

DEPARTMENT OF COMMUNICATION SCIENCES AND DISORDERS (CSD)

We offer the following fully accredited degree programs:

- Bachelor of Science in CSD
- Master of Arts in Speech-Language Pathology
- Master of Science in Speech-Language Pathology
- Doctor of Audiology
- Doctor of Philosophy in Audiology
- Doctor of Philosophy in Speech-Language Pathology

Our research laboratories and current research programs include:

• **Motor Speech and Prosody Laboratory**

Frank Boutsen, PhD, CCC-SLP
(405) 271-4214, ext. 46078
Frank-Boutsen@ouhsc.edu

- Eye-tracking and acoustic measures of prosody in individuals with speech and language disorders



• **Speech Perception Laboratory**

Blas Espinoza-Varas, PhD
(405) 271-4214, ext. 46073
Blas-Espinoza-Varas@ouhsc.edu

- Neural and psychoacoustic aspects of hearing and speech processing



• **Child Language Learning Laboratory (ChiLL)**

Denise Finneran, PhD, CCC-SLP
(405) 271-4214, ext. 46056
Denise-Finneran@ouhsc.edu

- Language learning and reading in children with dialect differences



• **Communication and Aural Rehabilitation Research Laboratory (CARRL)**

Andrew John, PhD
(405) 271-4214, ext. 46065
Andrew-b-John@ouhsc.edu

- Speech perception, room acoustics, and rehabilitation for hearing loss

- **Hearing Evaluation, Rehabilitation, and Outcomes Laboratory (HERO)**

Carole E. Johnson, PhD, AuD, CCC-A, F-AAA
(405) 271-4214, ext. 51968
Carole-Johnson@ouhsc.edu

- Aural rehabilitation, hearing aids, and evaluation of cochlear synaptopathy



- **Tinnitus and Sound Sensitivity Laboratory (TASSL)**

Suzanne H. Kimball, AuD, CCC-A, F-AAA
(405) 271-4214, ext. 46068
Suzanne-Kimball@ouhsc.edu

- Diagnosis and clinical treatment of tinnitus, hyperacusis, and misophonia



- **Child and Family Stuttering Laboratory**

Katerina Ntourou, PhD, CCC-SLP
(405) 271-4214, ext. 46069
Katerina-Ntourou@ouhsc.edu

- Emotion, temperament, language, and executive function impacts on stuttering

Professional degree students train in our clinic:

The [John W Keys Speech and Hearing Center](#) is a full-service speech and hearing clinic located within the Allied Health Clinics. In the JWKSHC, licensed and certified faculty, speech-language pathologists, and audiologists provide supervised student training as well as outstanding speech, language, hearing, and balance care to the Oklahoma City community.



The JWKSHC includes specialty and multidisciplinary clinics in:

- **Pediatric speech and language disorders**
- **Adult neurogenic speech disorders**
- **Central auditory processing disorder**
- **Cleft palate and craniofacial disorders**
- **Tinnitus and sound sensitivity**
- **Balance and falls**
- **Diagnostic audiology**
- **Hearing aids and assistive technology**
- **Cochlear implants**

The JWKSHC is also home to the two United Way of Central Oklahoma partner agency programs: the United Way Hearing Aid Bank and the iLEAP Language Enrichment Preschool. As well as the Oklahoma Seniors Cabaret Hearing for Seniors Program.



DEPARTMENT OF MEDICAL IMAGING AND RADIATION SCIENCES (MIRS)

We offer the following fully accredited degree programs:

- Bachelor of Science in Radiation Sciences – Nuclear Medicine
- Bachelor of Science in Radiation Sciences – Sonography
- Bachelor of Science in Radiation Sciences – Radiation Therapy
- Bachelor of Science in Radiation Sciences – Radiography
- Bachelor of Science in Radiation Sciences

Our research laboratories and current research programs include:

- **VERT Laboratory (Virtual Environment Radiotherapy Training)**

AHB 2038

Stacy Anderson, MS, RT(T), CMD

(405) 271-8001, ext. 41169

Stacy-anderson@ouhsc.edu

Marissa Mangrum, MSRS, RT(T)

(405) 271-8001, ext. 41158

Marissa-mangrum@ouhsc.edu

VERT provides a simulated state of the art training facility so students are free to learn in a low pressure environment and can make mistakes safely and learn in their own time. A tool for educators that students readily engage to visualize key concepts and techniques.

