AMIT SETHI, PhD, OTR/L
CURRICULUM VITAE

BIOGRAPHICAL INFORMATION

Name: Amit Sethi
Business Address: Department of Occupational Therapy
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EDUCATION and TRAINING

UNDERGRADUATE:

Dates Attended	Name and Location of Institution	Degree Received, Year	Major Discipline
September 1997 to March 2002	Manipal College of Allied Health Sciences, Karnataka, India	Bachelor of Science, 2002	Occupational Therapy

GRADUATE:

Dates Attended	Name and Location of Institution	Degree Received, Year	Major Discipline
August 2004 to December 2005	University of Wisconsin Milwaukee, WI	Master of Science, 2005	Occupational Therapy
August 2006 to December 2010	University of Florida Gainesville, FL	Doctor of Philosophy, 2010	Rehabilitation Science

APPOINTMENTS and POSITIONS

ACADEMIC POSITIONS:

Years Inclusive	Department, Name and Location of Institution	Rank/Title
August 2004 to July 2005	University of Wisconsin Milwaukee Milwaukee, WI	Project Assistant
August 2005 to December 2005	University of Wisconsin Milwaukee Milwaukee, WI	Teaching Assistant
August 2006 to December 2010	Department of Rehabilitation Sciences, College of Public Health & Health Professions, University of Florida, Gainesville, FL	Research Assistant
August 2010 to December 2010	Department of Occupational Therapy, College of Public Health & Health Professions, University of Florida, Gainesville, FL	Teaching Assistant
January 2011 to April 2013	Department of Occupational Therapy, School of Health Professions, University of Texas Medical Branch, Galveston, TX	Assistant Professor
May 2013 to present	Department of Occupational Therapy, School of Health and Rehabilitation Sciences, University of Pittsburgh, Pittsburgh, PA	Assistant Professor

ACADEMIC APPOINTMENTS:

July 2018 to present	Department of Occupational Therapy, School of Health and Rehabilitation Sciences, University of Pittsburgh, Pittsburgh, PA	Graduate Faculty
July 2018 to present	Master of Science Program, Department of Occupational Therapy, School of Health and Rehabilitation Sciences, University of Pittsburgh, Pittsburgh, PA	Program Director

NON-ACADEMIC POSITIONS:

Years Inclusive	Department, Name and Location of Institution	Rank/Title
September 2001 to March 2002	Indraprastha Apollo Hospital New Delhi, India	Intern Occupational Therapist
April 2002 to July 2004	UDAAN for the disabled New Delhi, India	Staff Occupational Therapist
February 2006 to April 2006	The Institute of Rehabilitation & Research Houston, TX	Staff Occupational Therapist
May 2006 to July 2006	Stoney Brook Health Care Center Houston, TX	Staff Occupational Therapist
June 2008 to September 2008	Shands Rehabilitation Hospital Gainesville, FL	Staff Occupational Therapist

May 2009 to September 2009	Oakhammock Assisted Living Gainesville, FL	Staff Occupational Therapist

DISCIPLINE SPECIALIZATION: Neurorehabilitation

CERTIFICATION and LICENSURE

SPECIALTY CERTIFICATION:

National Board for Certification in Occupational Therapy, #240189 — 2008 to present

PROFESSIONAL LICENSURE:

Florida State Occupational Therapy License, #13210 — 2008 to 2013
Texas State Occupational Therapy License, #114551 — 2012 to 2015
Commonwealth of Pennsylvania Occupational Therapy License, #OC012750 — 2013 to present

MEMBERSHIPS in PROFESSIONAL and SCIENTIFIC SOCIETIES

ORGANIZATION:

Pennsylvania Occupational Therapy Association
American Occupational Therapy Association — 2011 to present
North American Society for the Psychology of Sport and Physical Activity
The Society for Neuroscience
Fellow Academy of General Education, Manipal Academy of Higher Education

HONORS & AWARDS

SCHOLARLY AWARDS:

University of Florida Certificate of Achievement — 2007-2010
University of Florida Alumni Pre Doctoral Fellowship — 2006-2010
University of Wisconsin Milwaukee Chancellor's Fellowship Award — 2005
Manipal College of Allied Health Sciences Best Outgoing Student Award — 2001
40th Annual National Conference of All India Occupational Therapists Association, "Kailash Merchant Award" for Best Scientific Paper in Neurology — 2018

TEACHING AWARDS:

Academic Educator Award – Pennsylvania Occupational Therapy Association

RESEARCH AWARDS:

