Proposal for Symposia at American Congress on Rehabilitation Medicine (ACRM) 2015 Conference in Dallas, Texas (October 25-30<sup>th</sup>)

Title: Building Capacity for Global Health and Rehabilitation using Technology

## Organizers:

- Michelle J. Johnson, PhD
- Karla Bustamante-Valles, PhD

Symposia Abstract: Non-communicable diseases, especially cardiovascular diseases, are the leading cause of death and disability in the world. An increase in their prevalence often leads to higher incidences of diabetes and stroke and consequently, an increase in the number of persons living with permanent disability due to impairment or amputation. Our long-term goal is to use affordable technologies to improve the health and function of persons with persistent upper and lower limb disability due to disease or traumatic event occurring in the USA and the developing world. This symposia is organized in three parts: Part 1) Focuses on assessment of health and rehabilitation capacity in USA and developing countries and discuss the opportunity for technology, Part 2) Focuses on how specific strategies such as the use of assistive devices, telerehabilitation, mobile technologies and robotic technologies can play diverse roles in increasing health and rehabilitation capacity in the developed and developing world; and Part 3) focuses on a few case examples. Our learning objectives are to increase awareness on the growing disparities between rehabilitation infrastructure and deployment in developed and developing world and provide a forum for discussing ideas of how rehabilitation capacity can be created and how technology can play a more significant role in bridging the gap.

Agenda: 90 minutes

Introduction: 5 minutes

## Part 1: Global Health and Rehabilitation

- Asare Christian, MD, MPH (rehabilitation capacity/Assessment) [10 min] (Suggested)
- Andrew Haig, MD (International Rehabilitation Forum) [10 min] (Suggested)

## Part 2: Role for Technologies

- Adriana Velazquez Berumen, (Coordinator Diagnostic Imaging and Medical Devices at World Health Organization) (medical devices) [10 min] (Suggested)
- Patricia (Tamar) Weiss, PhD, OTR [10 min] (role of telerehabilitation) (Suggested)
- Michelle Johnson, PhD (robotics) [10 min] (role of assistive and therapy robots) (Confirmed)
- Juan Calderon, PhD (prosthetics)[10 min] (role of assistive devices such as prosthesis) (Suggested)

## Part 3: Case Studies

- Karla Bustamante-Valles, PhD (Rehab Gym) [10 min] (Confirmed)
- Ryan Littman-Quinn or Carrie Novarik, MD (mhealth) [10 min] (Suggested)

Discussion: 10 minutes