College Research Mission

To engage faculty and students in the discovery of knowledge that will define the future of health disciplines through applied and basic research, innovation, and entrepreneurship.

Bench, Bedside & Community Health Research

"Translational research transforms scientific discoveries arising from laboratory, clinical, or population studies into clinical applications. . . ."
Faculty Research Profiles
Authors and Citations are Listed Alphabetically

RuthAnn Althaus, PhD, MPH, MBA, MSLIS, CHES
Department of Social and Public Health

Major research area(s): Organization and financing of health systems; interdisciplinary studies of ethics (business, nonprofits, and health care); business models for poverty reduction; health care leadership pedagogy.

Email: althaus@ohio.edu

Select publications:


Cathy J. Baker, PhD, RN, CNS
School of Nursing

Major research area(s): Culturally-sensitive nursing interventions; smoking cessation.

Email: bakerc2@ohio.edu

Select publications:


Tania B. Basta, PhD, MPH, CHES
Department of Social and Public Health

Major research area(s): HIV prevention and treatment; Appalachian rural health; and HIV research ethics.

Email: basta@ohio.edu

Select publications:


Joann P. Benigno, PhD, CCC-SLP
School of Rehabilitation and Communication Sciences

**Major research area(s):** Situational and psychosocial factors related to social communication skills in children with and without developmental disabilities; language and cognitive outcomes of children who are orphans.

**Email:** benigno@ohio.edu

**Select publications:**

Darlene E. Berryman, PhD, RD, LD
School of Applied Health Sciences and Wellness

**Major research area(s):** Obesity; depot-specific differences and impact of growth hormone on adipose tissue biology; nutrient and endocrine interplay in obesity and type 2 diabetes.

**Email:** berrymad@ohio.edu

**Select publications:**
- Comisford R, Lubbers ER, Householder LA, . . . **Berryman DE.** Growth hormone receptor antagonist transgenic mice have increased subcutaneous adipose tissue mass, altered glucose homeostasis and no change in white adipose tissue cellular senescence. *Gerontol.* 2015(Sep 16). Epub ahead of print PMID: 26372907.

Douglas S. Bolon, PhD
Department of Social and Public Health

**Major research area(s):** Organizational behavior/theory issues in hospitals; hospital mission statements, governance, and human resources; healthcare management.

**Email:** bolon@ohio.edu

**Select publications:**


**François-Xavier Brajot, PhD, CCC-SLP**

Department of Rehabilitation and Communication Sciences

**Major research interest(s):** The nature of sensorimotor integration of speech, with an emphasis on somatosensory contributions, in both neurotypical and disordered populations. This involves three interrelated lines of research addressing neurophysiological, biomechanical and acoustic dimensions.

**Email:** brajot@ohio.edu

**Select publications:**


**Robert Brannan, PhD**

School of Applied Health Sciences and Wellness

**Major research area(s):** Reducing the fat content of fried foods; developing value-added ingredients from pawpaw; meat science—interactions between antioxidants in meat systems.

**Email:** brannan@ohio.edu

**Select publications:**

Julie A. Brown, PhD
Department of Social and Public Health

Major research area(s): Gerontechnology; senior digital gaming (theory development, demographics, design); play in old age; life course.
Email: brownj14@ohio.edu
Select Publications:

Rebecca M. Bryant, DNP, CNP
School of Nursing

Major research interest(s): Evidence-based practice to improve patient outcomes: patient self-care initiatives related to chronic disease management and home-based care by nurse practitioners for the geriatric population.
Email: bryantr@ohio.edu
Select publications:

Gary Chleboun, PT, PhD
School of Rehabilitation and Communication Sciences

Major research area(s): Mechanics of whole muscle function using ultrasound imaging; change in muscle fascicle length during various daily activities such as walking, stair negotiation, and strengthening exercises; fascicle length adaptation to resistance training; lumbar spine motion in healthy and back pain subjects.
Email: chleboun@ohio.edu
Select publications:


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**Theresa Cluse-Tolar, PhD, SW**  
Department of Social and Public Health

**Major research interest(s):** Disproportionality in child welfare, work-family conflict, job stress/satisfaction, interpretation of stalking behavior, poverty, marginalized populations.  
**Email:** cluse@ohio.edu  
**Select publications:**


---

**Tawna Cooksey-James, PhD, RN, CNE**  
School of Nursing

**Major research area(s):** Best practices for student outcomes; assessment/benchmark testing and remediation; factors and barriers for learning and health care; self-efficacy; culture in health care.  
**Email:** cookseyt@ohio.edu  
**Select publications:**


Cory Cronin, PhD
Department of Social and Public Health

**Major research area(s):** Health care organizations, hospital community benefit, hospital-community relationships, health care policy, health disparities, health care access.