Outstanding Research Award, College of Public Health and Health Professionals, University of Florida — 2010

TRAVEL AWARDS:

College of Public Health and Health Professions, University of Florida — 2010
Graduate Student Council, University of Florida — 2007, 2009
Department of Occupational Therapy, University of Florida — 2007

PUBLICATIONS

REFEREED ARTICLES

1. **Sethi A,** Stergiou, N, Patterson, TS, Patten C, & Richards LG. Speed and rhythm affect temporal structure of variability in reaching post stroke: A pilot study. *Journal of Motor Behavior*, 2017, 49(1): 35-45.
2. **Sethi, A.,** Callaway, C., Sejdic, E., Terhorst, L., Skidmore, E.R. Heart rate variability is associated with motor outcome 3-months after stroke. *Journal of Stroke and Cerebrovascular Diseases*. 2016; 25(1): 129-135.
3. **Sethi A**, Patterson T, McGuirk T, Patten CP, Richards LG, & Stergiou N. Temporal structure of variability decreases in reaching movements in individuals post stroke. *Clinical Biomechanics.* 2013; 28:134-9.
4. Patterson T, Bishop M, McGuirk T, **Sethi A**, & Richards L. Reliability of upper extremity kinematics while performing different tasks in individuals post stroke. *Journal of Motor Behavior*. 2011; 43:121-130.

5. Richards L, Hanson C, Wellborn M, & **Sethi A.** Driving motor recovery after stroke. *Topics in Stroke Rehabilitation*. 2008; 15:397-411.5.
6. **Sethi A,** & Mukherjee A. To see the efficacy of Hyperbaric Oxygen Therapy over the gross motor abilities of C.P. children of 2-5 years of age, given initially as an adjunct to occupational therapy. *Indian Journal of Occupational Therapy.* 2003; 35:7-11.

INVITED PAPERS, PROCEEDINGS OF CONFERENCES, SYMPOSIA, MONOGRAPHS, BOOKS, BOOK CHAPTERS

Invited Papers

1. **Sethi A,** Patterson T, McGuirk T, & Richards LG. Effect of functional task training upon temporal structure of variability of upper extremity post stroke. *Journal of Hand Therapy.* 2013; 26:132-8.

PUBLISHED ABSTRACTS

1. **Sethi A**, Patterson T, McGuirk T, & Richards LG. Does rhythm enhance upper extremity movement post stroke? *Journal of Sport and Exercise Psychology.* 2010; S 126.

2. **Sethi, A.,** Callaway, C., Sejdic, E., Terhorst, L., Skidmore, E.R. Heart rate variability is associated with upper extremity recovery after stroke. *Neurorehabilitation and Neural Repair*. 2014; 28(9): 927.

3. Al-Zaiti, S., **Sethi, A.,** Carey, M., Canty, J., & Fallavollita, J. Temporal complexity of depolarization indicates myocardial sympathetic denervation and predicts sudden cardiac arrest in patients with ischemic cardiomyopathy and poor left ventricular ejection fraction. Journal of Electrocardiology. 2014; 47; 910-913

OTHER PUBLICATIONS

THESES and DISSERTATIONS

1. **Sethi A.** *The effect of posture on reaching and upper extremity interlimb coordination in cerebral palsied children: Dynamic systems perspective* [master thesis]. Milwaukee, WI, University of Wisconsin; 2005.
2. **Sethi A.** *Understanding variability in reaching movements post stroke: non-linear dynamical systems perspective* [dissertation]. Gainesville, Florida, University of Florida; 2010.

RESEARCH-RELATED PRESENTATIONS, LECTURSHIPS, SEMINARS

Peer-Reviewed Presentations

International

1. Balasubramanian CK, Stoecklien J, Page R, Eldridge D, **Sethi A.** Number of trials required to accurately evaluate spatiotemporal gait variability data using instrumented mats. Poster to be be presented at the *International Society for Gait and Posture Research Meeting, June 2014, Vancouver, Canada.*
2. Balasubrmanian CK, **Sethi A**, Neptune RR, Kautz SA.. Understanding the complexity of gait kinematics using non-linear analysis in persons with chronic hemiparesis. Poster presented at the *International Society for Gait and Posture Research Meeting, 2013, Akita, Japan.*
3. **Sethi A,** Santarneeechi E, & Pascual-Leone A. Feasibility of the combined brain and hand stimulation in moderate to severe chronic individuals with stroke. Poster to be presented at the annual meeting *World Federation of Occupational Therapy*, May, 2018, Cape town, South Africa.