- Offers an opportunity to learn in a safe and engaging, real world environment
- Students develop psycho- motor skills and become familiar with hand controls prior to clinical placement.

Opportunity for patients to learn and operate radiation therapy equipment to better understand their treatment

- **Treatment Planning Laboratory**

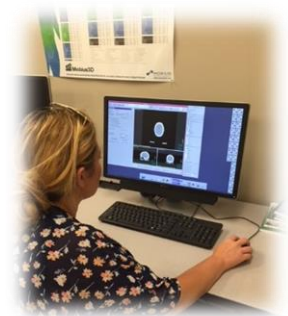
AHB 1026

Stacy Anderson, MS, RT(T), CMD

(405) 271-8001, ext. 41169

Stacy-anderson@ouhsc.edu

A computer based laboratory for radiation therapy and medical dosimetry students to create functional radiation therapy treatment plans from CT data sets for various types of cancers including breast, prostate, brain, gynecological, gastrointestinal, lung and colon/ rectal



cancers. The clinical environments for oncology patients are often limited in the expensive treatment planning systems which healthcare professionals use for patient care and treatment planning. This limits students' abilities to work with the treatment planning equipment which is vital to their competency and development. This laboratory provides students a real world environment to work with the intricate systems.

- **MIRS 3D Printing Lab**

Located in AHB 1034

Dr. Kari Boyce, PhD, RDMS, RDCS

(405) 271-8001, ext. 43402

Kari-Boyce@ouhsc.edu

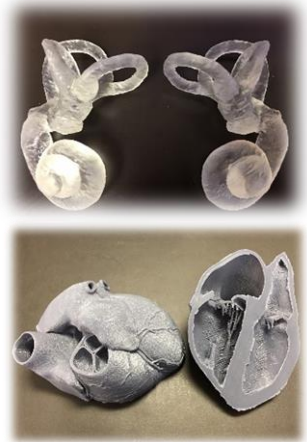
Bradford Gildon, MA, BSRT, RT(R)

(405) 271-8001, ext. 41198

Bradford-Gildon@ouhsc.edu

Lab Capabilities

- Form 2 SLA 3D printer with a variety of resins
- Capabilities to print:
 - Anatomic instructional models (general, not patient specific)
 - Patient specific pre-surgical planning models
 - Patient specific surgical tools
 - Research and development prototypes



- **CT Simulation Lab**

AHB 1036

Jeff Berry, MS, RT(R)(CT)

(405) 271-8001, ext. 41165

Jeff-Berry@ouhsc.edu

- 16 slice Philips scanner
- 70 cm gantry bore width
- IACUC approved for lab animal studies
- Can scan non-metallic materials such as fossils
- Scanned for the Oklahoma City Zoo, Tulsa Zoo, Sam Noble Oklahoma Museum of Natural History

- **Sonography Lab**

AHB 1024

Dr. Kari Boyce, PhD, RDMS, RDCS

(405) 271-8001, ext. 43402

Kari-Boyce@ouhsc.edu

Robin White, MED, RDMS, RDCS, RVT

(405) 271-8001 ext. 41170

Robin-White@ouhsc.edu

- 5-6 functional Ultrasound units (Acuson/Siemens, GE, Zonare, Sonosite)
- Various multipurpose and tissue mimicking phantoms
- Various equipment available for ergonomic support/teaching ergonomic technique
- In lab capability of VGA projection from US units on big screen TV

DEPARTMENT OF NUTRITIONAL SCIENCES (NS)

We offer the following fully accredited degree programs:

- MA in Dietetics
- MS in Nutritional Sciences
- Certificate in Dietetic Internship
- PhD in Allied Health Sciences with Specialization in Nutritional Sciences

Faculty Interests and Contacts:

Brian dela Cruz, MS, RDN/LD
(405) 271-8001, ext. 41181
Brian-dela-cruz@ouhsc.edu

- Motivational interviewing as a counseling tool

Jennifer Graef, PhD, RD
(405) 271-8001, ext. 41182
Jennifer-Graef@ouhsc.edu

- Role of functional foods in preventing and/or alleviating inflammation-associated chronic disease
- Estrogen deficiency and osteoporosis
- Dietary alterations of gut microflora and immunity
- Sport nutrition and performance