**Email:** croninc@ohio.edu

**Select publications:**


Jeffrey J. DiGiovanni, PhD, CCC-A
School of Rehabilitation and Communication Sciences

**Major research area(s):** Assess and improve hearing aid efficacy with an emphasis on signal processing that is designed to improve speech intelligibility and/or reduce listening effort.

**Email:** digiovani@ohio.edu

**Select publications:**


Joseph W. Duke, PhD
School of Applied Health Science and Wellness

**Major research area(s):** Cardiopulmonary consequences of premature birth in adulthood; pulmonary gas exchange in health and disease; pulmonary vascular regulation during exercise and hypoxia.

**Email:** duke@ohio.edu

**Select publications:**


Sarah B. Garlington, PhD, MPhil, MSSW  
Department of Social and Public Health

Major research interest(s): Intersection of religion and social welfare policy and provision at local, national, and international levels; impact of policy on vulnerable populations nationally and internationally, human rights and social work relationship; geographic information systems (GIS) mapping of social dynamics.

Email: garlingt@ohio.edu

Select publications:


Dustin Grooms, PhD, ATC, CSCS  
School of Applied Health Sciences and Wellness

Major research area(s): Neuroplasticity associated with musculoskeletal injuries and rehabilitation; neural control of human movement; visual-motor implications for injury risk; musculoskeletal injury screening and prevention; core stability; military human performance.

Email: groomsd@ohio.edu

Select publications:


Brooke Hallowell, PhD, CCC-SLP, F-ASHA  
School of Rehabilitation and Communication Sciences

**Major research area(s):** Aphasia and other acquired neurogenic language disorders in adults; eyetracking research methods to study cognitive and linguistic processing; aging, disability, and access to care in diverse global contexts.

**Email:** hallowel@ohio.edu

**Select publications:**


doi:10.1080/02687038.2011.618219


doi:10.1016/j.jcomdis.2015.01.005


Deborah Henderson PhD, RN, CNE  
School of Nursing

**Major research area(s):** Simulation training nursing education.

**Email:** hendersd@ohio.edu

**Select publications:**


Jennifer Horner, PhD, JD  
College of Health Sciences and Professions

**Major research areas:** Law and ethics for health professions; research integrity; neurobehavioral disorders.

**Email:** hornerj@ohio.edu

**Select publications:**


**Cheryl A. Howe, PhD, CES, CEP**  
School of Applied Health Sciences and Wellness

**Major research area(s):** Dose of physical activity required to prevent and treat childhood obesity and obesity-related diseases; evidence-based structured healthy lifestyle interventions implemented in school settings to correct the daily energy surplus related to childhood obesity. Development of techniques for measuring enjoyment and energy cost of free-play physical activity in children. Effects of physical fitness and activity habits on adolescent obesity in Ecuador.  
**Email:** howec@ohio.edu

**Select publications:**


---

**Gregory Janson, PhD**  
Department of Social and Public Health

**Major research area(s):** The physiological and psychological impact of trauma and its treatment; working with severely disturbed children, adolescents and families; the effects of emotional maltreatment on young children in school settings.  
**Email:** gregory@ohio.edu

**Select publications:**

**Fuh-Cherng Jeng, MD, PhD**  
School of Rehabilitation and Communication Sciences  

**Major research area(s):** Event-related and cognitive potentials to help identify babies who are at risk for developing language disorders; to enhance the ability of scientists and therapists to create methods to prevent and treat hearing loss and communication disorders for individuals who speak tonal and non-tonal languages around the world.  

**Email:** jeng@ohio.edu  

**Select publications:**  

---

**Xia Jing, MD, PhD**  
Department of Social and Public Health  

**Major research area(s):** Genomics in electronic health records (EHR); knowledge representation; knowledge management; data analysis and visualization; EHR applications; personalized medicine; information customization; structured clinical documentation.  

**Email:** jingx@ohio.edu  

**Select publications:**  
**Jing X,** Cimino JJ, Del Fiol G. Usability and acceptance of the Librarian Infobutton Tailoring Environment (LITE): an open access online knowledge capture, management, and configuration tool for OpenInfobutton. *J Med Internet Res.* 2015. doi:10.2196/jmir.4281  

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**Youngsun Kim, PhD, CCC-SLP**  
School of Rehabilitation and Communication Sciences  

**Major research area(s):** Dysphagia (swallowing disorders); biomechanical and temporal characteristics of normal and disordered swallowing; refinement of diagnostic tools and develop intervention strategy for patients who aspirate.  