National

1. **Sethi,A**, & Kamm K. Effect of posture on reaching patterns in children with cerebral palsy. Poster presented at American Occupational Therapy Association Annual Conference and Expo, April 2007; St. Louis, MO.
2. **Sethi A**, Patterson T, Mcguirk T, & Richards LG. Movement in stroke more or less variability and its clinical relevance. Poster presented at Annual Society for Neuroscience Meeting**,** November 2009; Chicago, IL.
3. **Sethi A**, Patterson T, Mcguirk T, & Richards LG. Variability in upper extremity inter-joint coordination post stroke. Poster presented at American Occupational Therapy Association Annual Conference and Expo, April, 2010; Orlando, FL.
4. **Sethi A**, Patterson T, Mcguirk T, & Richards L.G. Reliability of adaptive variability of upper extremity movements post stroke. Poster presented at Annual Society for Neuroscience Meeting, November 2010; San Diego, CA.
5. **Sethi A.** Movement complexity and adaptability: evidence from reaching dynamics in individuals with stroke**.** Presentation at Division of Rehabilitation Sciences, University of Texas Medical Branch, April 2011, Galveston, TX.
6. **Sethi A,** Patterson T, McGuirk T, & Richards L.G. Quantification of abnormal upper extremity synergy post stroke. Poster presented at Annual Society for Neuroscience Meeting, November 2012; New Orleans, LA.

7. **Sethi A,** Richards LG, Patten CP, Patterson T, & Stergiou N. Guiding principles for addressing upper extremity impairments in individuals with chronic stroke. Research Paper presented at American Occupational Therapy Association Annual Conference and Expo, April 2014; Baltimore, MD.
8. *Alibjeji NA, Kirsch N, **Sethi A**, Sharma N. A state synchronization controller for functional electrical stimulation-based telerehabilitation. Research paper presented at the Annual Dynamic Systems and Control Conference of American Society of Mechanical Engineers, October 2014, San Antonio, TX.
* Trainee mentored to presentation **Awarded Best Student Paper**
9. **Sethi, A,** Callaway C, Sejdic E, Terhorst L, Skidmore ER. Heart rate variability is associated with upper extremity recovery after stroke. Poster presented at the annual meeting American Society of Neurorehabilitation, November, 2014, Washington DC.
10. *Raj S, Dounskaia N, & **Sethi A**. Examining joint control in multi-joint movements in patients with stroke. Poster presentation at the Biomedical Engineering Society Conference, October 2015, Tampa, FL.
* Trainee mentored to presentation
11. *Gustafson J, Farrokhi S, **Sethi A.** Knee Motion Variability during Walking Exercise in Patients with Knee Osteoarthritis, Podium presentation at the Gait and Clinical Movement Analysis Society, May 2016.
* Trainee mentored to presentation
12. **Sethi A.** Mechanistic studies: Determining who, what and how for clinical trials, Podium presentation at the 5th Annual Occupational Therapy Summit of Scholars, May 2016, Pittsburgh, PA.
13. **Sethi A,** Raj S, & Dounskaia N. Interaction torque control deficits in patients with stroke, Poster presentation at the Society for Neuroscience, November 2016, San Diego, CA.
14. **Sethi A,** Santarnecchi E, & Pascual-Leone A. Combined brain and hand stimulation in moderate to severe chronic individuals with stroke. Poster presented at the annual meeting American Society of Neurorehabilitation, November, 2016, San Diego, CA.
15. **Sethi A,** Acharya, A., Raj S, & Dounskaia N. Control of paretic and non-paretic arm during bimanual reaching movements after stroke. Poster presentation at the Society for Neuroscience, November 2017, Washington DC.
16. Stepansky KE, **Sethi A,** Everette J, Toto P, Bendixen RM. Caregiver preparedness training within inpatient brain injury rehabilitation: A Scoping review. Poster presentation at the American Congress of Rehabilitation Medicine, September, 2018, Dallas, TX.
17. Weber D, Sharma G, Friedenberg D, Urbin M, Sarma D, **Sethi A.** A Sleeve Electrode Array for Myolectric Control of Functional Electrical Stimulation-Assisted Hand Function. Platform presentation at the IEEE Engineering in Medicine and Biology Society, July 2018, Honolulu, HI
18. Sharma G, Weber D, Friedenberg D, Urbin M, Sarma D, **Sethi A**. A Sleeve Electrode Array for Myolectric Control of Functional Electrical Stimulation-Assisted Hand Function. Poster presentation at American Congress of Rehabilitation Medicine, September, 2018, Dallas, TX

