Faculty Research

School of Allied Health faculty are engaged in research addressing society’s most pressing health issues.

**Catana E. Brown, PhD, OTR**

- **Partnerships in Health Promotion**
  Sponsor: Department of Health and Human Services
- **Matching Learning Potential and Rehabilitation Approach for People with Schizophrenia**
  Sponsor: National Alliance for Research on Schizophrenia
- **Dynamic Assessment of Cognition in Schizophrenia**
  Sponsor: National Institutes of Health
- **A Psychiatric Rehabilitation Approach to Weight Loss**
  Sponsor: National Institutes of Health

**Lara Boyd, PhD**

- **Can Motor Learning Shift the Timing and Pattern of Brain Activity After Stroke**
  Sponsor: University of Kansas Medical Center Research Institute, Inc.
- **Compensatory Brain Activation After Stroke**
  Sponsor: National Institutes of Health
- **Recovery from Stroke: What is the Role of the Undamaged, Contralesional Cortex?**
  Sponsor: American Heart Association

**Susan E. Carlson, PhD**

- **DHA Supplement and Pregnancy Outcomes**
  Sponsor: National Institutes of Health
- **Clinical Trials**
  Three Privately Sponsored
- **Research Grant**
  Privately Sponsored

**Mark E. Chertoff, PhD**

- **Clinical Measures of Auditory Linear/Nonlinear Processes**
  Sponsor: University of Kansas Medical Center Research Institute, Inc.
- **Diagnosing Auditory Nerve Degeneration**
  Sponsor: Royal National Institute for Deaf People (UK)

**Debora B. Daniels, PhD**

- **Language and Vocabulary Development: Development of a Culturally-based Language & Vocabulary Intervention for Elementary School Children with Language Impairments & Children Who Are at High Risk for Developing Learning Disabilities**
  Sponsor: Department of Education (Co-Investigator)

**Winifred Dunn, PhD, OTR, FAOTA**

- **Characterizing Individual Differences in Sensory Processing, Temperament and Brain Activity in Adolescents with and without Asperger Syndrome**
  Sponsor: Wallace Research Foundation
John A. Ferraro, PhD
An Improved Method of Electrophysiological Assessment of Hearing Function in Newborns and Young Children
Sponsor: Deafness Research Foundation

Marc E. Fey, PhD
Effects of Fast ForWord on Language Processing
Sponsor: National Institutes of Health

Mary Hise, PhD, RD, LD
Immuno-modulatory Effects of Parenteral Nutrition After Intestinal Failure
Sponsor: National Institutes of Health

Patricia Kluding, PhD, PT
The Effects of Diabetes on the Benefits of Exercise After Stroke
Sponsor: National Institute of Disability and Rehabilitation Research (Fellowship)

Karen Kuphal, PhD
Effect of Exercise on Reducing Peripheral Neuropathic Pain in Female Rats
Sponsor: Building Interdisciplinary Research Careers in Women's Health K-12

Wen Liu, PhD
A Pilot Study of Electro-acupuncture and Strengthening Exercise for Spastic Wrist Joint in Post-stroke Patients
Strength Training for Management of Idiopathic Scoliosis
Sponsor: KU Surgery Association
Sensory-enhanced Motor Training for Hemiparetic Arm/Hand
Sponsor: National Institutes of Health
Development of a Robot-aided Training with Sensory Enhancement to Restore Motor Function for Stroke Survivors
Sponsor: National Institutes of Health

Patricia S. Pohl, PhD, PT
Cost of Conversation After Stroke: Functional Deficits Revealed After Speaking
Sponsor: American Heart Association-Heartland Affiliate

Jeffrey D. Radel, PhD
Factors Contributing to Severity of Retinal Vascular Pathogenesis Studied in Animal Models
Influence of Dietary Components on Oxygen-Induced Vascular Pathology in Newborn Rat Retina
Sponsor: University of Kansas Medical Center Research Institute, Inc. (Co-Investigator)
Julie A. Roth, JD, MHSA, RHIA
HIPAA Transactions and Code Sets: Have the Standards Been Successful?
A Hospital Financial Manager Perspective
Sponsor: American Health Information Management Association

Irina Smirnova, PhD
Can a Drug Replace Exercise to Improve the Diabetic Heart?
Sponsor: American Heart Association
Proteomic Approach to Study Diabetic Heart Protein
Posttranslational Modification
Sponsor: National Institutes of Health
ICAM-1 Targeted Nanoparticles for in Vivo, VEGF-Induced Angiogenesis
Sponsor: Juvenile Diabetes Research Foundation International (Co-Investigator)

Lisa A. Stehno-Bittel, PhD, PT
Templated Islets for Enhancing Insulin Production
Sponsor: Juvenile Diabetes Research Foundation International (Co-Investigator)
Portable and Wavelength-Tunable Two-Photon Microscopy
Sponsor: National Institutes of Health (Co-Investigator)
Dilation of Arteries and Veins in Rabbits in Vivo by Proteolysis of Intramural Elastin
Sponsor: Proteon Therapeutics, LLC
Impact of Exercise on Parkinson’s Disease Therapy
Sponsor: National Institutes of Health; University of Houston (Co-Investigator)

Debra K. Sullivan, PhD, RD, LD
Dairy Foods and Blood Pressure in Multi-Ethnic Children
Sponsor: National Institutes of Health
Synergistic Effect of Dairy Foods on Metabolism: A Mechanistic Study
Sponsor: Dairy Management, Inc.
Supplement to Synergistic Effect of Dairy Foods on Metabolism: A Mechanistic Study
Sponsor: Dairy Management, Inc.
Co-Investigator:
Growth Hormone Use in Prader-Willi Syndrome and Obese Adults
Private Sponsor
Substrate Oxidation in Children in Response to Exercise with High and Low Intake
Sponsor: Dairy Management, Inc.
Resistance Training for the Prevention of Obesity
Sponsor: National Institutes of Health
Prevention of Obesity in Children with PAAC
Sponsor: National Institutes of Health
Kansas Get Moving!
Sponsor: Sunflower Foundation
Long-term Exercise, Weight Loss and Energy Balance
Sponsor: National Institutes of Health
A Psychiatric Rehabilitation Approach to Weight Loss
Sponsor: National Institutes of Health
Prevention of Obesity in YMCA After School Programs
Sponsor: National Institutes of Health

Hao Zhu, PhD
Role of Ncb5or in Insulin Production
Sponsor: National Institutes of Health; Brigham and Women’s Hospital-Harvard Medical Center (Co-Investigator)