**Email:** kimy2@ohio.edu  

**Select publications:**  


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**Caroline Kingori, PhD**

Department of Social and Public Health

**Major research area(s):** Primarily HIV/AIDS and mental health among people of African descent, immigrants and refugees. Other major areas include: measurement and evaluation research; global health; and community-based participatory research.

**Email:** kingori@ohio.edu

**Select publications:**


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**Michael R. Kushnick, PhD**

School of Applied Health Sciences and Wellness

**Major research area(s):** Therapeutic lifestyle modification to attenuate chronic disease, namely, cardiovascular disease and T2DM by (a) using slow digesting starch to modulate blood glucose response and (b) using physical activity/exercise to modify risk factors associated with chronic diseases.

**Email:** kushnick@ohio.edu

**Select publications:**


**Chao-Yang Lee, PhD**  
School of Rehabilitation and Communication Sciences

**Major research area(s):** Speech perception: the cognitive processes involved in extracting information from the acoustic signal to understand spoken language.  
**Email:** leec1@ohio.edu  

**Select publications:**  

**Mingun Lee, PhD, MSW**  
Department of Social and Public Health

**Major research area(s):** Social work program evaluation, school prevention program; evidence-based practice in rural settings; social work education and field evaluation; cultural competence.  
**Email:** leem3@ohio.edu  

**Select publications:**  

**Randy Leite, PhD**  
College of Health Sciences and Professions

**Major research area(s):** Father involvement with children; post-divorce family dynamics; family policy.  
**Email:** leite@ohio.edu  

**Select publications:**  

Sally Marinellie, PhD, CCC-SLP  
College of Health Sciences and Professions

**Major research area(s):** School-age language acquisition including vocabulary, metasemantics, and syntax in relation to literacy skills.  
**Email:** marinels@ohio.edu  

**Select publications:**  

John McCarthy, PhD, CCC-SLP  
School of Rehabilitation and Communication Sciences

**Major research area(s):** Improving computer interfaces for speech generating devices for children and adults with a wide range of physical, intellectual, and sensory disabilities; expanding creative possibilities for children and young adults with complex communication needs through technology and inclusive programs.  
**Email:** mccarthj@ohio.edu  

**Select publications:**  
*McCarthy JW*. Music therapists may be missing chances to provide opportunities for individuals with autism spectrum disorders requiring AAC to use aided systems, but we still need to know why. *Evidence-Based Commun Assess Intervent.* 2013;7(1):52-56.  

Charman L. Miller, DNP, ANP-BC, CNE  
School of Nursing

**Major research area(s):** Forensic nursing; human simulation in nursing education.  
**Email:** millerec3@ohio.edu  

**Select publications:**  
James Montgomery, PhD, CCC-SLP, F-ASHA
School of Rehabilitation and Communication Sciences

**Major research area(s):** Cognitive-based psychometric models of auditory sentence comprehension in school age children with and without specific language impairment, ie, investigating the contribution of cognitive mechanisms to spoken sentence comprehension and intervention approaches to improving comprehension.

**Email:** montgoj1@ohio.edu

**Select publications:**


Michele Morrone, PhD
Department of Social and Public Health

**Major research area(s):** Public perception of environmental health risks; Appalachian studies; environmental justice; health disparities, social determinants of health.

**Email:** morrone@ohio.edu

**Select publications:**


Sharon Rana, PhD  
School of Applied Health Sciences and Wellness

Major research area(s): Effect of fatigue and exercise on neuromuscular function specifically mechanomyographic (MMG) and electromyographic (EMG) signals; muscular performance with exercise intervention, exercise threshold estimations, and childhood growth/obesity studies.

Email: rana@ohio.edu

Select publications:


David W. Russ, PT, PhD  
School of Rehabilitation and Communication Sciences

Major research area(s): Skeletal muscle physiology and fatigue at the molecular, organelle, tissue and organism levels, including human and rat models to determine what factors other than muscle mass can affect muscle force production, particularly in cases of aging and disuse.

Email: russd@ohio.edu

Select publications:

Jeffrey A. Russell, PhD, AT  
School of Applied Health Sciences and Wellness

Major research areas: Neuromusculoskeletal demands placed on the human body by performing arts; body worn sensor applications in biomechanics; orthopaedic imaging of pathoanatomy and motion of the lower extremity in dancers; improvement of healthcare for performing artists.

Email: russelj4@ohio.edu

Select publications:
Russell JA, Shave RM, Kruse DW, Koutedakis Y, Wyon MA. Ankle and foot contributions to extreme plantar flexion and dorsiflexion in female ballet dancers. *Foot Ankle Int.* 2011;32(2):183-188.