State, Regional
1. **Sethi A.** Understanding movement variability: novel outlook towards neurorehabilitation. Presentation at Annual Texas Occupational therapy Association Meeting, November 2011; Fresco, TX.
2. **Sethi A,** Sejdic E, Balasubramanian CK, Brixey J, Kumar A, Ottenbacher M, Fisher S.R. The temporal distribution of ambulatory activity discriminates fallers from non-fallers in acutely ill older patients. Poster presented at University of Pittsburgh Aging Institute Day, March 2014; Pittsburgh, PA.
3. *Raj S, **Sethi A,** Piva S, Sowa G, Farrokhi S. Knee joint variability during walking exercise in patients with knee osteoarthritis. Poster presented at University of Pittsburgh, Rehabilitation Institute Day, June 2014; Pittsburgh, PA.
* Trainee mentored to presentation **(Awarded Best Undergraduate Student Poster)**
4. ***Akanbi, T., Santarnecchi, E., Pascual-Leone, A., Munin, M., & **Sethi, A**. Combining Hand and Brain Electrical Stimulation in Individual with Severe Stroke: A Case Study. Poster presented at University of Pittsburgh, Rehabilitation Institute Day, May 2016; Pittsburgh, PA. * Trainee mentored to presentation
5. *Mercader. D., Santarnecchi, E., Pascual-Leone, A., Munin, M., Foldes, S, & **Sethi, A.** EEG changes after the Combined Brain and Hand Electrical Stimulation in moderate to severe Individuals with Chronic Stroke. Poster presented at University of Pittsburgh, Rehabilitation Institute Day, May 2016; Pittsburgh, PA.
* Trainee mentored to presentation **(Awarded Best Undergraduate Student Poster)**
6. *Eldeeb S, Susam B, Akcakaya M, Sybeldon M, Foldes S, Santarnecchi E, Pascual-Leone A, & **Sethi A**. Novel method to measure functional connectivity between motor cortices after stroke. Poster presented at University of Pittsburgh, Rehabilitation Institute Day, June 2018; Pittsburgh, PA.
* Trainee mentored to presentation

Invited Presentations

International

1. **Sethi A**. Guiding principles to improve upper extremity function after stroke. Invited Guest Speaker at the 52nd Annual Conference of the All India Occupational Therapsists' Association, May 2015, New Delhi, India.
2. **Sethi A**. The connections between brain and heart: implications for motor recovery after stroke. Invited Guest Speaker at the Rehab Rounds at the University of Toronto, October 2015, Ontario, Canada.

State, Regional

1. **Sethi A.** Heart rate variability and motor recovery after stroke. Invited Speaker at the Action Club at the Department of Kinesiology at the Penn State University, PA, March 2016.
2. **Sethi A.** Variability analyses reveal novel insights to motor recovery after stroke. Invited Speaker at the Panther Rehabilitation Rounds at the University of Pittsburgh, PA, February 2016.
3. **Sethi A.** Application of non-linear analyses in rehabilitation. Invited speaker at the doctoral seminar in rehabilitation Sciences at the University of Pittsburgh, PA, July 2016.
4. **Sethi A.** Application of non-linear analyses in sports rehabilitation. Invited speaker at the doctoral seminar in the Department of sports medicine at the University of Pittsburgh, PA, September 2016.

PROFESSIONAL ACTIVITIES

TEACHING: School of Health and Rehabilitation Sciences, University of Pittsburgh

Doctor of Occupational Therapy

1. Course Title: Neurobehavioral Science (OT 2205) – 3 credits
   Position: Instructor (2017 - present)
   Year(s), number of students: Fall 2017, 45 OTD students, 5 MOT students; Fall 2018, 54 OTD students, 1 MOT student
   Contact hours; number of lectures: 2 hour per week; 16 lectures / 16 labs (16 week course)
   Description: Examines the neuroscientific concepts underlying normal somatosensory, special sensory, motor, cognition, and emotion functional systems, and explores the manifestation of dysfunction of major neural elements.

Doctor of Occupational Therapy – Course Liaison

1. Course Title: Body Structures and Functions: Anatomy (OT 2201) – 3 credits
   Year(s), course instructor: Summer 2017, Alex Harper, MS, OTR/L; Summer 2018, Kasey Stepansky, CScD, OTR/L

Master of Occupational Therapy

1. Course Title: Human Anatomy (OT 2205) – 3 credits
   Position: Co-Instructor (2013)
   Year(s), number of students: Summer 2013, 50 MOT students
   Contact hours; number of lectures: 16 hour per week; 70 lectures / labs (8 week course)
   Description: The musculoskeletal and peripheral nervous systems are studied in-depth; attention is also given to the cardiopulmonary and the central nervous systems. Learning is facilitated through lectures and directed laboratory experience using prosected cadavers, skeletal materials and models.

