School of Health Professions: Research & Scholarship

June 6, 2018
SHP: Background

• MU School of Health Professions was established in 1978 as a unit within the School of Medicine. It became an autonomous college at MU in 2001.

• SHP consists of 11 disciplines housed in 6 departments: Clinical and Diagnostic Science, Communication Science and Disorders, Health Psychology, Health Sciences, Occupational Therapy, and Physical Therapy.

• Department of Health Sciences, established in 2008, is the #1 major at MU.

• SHP is the academic home of 11% of MU’s undergraduate students – a 71% increase since 2010.
Clinical Services

- TigerOT
- PhysZOU
- MU Speech & Hearing Clinic
- Robert G. Combs Language Preschool
- Accent Modification and Pronunciation
- MU Adult Day Connection
- Health Psychology Clinics
• Go, Baby, Go!

• Interdisciplinary project creating custom-fit toy cars for children with mobility impairments based on clinical assessments.

• Efficacy research
• 925 degrees conferred in FY17
• 88% are employed or in graduate school in 6 months
• 81% stay in MO for graduate school
• 69% are employed in MO
Academic Success: Graduate & Professional

• 4 of the top ten graduate degrees for jobs
• Projected job growth through at least 2024
• 100% job placement
• 100% pass rate on licensure & certification exams
Future Academic Program Growth

• PhD in Health & Rehabilitation Sciences
• Doctorate in Occupational Therapy
• MPH – Veterinary Public Health
• MHS – Athletic Training
• BHS – Occupational Therapy Assistant
Non Tenure-Track Faculty

- NTT Assistant Professor
- NTT Associate Professor
- NTT Professor
Tenured & Tenure-Track Faculty

Years: FY 08 to FY 17

- Assistant Professor
- Associate Professor
- Professor
The common theme of our research is addressing critical health-related issues, including mechanisms underlying disorders, the development and assessment of innovative interventions, and the public health missions of preventing disease and promoting health in communities and individuals.

Interdisciplinary approaches – Our faculty collaborate on funded research with members of A&S, Engineering, Education, School of Medicine, Vet Med, HES.
FY14-FY17: SHP Research At A Glance

• Grant proposal submissions grew from $4.2 million in FY14 to more than $18.5 million in FY17.

• Grant funding increased by 65%

• Grant awards increased by 39%
Research Grant Awards & Expenditures

- FY 13
- FY 14
- FY 15
- FY 16
- FY 17

Research Awards
Research Expenditures
• Classifying Neck Surface EMG Signals, NIH funded

• Developing a new sEMG pattern recognition system to help assess risk for voice disorders

• Examines biological, psychological, and social factors that increase risk for voice disorders
Trent Guess, Physical Therapy

Combines experimental and computational methods in movement analysis with an emphasis on joint loading, rehabilitation, and orthopaedics to address issues of musculoskeletal health.
Participants:
27 adolescents with ASD
- 74.1% Male
- 55.6% 16 years - 18 years of age
- 44.4% 19 years - 25 years of age
- 40.7% Asperger's Syndrome
- 33.3% Autism/Autistic Disorder
- 75.0% Mild ASD symptoms

27 caregivers of adolescents with ASD
- 77.8% Mothers
- 69.2% Married
- 44.0% Household income of $50,000 - $99,999

- Improving Health Care Transition Planning and Health Related Independence for Youth with ASD, DOD funded
- Studying ways to ease the transition of young adults with Autism Spectrum Disorder into more autonomous lifestyles
- Establishing needs specific to young adults with ASD as well as their caregivers to improve independence while insuring that patients receive appropriate health care.
Tim Wolf, Occupational Therapy

- **Better Living After Stroke Through Technology (BLAST), NIH funded**

- Developing an internet platform to improve the quality of life for stroke patients and their caregivers

- In new work, is using a transdisciplinary approach to identify cognitive changes associated with cancer treatment and develop by examining relationships between different discipline’s assessments.
HIV Testing Among Older Persons in Rural and Urban South Africa

Explores the barriers and facilitators to accessing HIV care including HIV testing and antiretroviral therapy access and adherence

Aim of developing interventions to improve resource access and treatment adherence
In AY 17-18, 57 undergraduate students in a variety of programs completed original research with a faculty mentor as part of our undergraduate research courses.
Interdisciplinary Ph.D.

• The Ph.D. in Health and Rehabilitation Science will enable SHP faculty to increase innovative research that addresses the underlying mechanisms of disorders and develops novel interventions to treat them.

• The Ph.D. program will enable SHP to address critical national workforce shortages by providing outstanding didactic and research training to the next generation of faculty in the health professions.
Near Future Goals

• New Degree Programs
• Strategic Hiring of Research Faculty
• Restore/Improve Physical Space
Contact me @

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