**Timothy Ryan, PhD, CSP, CIH**
Department of Social and Public Health

Major research area(s): Indoor environment (carbon monoxide detectors, prevalence and risks of MRSA bacteria, and microbial volatile organic compounds); Legionella; distance education pedagogy testing of delivery methods for an applied sciences curriculum via various media platforms, and the assessment of efficacy of such efforts.  
Email: ryant@ohio.edu

Select publications:


**Kristin Schuller, PhD**
Department of Social and Public Health

Major research interest(s): Quality improvement, patient safety, rural healthcare delivery, access to care, and organizational change.  
Email: schuller@ohio.edu

Select publications:
Menser T, Radcliff T, **Schuller KA**. Can a medical screening and referral program de-congest rural emergency departments and improve financial performance for rural systems? *J Rural Health.* 2014;31(2):126-134.


Alexander V. Sergeev, MD, PhD, MPH
Department of Social and Public Health

Major research area(s): Cardiovascular diseases (CVD) and their conventional (such as diabetes) and emerging (such as persistent organic pollutants) risk factors; comparative effectiveness research (CER) of treatment for CVD; epidemiological studies; quantitative methods in health research.

Email: sergeev@ohio.edu

Select publications:


Jennifer Shadik, PhD
Department of Social and Public Health

Major research interest(s): Parent interventions for child maltreatment; fathering; and parent education.

Email: shadik@ohio.edu

Select publications:


Janet Simon, PhD
School of Applied Health Sciences and Wellness

Major research area(s): Measuring the outcomes of various athletic training interventions as well as evaluating health related quality of life of high school and college athletes who suffer sport-related injury. Use and development of patient-based outcomes instruments for the purpose of outcomes assessment and measuring the end result of healthcare services.

Email: simonj1@ohio.edu

Select publications:


Simon J, Docherty CL. Health-related quality of life is lower in former Division I collision athletes compared to contact and limited-contact athletes. J Athl Train. 2015. In press.

**Betty Sindelar, PT, PhD**  
School of Rehabilitation and Communication Sciences

**Major research area(s):** Examination of the inter-play between structure and function in the development of temporomandibular joint (TMJ) using an animal model (pig) through application of immunohistochemical assays, material testing, EMG analysis, and other biochemical assays; testing novel approaches for the treatment of periodontal disease.  
**Email:** sindelar@ohio.edu  
**Select publications:**  

**Solveig Spjeldnes, MSW, PhD**  
Department of Social and Public Health

**Major research area(s):** Effects of rural offender reentry services and informal and formal social support factors on recidivism rates and wellbeing; criminal justice policy; crime reduction and rural community revitalization.  
**Email:** spjeldne@ohio.edu  
**Select publications:**  

**Chad Starkey, PhD, AT**  
School of Applied Health Sciences and Wellness

**Major research area(s):** (a) Epidemiology of sports injuries and illnesses; (b) epidemiological/financial impact of training services provided to Southeastern Ohio High Schools; and (c) evidence-based practice.  
**Email:** starkeyc@ohio.edu  
**Select publications:**  
David S, Gray K, Russell J, **Starkey C**. The Ottawa Ankle Rules over-predict the need for radiographs when applied in the acute setting. *J Sport Rehabil*. In press.  
Rika Tanda, PhD, RN  
School of Nursing

**Major research areas:** Early life environments and cognitive behavioral outcomes; association between maternal prepregnancy obesity and children’s behavioral and cognitive profiles.

**Email:** tandar@ohio.edu

**Select publications:**


---

James Thomas, PT, PhD  
School of Rehabilitation and Communication Sciences

**Major research areas:** Changes in motor coordination in low back pain; interactions of psychological and motor behaviors in the prediction of recurrent low back pain; the neuro-physiological mechanisms of trunk muscle fatigue as well as spinal manipulation techniques.

**Email:** thomasj5@ohio.edu

**Select publications:**


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Margorie Vogt, PhD, DNP, CNP, CNE, FAANP  
School of Nursing

**Major research areas:** Teaching-learning outcomes; service-learning; advanced practice nursing; cultural nursing care; childhood chronic illnesses.

**Email:** vogtm@ohio.edu

**Select publications:**


**Jae Yom, PhD, CSCS**  
School of Applied Health Sciences and Wellness  

**Major research area(s):** Unanticipated events on lower extremity landing biomechanics during sport movements; postural control with idiopathic toe walking behaviors.  
**Email:** yom@ohio.edu  
**Select publications:**  

**Li Xu, MD, PhD**  
School of Rehabilitation and Communication Sciences  

**Major research area(s):** Speech perception with cochlear implants: (a) studies on speech perception theories and speech processing strategies to improve performance of cochlear implant patients; b) evaluation of speech perception performance (eg, lexical tone perception and production) in prelingually deafened children with cochlear implants.  
**Email:** xul@ohio.edu  
**Select publications:**  