Leah Hoffman, PhD, RD/LD, CNSC
(405) 271-8001, ext 41174
Leah-Hoffman@ouhsc.edu

- Nutrition support (tube feeding and intravenous nutrition)
- Supportive nutrition care before and after surgery for cancer (especially pancreatic)
- Critical care nutrition and methods to enable best nutrition practices in the intensive care unit

Allen Knehans, PhD
(405) 271-8001, ext 43408
Allen-Knehans@ouhsc.edu

- Nutrition and disability
- Nutrition and peripheral artery disease



Susan Sisson, PhD, RDN, CHES, FACSM
(405) 271-8001, ext. 41176
Susan-Sisson@ouhsc.edu

Lab website: <http://alliedhealth.ouhsc.edu/labs/BehavioralNutritionPhysicalActivityLab.aspx>

- Physical activity and sedentary behavior epidemiology and related food consumption behaviors
- Influence of the physical and social environment on food consumption and physical activity
- Impact of sedentary behavior on obesity
- Interventions to combat sedentary lifestyle and poor food choices
- Food consumption and physical activity behaviors in children attending childcare centers

Michael Stout, PhD
(405) 271-8001, ext. 41177
Michael-Stout@ouhsc.edu

- Understand how metabolic disturbances (obesity, dyslipidemia, diabetes) promote aging
- Role of sex hormones in metabolic disturbances and aging
- Develop therapeutic strategies that target metabolic signaling pathways to diminish age-related disease

Peggy Turner, MS, RD/LD, FAND
(405) 271-2113, ext. 41179
Peggy-Turner@ouhsc.edu

- Informatics in dietetics
- Telehealth
- Inter-professional education and practice
- Nutrition assessment and medical nutrition therapy



Special Departmental Activities/Capabilities
Contact Patsy Johnson, patsy-johnson@ouhsc.edu, (405) 271-2113

- Offer a children's cooking camp each summer: one-week, 11-14 year-old, charge fee for camp
- Provide dietary services in College clinic, small presence using PRN dietitian
- Have foods lab kitchen that can be used for cooking classes and demonstrations

DEPARTMENT OF REHABILITATION SCIENCES (RS)

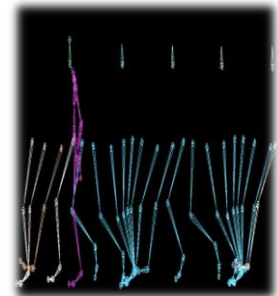
We offer the following fully accredited degree programs:

- Master of Occupational Therapy (MOT)
- Doctor of Physical Therapy (DPT)
- Doctor of Science in Rehabilitation Sciences (DSc)
- PhD in Allied Health Sciences with Specialization in Rehabilitation Sciences

Our research laboratories and current research programs include:

- **The Center for Human Performance Measurement**
Carol Dionne, PT, DPT, PhD, MS, OCS, Cert MDT
(405) 271-2131, ext. 47115
Carol-Dionne@ouhsc.edu

This OUHSC core facility helps researchers study biomechanical aspects of human movement through kinematics and 3D-kinetics from a 3-dimensional perspective. With a motion analysis system, composed of 12 state-of-the-art motion capture cameras and two in-floor force sensor plates that, together, analyze any type of human movement, the center can capture subtle movement deviations that may be early warning of pending injury or pathological process. The center's goal is to **advance human performance measurement to enhance health and well-being** through the development and application of new knowledge.



Return to work following trans-femoral amputation. Dr. Dionne has been awarded 6 years of OCAST funding, currently producing 8 publications, 12 national and international presentations and leveraged the development of the Center for Human Performance Measurement (CHPM).

- **Professor Paws Project**
Mary Isaacson, EDD, OTR/L, ATP, FAOTA
(918) 660-3272
Mary-Isaacson@ouhsc.edu

The purpose of the Professor Paws Project is to expand clinician knowledge and promote community awareness about service dogs through the utilization of a full-time facility dog at The University of Oklahoma-Tulsa.



- **Human Development Research Laboratory**

Thubi, H.A. Kolobe, PT, PhD, FAPTA
(405) 271-2131, ext. 47121
Thubi-Kolobe@ouhsc.edu

Research conducted in the Human Development Laboratory focuses on infant-robotic reinforcement movement learning for infants with motor and cognitive impairments. This work entails collaboration among engineering and computer science scientists at OU Norman in the College of Engineering. We are currently testing and validating the third version of the Self-Initiated Prone Progression Crawler (SIPPC-3) system, which represents an integration of robotics and sensor technologies designed to influence movement effort as infants learn to crawl. The SIPPC was patented in 2015, recognized with a Smithsonian Innovation Award (selected among 13 innovative inventions), and featured at the 2015 Smithsonian Innovation Festival in Washington, DC. The SIPPC research has been funded for 5 years by a grant from the National Institute of Health and currently by National Science Foundation grants. Although research on the validation of other features of the SIPPC continue, we are also interested in exploring licensing or start-up business opportunities.