2. Course Title: Neurobehavioral Science (OT 2109) – 4 credits
   Position: Instructor (2015 - 2017)
   Year(s), number of students: Spring 2015, 52 MOT students; Spring 2016, 52 MOT students; Spring 2017, 51 MOT students
   Contact hours; number of lectures: 6 hour per week; 16 lectures / labs (16 week course)
   Description: Focuses on the structures and functions of the nervous system (World Health Organization International Classification of Functioning, Disability and Health components Body Functions and Body Structures). Students will gain an understanding of the sensory, neuromuscular, and mental functions of the nervous system, as well as impairments imposed

by common pathologies affecting the nervous system.

Master of Occupational Therapy – Course Liaison

1. Course Title: Human Anatomy (OT 2201) – 4 credits
   Year(s), course instructor: Summer 2015 - 2016, Karthik Hariharan, PT, MS

Graduate Program in Health and Rehabilitation Sciences (Masters and Doctoral)

1. Course Title: Human Performance Analysis (HRS 2502) – 4 credits
   Position: Instructor (2016 - 2017)
   Year(s), number of students: Spring 2016, 6 MS students, 2 PhD students; Spring 2017, 1 PhD student
   Contact hours; number of lectures: 6 hour per week; 16 lectures / labs (16 week course)
   Description: Focuses on the structures and functions of the nervous system (World Health Organization International Classification of Functioning, Disability and Health components Body Functions and Body Structures). Students will gain an understanding of the sensory, neuromuscular, and mental functions of the nervous system, as well as impairments imposed by common pathologies affecting the nervous system.

2. Course Title: Advanced Clinical Practice in Neurorehabilitation (HRS 2594) – 3 credits
   Position: Instructor (2016 - 2017)
   Year(s), number of students: Spring 2014, 4 MS students, 3 MOT students; Contact hours; number of lectures: 6 hour per week; 16 lectures / labs (16 week course)
   Description: Provides advanced knowledge and application of theories and principles of motor control, motor learning and neuroplasticity to evaluate and develop evidence-based interventions for clients with neurological impairments. Clinical reasoning skills for implementing theoretical principles to develop interventions are emphasized.

Clinical Science Doctoral in Occupational Therapy

1. Course Title: Advances in Functional Assessment (OT 3000) – 4 credits
   Position: Instructor (2015 - present)
   Year(s), number of students: Summer 2015, 5 CScD students, Summer 2016, 5 CScD students, Summer 2017 2 CScD students, Summer 2018 5 CScD students
   Contact hours; number of lectures: 6 hour per week; 16 lectures (8 week course)
   Description: Focuses on concepts of classical test and item response theories to identify assessments for a specific patient population.

2. Course Title: Advances in Functional Assessment Colloquium (OT 3001) – 3 credits
   Position: Instructor (2015 - present)
   Year(s), number of students: Summer 2015, 5 CScD students, Summer 2016, 5 CScD students, Summer 2017 2 CScD students
   Contact hours; number of lectures: 3 hour per week; 8 on-line modules (8 week course)
   Description: Focuses on building a concept matrix using: (1) the perspective of body structures and functions, activity, and participation as defined by the International Classification of Functioning, Disability, and Health (ICF) of the World Health Organization and (2) methods of assessment such as, self-report, proxy report, clinical judgment, clinical performance and home performance to support a comprehensive assessment plan for a specific patient population.

3. Course Title: Data-based Decision Making: Clinical Rotation (OT 3301) – 3 credits
   Position: Instructor (2018)
   Year(s), number of students: Spring 2018, 1 CScD student,
   Contact hours; number of lectures: 3 hour per week; 16 discussion-based meetings (16 week course)
   Description: In this clinical rotation, students work with staff at an assigned clinic and a faculty mentor, using data analytic strategies to analyze and synthesize data from relevant clinical cases to assist them in documenting patient progress, satisfaction, and outcomes, and staff productivity.

4. Course Title: Cognate Seminar (OT 3600) – 3 credits
   Position: Instructor (2018)
   Year(s), number of students: Summer 2018, 1 CScD student,
   Contact hours; number of lectures: 3 hour per week; 16 discussion-based meetings (16 week course)
   Description: Focuses on collecting patient assessment and intervention data for a chosen theoretical model, and comparing results to current research evidence in preparation for their capstone project.

