

## Lakeshore Research Topics Of Interest (LRTOIs)

**Target Populations** in this Round of Funding: Spinal Cord Injury, Multiple Sclerosis, Parkinson's, Stroke, Pediatrics (e.g., spinal cord injury, spina bifida, cerebral palsy).

With appropriate justification, other populations that fall within Lakeshore's mission can be proposed. Populations can also be combined under a more generic category of physical disability provided the scientific integrity and generalizability of the findings are maintained.

**Target Health Outcomes:** cardiorespiratory, musculoskeletal, neuromotor, metabolic, functional, mental, reduction in self-reported measures of secondary conditions (e.g., pain, fatigue).

**Note:** If selected to submit a full proposal, A UAB PI must arrange a meeting with Lakeshore program and research staff prior to submission to gather information for the full proposal related to the target population, program methodology, data collection procedures, and use of facilities.

### **LRTOIs**

A different topic may be selected other than those listed below provided it meets an important priority area for Lakeshore.

1. **Program Evaluation** – Use systematic methods and/or appropriate technologies to capture and monitor the effects of one or more ongoing Lakeshore programs in aquatics, fitness, recreation and/or sports (including Paralympic sports) with existing and/or new Lakeshore members, with the intention of building an 'evidence-based' framework for capturing successful outcomes of existing and new programs in the future.
2. **Comparative Effectiveness** – Compare two or more programs offered at Lakeshore or compare an existing or proposed Lakeshore program to one offered at a different facility with a specific disability group. Establish appropriate data collection techniques to track qualitative/quantitative changes in health, behavior and/or function.
3. **Novel Exercise Training Techniques (Dose-Response)** – Examine the "trainability" or adaptability in one of the target populations listed above focusing on certain health issues or risk factors associated with the condition.
4. **Pediatrics** – Monitor and/or improve the health of children with physical disabilities in outpatient and/or home-based settings. Participants should have an affiliation with Lakeshore Foundation's summer camps and/or yearly programs or be associated with Children's Hospital of Alabama.
5. **Secondary Conditions** – Examine the effects of exercise, nutrition or a combined exercise/nutrition intervention on one or more of the following secondary conditions: pain, fatigue, obesity, inflammation, depression, deconditioning.
6. **Military Program** – Examine changes in health and function associated with Lakeshore Foundation's military program for injured/disabled veterans before and after short-term residential programs and one year post-intervention.
7. **Exercise Behavior/Adherence** – Identify key factors influencing exercise adherence in highly compliant and non-compliant Lakeshore members.
8. **Engineering and Exercise Technology** – Develop an innovative exercise, sport or recreational technology to address gaps in physical activity or sport participation in children or adults with disabilities.



### **Governing Board**