health and Human Services; grant #UB4HP19061)
- Assess Health Mentors Program
Mission
To identify current and innovative, evidence-based methodologies and practices that support and enhance professional development and teaching effectiveness among health professions faculty.

General Laboratory Description
The Professional Development Laboratory focuses on methods for developing skills for academia including teaching, effective management and balance of workload for highest quality education and educational outcomes and building capacity to engage in educational research.

General Description of Student Activities
Students with specific interest in academic education within the arena of health professions may participate in this Laboratory. Research activities include 1) conducting literature reviews, 3) attending research planning meetings, 3) providing support in data collection and coding processes, 4) participating in educational outcome analysis, 5) assisting with the development of educational and training resources, 6) providing support for workshops/presentations and 7) contributing to writing scholarly reports appropriate for presentation or for publication.

Examples of Projects
- Utilize Peer Review to Enhance Teaching Effectiveness in Occupational Therapy Curricula.
- Analyze Faculty mentoring and its impact on teaching efficiency
- Analyze Faculty workload as it impacts instructional delivery.
- Review Teaching and Learning Initiative to build Faculty capacity and to design and implement educational research
Mission
To enhance the quality of fieldwork education by studying and responding to the needs of occupational therapy students, programs, fieldwork educators and existing and emerging practice environments.

General Laboratory Description
The Fieldwork Education Laboratory focuses on the ongoing study of the fieldwork process, fieldwork students, fieldwork educators, and fieldwork environments. Students will 1) study fieldwork needs, trends, student and fieldwork educator performance and outcomes; 2) develop and implement innovative fieldwork programming; 3) teach, train, and prepare students, fieldwork educators and academic programs for best practice in fieldwork education; 4) disseminating information and research outcomes.

General Description of Student Activities
Students will participate in research and scholarship, including review of literature, attending research/project planning reviews, and contributing to scholarly reports suitable for presentation or publication, assisting in development of fieldwork programs, providing support in data collection and coding processes, participating in educational outcomes analysis, assisting with development of educational resources and with training, and providing support for workshops/presentation.

Examples of Projects
- Studies of collaborative models of fieldwork
  - Compare outcomes of traditional models of fieldwork education and collaborative model
  - Participate in collaborative model of supervision in school-based practice
  - Participate in collaborative model of fieldwork education toolkit – dissemination
- Education and training
  - Academic Fieldwork Coordinator’s Institute
Mission
To study and disseminate ways to increase knowledge, skill, and promote evidence-based practice, including best practices in educating students and clinicians to lead evidence-based practice and to develop educational initiatives that foster development in a broad range of practice settings.

General Laboratory Description
The Evidence-based Practice Laboratory focuses on the ongoing study of methods to develop student and practitioner attitudes, knowledge and skills in this Laboratory and to create practice environments that facilitate and sustain evidence-based practice.

General Description of Student Activities
- Post-professional Occupational Therapy Department
  - Design and carry out evidence-based practice project at own clinical, educational or management setting
  - Conduct a systematic investigation (i.e., qualitative or quantitative), with Faculty researcher, into current status of evidence-based practice
- Professional Occupational Therapy Department and Entry Level Students
  - Conduct literature reviews, attend research or project planning meetings, provide support in data collection and coding processes, participate in educational outcome analysis, assist with the development of educational resources and with training, provide support for workshops/presentations and contribute to the writing of scholarly reports appropriate for presentation or publication

Examples of Projects
- Assess systematic development of environments that promote evidence-based practice
- Explore clinicians’ use of everyday evidence
- Review effectiveness of teaching methods to develop students’ knowledge and skill in evidence-based practice
Mission
To build sustainable partnerships between select organizations and the Department of Occupational Therapy at Thomas Jefferson University to establish and study innovative model practices for occupational therapy practice. To develop programs that demonstrate evidence-based practice with a focus on outcome measurement. To serve as a training ground for students, foster partnerships with clinicians and generate new knowledge through clinical research.

General Laboratory Description
Promoting Environments that Measure Outcomes (PrEMO) Laboratory operationalizes the translation of knowledge to practice fueled by the unique passions and dedication of Jefferson Faculty. Faculty leaders partner with selected organizations to create innovative programs that utilize the latest research knowledge and advanced clinical practices. Each PrEMO site uses data-driven decision making to implement evidence-based, data-driven practices. PrEMO Laboratories are model practice environments that are ideal for Jefferson occupational therapy fieldwork students and for clinical research. PrEMO Laboratories also build the capacity of practicing therapists and associated staff to ultimately maximize clinical outcomes for consumers.

General Description of Student Activities
Students study and use specialized knowledge and skill to provide model practice that is specific to the PrEMO population and setting and tailored to the unique needs of the client. Students develop skill in data-driven decision making to measure outcomes as they mentor with Faculty and trained fieldwork educators to produce client-specific case reports, participate in program development and/or engage in clinical research activities.

Examples of Projects
- The Pioneer Sensory Autism Center at Burlington County Special Services Center: a school-based setting for children with autism. The curriculum emphasizes adaptive behavior, communication, vocational skills and academic skills to maximize functional independence at home and in the community. Dr. Roseann Schaaf and Amy Carroll mentor and collaborate with Jefferson occupational therapy students and the level II fieldwork educator to advance knowledge and skills in the areas of autism, sensory integration and school-based interventions. During this experience students use best evidence and data-driven decision making to steer their practice.
• Baker Industries: A nonprofit work rehabilitation program for adults with physical, intellectual and/or psychosocial needs. Participants may also be experiencing homelessness, recovering from substance use or be individuals on parole or probation. Jefferson occupational therapy students collaborate with staff and Dr. Tina DeAngelis to create client-centered mental health interventions with measurable outcomes.

• Riverview Home: a city-operated assisted living facility in Philadelphia that provides safe, stable housing and basic health services for adults age 45 to 90 years, with cognitive, psychosocial and physical chronic conditions and disabilities. Students work with Dr. Arlene Lorch to create and implement interventions that promote resident independence across the occupational therapy domain.