5. Course Title: Capstone Practicum (OT 3700) – 5 credits
   Position: Instructor (2018)
   Year(s), number of students: Summer 2018, 1 CScD student,
   Contact hours; number of lectures: 5 hours per week; 16 discussion-based meetings (16 week course)
   Description: This course consists of a practicum along with a capstone project that focuses on analyzing the active intervention mechanisms and assessment - intervention –outcome linkages for a specific patient population. Students will submit their project findings for presentation at a professional forum (e.g., regional, national, or international conference), or as a continuing education module.

School of Health Professions, University of Texas Medical Branch

Master of Occupational Therapy

1. Course Title: Occupational Therapy Interventions and Adaptations (OCCT 6410) – 3 credits
   Position: Instructor (2011)
   Year(s), number of students: Summer 2011, 48 MOT students
   Contact hours; number of lectures: 6 hours per week; 16 lectures / 16 labs (12 week summer course)
   Description: Provides the knowledge and skills to MOT students to use theories and principles to assess and develop interventions to enhance performance in activities of daily living in clients with neurological impairments.

2. Course Title: Interventions for Neurological Practice (OCCT 6424) – 3 credits
   Position: Instructor (2012)
   Year(s), number of students: Summer 2012, 51 MOT students
   Contact hours; number of lectures: 6 hours per week; 16 lectures / 16 labs (12 week summer course)
   Description: Provides the knowledge and skills to MOT students to use theories and principles to assess and develop interventions to enhance performance in activities of daily living in clients with neurological impairments.

3. Course Title: OT Domain: Personal Performance (OCCT 5221) – 3 credits
   Position: Instructor (2011)
   Year(s), number of students: Fall 2011, 52 MOT students
   Contact hours; number of lectures: 2 hour per week; 16 lectures / 16 labs (16 week course)
   Description: Provides the knowledge of the client factors domain of the Occupational Therapy Practice Framework.
4. Course Title: Foundations for Neurological Practice (OCCT 6226) – 3 credits
   Position: Co-Instructor (2012- 2013)
   Year(s), number of students: Spring 2012, 52 MOT students; Spring 2013, 54 MOT students
   Contact hours; number of lectures: 6 hours per week; 16 lectures / 16 labs
   Description: Provides the fundamentals of neuroscience and neurobiology of movement, sensation and higher mental functions.

5. Course Title: Applied Reasoning I (OCCT 5110) – 2 credits
   Position: Instructor (2012)

Year(s), number of students: Fall 2012, 54 MOT students
Contact hours; number of lectures: 2 hours per week; 14 lectures (16 week course)
Description: Addresses the basics and fundamentals of clinical reasoning using a problem-based learning approach in clients with musculoskeletal impairments.

6. Course Title: Applied Reasoning II (OCCT 5113) – 2 credits
Position: Instructor (2013)
Year(s), number of students: Spring 2012, 54 MOT students
Contact hours; number of lectures: 2 hours per week; 14 lectures (16 week course)
Description: Addresses the basics and fundamentals of clinical reasoning using a problem-based learning approach in clients with neurological impairments.

Mentoring and Research Supervision

Mentoring- Students and Post-doctoral associates

1. Sandesh Raj, Bachelor of Science in Bioengineering, Swanson School of Engineering, 2013-2014

Product: Raj S, **Sethi A,** Piva S, Sowa G, Farrokhi S. Knee joint variability during walking exercise in patients with knee osteoarthritis. Poster to be presented at University of Pittsburgh, Rehabilitation Institute Day, June 2014; Pittsburgh, PA.
Awarded: Best Undergraduate Poster.

2. Sandesh Raj, Bachelor of Science in Bioengineering, Swanson School of Engineering, Summer 2015

Product: **Mentor for University Honors College Health Science Fellowship**

3. Stephen Foldes, Post-doctoral associate, Department of Physical Medicine and Rehabilitation, 2015-2017

Product: **Mentor for Craig Nielsen Foundation Post-doctoral Fellowship Grant**

4. Arjun Acharya, Bachelor of Science in Bioengineering, Swanson School of Engineering, Summer, 2016

Product: **Mentor for Rehabilitation Engineering Undergraduate (ASPIRE) Fellowship**

5. Soundarya Bhaskar, Bachelor of Science in Neuroscience, Dietrich School of Arts & Sciences, Fall, 2016, Spring, 2017

Product: **Mentor for Research Preceptorship**

6. Temitope Akanbi, Master of Science in Occupational Therapy, School of Health and Rehabilitation Sciences, Fall, 2015, Spring and Summer, 2016.