- **The Lee Mitchener Tolbert Center for Developmental Disabilities and Autism**

The Lee Mitchener Tolbert Center for Developmental Disabilities was founded in 1995 for the purpose of disseminating information, expanding knowledge, and promoting "best practice" service delivery to enhance the lives of people with developmental disabilities and their families.

- **Oklahoma Autism Network**

The Oklahoma Autism Network is a center of excellence committed to improving quality of life for individuals with autism and their families. We facilitate and implement Oklahoma's Statewide Autism Plan through research, education, and service while respecting individual preferences and promoting community inclusion.

- **Rehabilitation Resources Clinic (OKC)
OU Physical Therapy & Sports Medicine @ The Tandy Family YMCA (TULSA)**

Our state-of-the-art rehabilitation clinics are staffed by faculty and clinical staff from The University of Oklahoma Physical Therapy program to offer evidence-based physical therapy services for people of all ages and activity levels. Our clinicians blend the latest scientific evidence with the art of personalized rehabilitation.



Faculty interests include:

Sandra Arnold, PT, PhD
(405) 271-2131, ext. 47118
Sandra-Arnold@ouhsc.edu

- Tool development of the School Outcomes Measure (SOM), a minimal data set that measures the outcomes of school age children with disabilities who receive school-based occupational therapy and physical therapy.

Elizabeth Hile , PT, PhD, NCS, CLT
(405) 271-2273
Elizabeth-Hile@ouhsc.edu

- Balance and Gait Dysfunction in Cancer Survivors (special interest in Chemotherapy-Induced Neurotoxicity)
- Prospective Surveillance and Rehabilitation of Side-Effects of Cancer Treatments
- Measurement of and Interventions for Balance and Mobility Decline in Older Adults Exercise and Nutrition Pre-Surgical Rehabilitation (Prehab) for Improved Survival Outcomes in Cancer

Lynn Jeffries, PT, DPT, PhD, PCS
(405) 271-2131, ext. 47131
Lynn-Jeffries@ouhsc.edu

- Exploring Knowledge Translation in School Based Physical Therapy
 - The purpose of this study is to determine the extent to which physical therapists in educational settings use evidence-based interventions, their perceptions of their skills in doing so and identify their perceived barriers to and facilitators of the implementation of evidence-based interventions.
- Developmental Trajectories of Impairments, Health, and Participation of Children with Cerebral Palsy.
 - The purpose of this study was to document longitudinal developmental trajectories and reference percentiles of primary and secondary impairments, health, self-care and participation, for children with cerebral palsy.
- Relationship of Student Outcomes of School-Based Physical Therapy Services
 - The purpose of this study was to describe the changes in students' participation in school activity, self-care, posture and mobility, recreation and fitness, and academic outcomes and the relationships of these changes to identified characteristics of school-based physical therapy intervention, including service delivery models, activities, procedures, and dosage.

Ken Randall, PT, PhD, MHR
(918) 660-3276
Ken-Randall@ouhsc.edu



- OU ALL-Stars - an interprofessional study assessing the influence of a fitness and wellness program for children with acute lymphoblastic leukemia (ALL). The study examines how physical exercise and education and activities related to wellness and nutrition influence biopsychosocial measures that include quality of life, hopelessness, strength, endurance, blood chemistry, and bone density. ALL-Stars involves students and faculty from physical therapy, occupational therapy, and nutritional sciences in collaboration with the St. Jude affiliate clinic at St. Francis Hospital and the Tandy Family YMCA.

Hongwu Wang, PhD
(405) 271-2131, ext. 47137
Hongwu-Wang@ouhcs.edu

- Interests in technologies including robotics, sensors, machine learning, and human-machine interaction. Seek opportunities to apply knowledge from these fields to rehabilitation devices and systems for people with disabilities and elders. Particularly active in the areas of assistive robotics, sensor-driven health technologies and systems, and instrumented environments and ambient assistive living.