Product: **Mentor for K. Leroy Irvis Fellowship**

7. Derek Wong, Bachelor of Science in Neuroscience, Dietrich School of Arts & Sciences, Fall, 2017, Spring, 2018

Product: **Mentor for Research Preceptorship**

8. Catherine Leece, Master of Science in Occupational Therapy, School of Health and Rehabilitation Sciences, Spring, 2016

Product: **Mentor for First Gear Program offered by the Pitt Innovation Institute**

9. Daniel Mercader, Bachelor of Science in Bioengineering, Swanson School of Engineering, 2015-2016

Product: Mercader. D., Santarechhi, E., Pascual-Leone, A., Munin, M., Foldes, S, & **Sethi, A.** Neural Mechanisms Underlying the C*ombined Brain and Hand Electrical Stimulation in moderate to severe Individuals with Chronic Stroke.* Poster presented at University of Pittsburgh, Rehabilitation Institute Day, May 2016; Pittsburgh, PA
Awarded: Best Undergraduate Poster.

10. Sandesh Raj, Medical student, School of Medicine, 2017-2018

Product: Raj, S, Dounskaia, & **Sethi, A.** Effect of stroke on joint control during reach-to-grasp movements.
Manuscript Under review in the Journal of Neuroengineering and Rehabilitation.

11. Safaa Mohamed, Doctoral student in Electrical and Computer Science Engineering, Swanson School of Engineering, 2017-2018

Product: Mohamed, S., Akcakaya, M., Foldes, S, Santarechhi, E., Pascual-Leone, A., & **Sethi, A.** EEG-based functional connectivity method to analyze motor recovery after stroke: A pilot study.
Manuscript Under review in the Journal of Biomedical Signal Processing and Control

12**.** Kasey Stepansky, Clinical Science Doctoral student in Occupational Therapy, School of Health and Rehabilitation Sciences, Spring, 2017

Product: Stepansky, K., Sethi, A., Toto, P., James, Everett, Bendixen, R. Caregiver Preparedness Training within Inpatient Brain Injury Rehabilitation: A Scoping Review.
Abstract presented at the Annual Conference of the American Congress of Rehabilitation Medicine, 2018

13. Marcus Allen, PhD student in Mechanical Engineering, Swanson School of Engineering, Doctoral committee member, 2017-2019

14. Abdullah Alsaeed, MS student in Occupational Therapy, School of Health and Rehabilitation Sciences, Fall, 2018

ACADEMIC ADVISING

1. 2010-2011: 10 MOT students
2. 2011-2012: 15 MOT students
3. 2012-2013: 9 MOT students
4. 2014-2015: 4 MOT students
5. 2015-2015: 10 MOT students
6. 2016-2017: 4 MOT students
7. 2017-2018: 10 OTD students, 1 CScD student
8. 2018-2019: 10 OTD students, 5 MSOT students, 1 CScD student

RESEARCH

GRANT FUNDING

Current Grant Support

Grant Number Amount	*Grant Title*	*Project Role, Effort*	*Years Inclusive*	*Source,*
University of Pittsburgh Medical Center Internal Grant	*Combined brain and hand stimulation to improve hand function after stroke*	*Principal Investigator*	*2015-2018*	*Rehabilitation Institute $30,000*
Pilot Grant	*Combined non-invasive transcranial random noise current stimulation and functional electrical stimulation to improve hand movement in individuals with severe impairments after chronic stroke*	*Principal Investigator*	*2016-2018*	*NIH P2CHD086844 Medical University of South Carolina's National Center for Neuromodulation for Rehabilitation, $38,500*
Pilot Grant	*Development of algorithms of the Individualized hand improvement and tracking system for stroke*	*Principal Investigator*	*2017-2018*	*Clinical and Translational Science Institute, $35,000*

Pilot Grant	*Moving brain computer interface success into stroke*	*Co-Investigator*	*2017-2019*	*Aging Institute, $52,402*

Completed Grant Support

Grant Number	*Grant Title*	*Project Role, Effort*	*Years Inclusive*	*Source, Amount*
University of Florida, Internal grant	*Does rhythmic auditory training enhances the upper extremity flexibility post stroke?*	*Principal Investigator*	*2010*	*College of Public Health Professions, University of Florida, $100*
F_105-2014 University of Pittsburgh, Internal Grant	*Individualized hand improvement and tracking system for stroke*	*Principal Investigator*	*2015*	*Center for Medical Innovation, $18,000*
University of Pittsburgh Internal Grant (project under the NSF-ICORPS)	*Customer Discovery for the Individualized hand improvement and tracking system for stroke*	*Principal Investigator*	*2016*	*Innovation Institute, $3000*
F_160-2016 University of Pittsburgh, Internal Grant	*Individualized hand improvement and tracking system for stroke*	*Principal Investigator*	*2016-2017*	*Center for Medical Innovation, $22,000*
Pilot Grant	*Examining the commercialization potential of the Individualized hand improvement and tracking system for stroke*	*Principal Investigator*	*2017*	*IDEA Foundry Accelerator, $25,000*

Laboratory memberships

Laboratory Name, Principal Investigators

1. Neuromotor Recovery and Rehabilitation Laboratory; Sethi, 2015-present
2. Hand Motion Laboratory; Sethi, Baker, 2016-present.
3. Rehabilitation Neural Engineering Laboratory; Sethi, 2016-present

Journal Refereeing

1. Reviewer, Stroke Research and Treatment, 2012 to present
2. Reviewer, Neurorehabilitation and Neural Repair, 2012 to present
3. Reviewer, Archives of Physical Medicine and rehabilitation, 2013 to present
4. Reviewer, Journal of Rehabilitation Research and Development, 2014 to present
5. Reviewer, Clinical Medicine and Research, 2014 to present
6. Reviewer, American Journal of Occupational Therapy, 2014 to present
7. Reviewer, Occupational Therapy Journal of Research, 2015 to present
8. Reviewer, Medicine, 2103 to present
9. Reviewer, Journal of Motor Behavior, 2015 to present
10. Reviewer, Topics in Stroke Rehabilitation, 2015 to present
11. Reviewer, Neural Plasticity, 2016 to present

Grant reviewer:

1. National Center for Neuromodulation for Rehabilitation, Medical University of South Carolina, 2017, 2018.
2. Central Research Development Fund, University of Pittsburgh, 2017
3. Clinical Translational Science Institute, University of Pittsburgh, 2014, 2018

Review Committee- conference reviewer
1. Reviewer, American Occupational Therapy Association Conference, 2013, 2014, 2015, 2016.
2. Reviewer, All India Occupational Therapists' Association Conference, 2015.

SERVICE

INTERNATIONAL, NATIONAL AND REGIONAL ORGANIZATIONS

National Service Organizations

	Role, Service	*Organization*	*Dates*
1.	Member, Online Presence Committee	American Society of Neurorehabilitation	2016- 2018

University of Pittsburgh Service

	Role, Service	*Organization*	*Dates*
1.	Pro-tem Member	University Senate Research Committee	2018

Regional Service Organization

	Role, Service	*Organization*	*Dates*
1.	Upper Extremity Technology Review Board	HealthSouth Corp	2017- current
2.	Outcome Measure Committee	UPMC – Centers for Rehab Services	2018

Department of Occupational Therapy Service Activities

	Role, Service	*Dates*
1.	Program Director, Master of Science Occupational Therapy Program, Department of Occupational Therapy, School of Health And Rehabilitation Sciences, University of Pittsburgh	2018- current
2.	Director, Program Evaluation Committee, Master of Occupational Therapy Program, Department of Occupational Therapy, School of Health And Rehabilitation Sciences, University of Pittsburgh	2016- 2018
3.	Member, Occupational Therapy Faculty Search Committee, Department of Occupational Therapy, School of Health Professions, University of Texas Medical Branch	2011-2013
4.	Member, Occupational Therapy Chair Search Committee, Department of Occupational Therapy, School of Health Professions, University of Texas Medical Branch	2011-2013
5.	Chair, Research Committee, Department of Occupational Therapy, School of Health Professions, University of Texas Medical Branch	2011-2013
6.	Chair, Curriculum Committee, Department of Occupational Therapy, School of Health Professions, University of Texas Medical Branch	2011-2013
7.	Chair, Special Events Committee, Department of Occupational Therapy, School of Health Professions, University of Texas Medical Branch	2011-2013

8.	Member, Educational Technology Group: University Ad-hoc Committee, Department of Occupational Therapy, School of Health Professions, University of Texas Medical Branch	2012-2013
9.	Member, University of Texas Medical Branch Stroke Support Group Organizing Committee, Department of Occupational Therapy, School of Health Professions, University of Texas Medical Branch	2012-2013
10.	Graduate Representative, Department of Occupational Therapy, College of Public Health and Health Professions, University of Florida	2010