

# Srinivas University

Mangalore, India



## Atomic Research Centre (ARC)

(Musculoskeletal Disorders and Sports Physiotherapy)



**Vidhya Krishna P**  
**Assistant Professor**  
**Institute of Physiotherapy**

### 1. Purpose of ARC:

To create an innovative and advanced sports physiotherapy research centres to progress and excel in the advanced physiotherapy and rehabilitative intervention in the field of Musculoskeletal Disorders and Sports physiotherapy. Further to explore various research projects and programs to grow Sports physiotherapy wing and Orthopaedic rehabilitation centers.

### 2. Objective of ARC:

- The objective of this research centre is to provide a scientific communication medium to discuss the utmost advancements in the domain of orthopaedic Physiotherapy and Rehabilitation Research.
- To update and inculcate all advanced methods of assessment and examination procedures used to evaluate patients with Musculoskeletal & Sports conditions.
- To train both UG, PG students and Research scholars in the immediate recognition and treatment of emergency sports related conditions
- To train students in the recognition, evaluation and management of physical disabilities and musculoskeletal physiotherapy and rehabilitation management skills.
- To identify and specify strategies of intervention during various phases of Sports rehabilitation.

### 3. Description on Proposed Research:

1. Effect of core strength in the fast bowlers.
2. Relationship between dynamic balance and injuries in cricketers.
3. Evaluating association between core strength and dynamic balance in pacers.

### 4. Expected Outcomes:

1. Impact of core strengthening in cricket fast bowlers.
2. Significant improvement in the idea about the fitness programmes.
3. The extent of correlation between core strength and dynamic balance.

### 5. List of the Team Members:

1. Dr. Vidhya Krishna
2. Dr. Anupama Pathak
3. Dr. Aishwarya Sonwane

#### **6. List of Working Papers:**

**(1) Association between core strength and dynamic balance of throwing hand in professional cricket fast bowlers; a cross-sectional study.**

#### **7. List of related Published Papers in Journals, Proceedings, Book Chapters, Magazines by Coordinator & his/her Group year wise in APA format.**

1. Cramer, J., Quintero, M., Rhinehart, A., Rutherford, C., Nasypany, A., May, J., & Baker, R. T. (2017). Exploration of score agreement on a modified Upper Quarter Y- Balance Test kit as compared to the Upper Quarter Y- Balance Test. *International journal of sports physical therapy*, 12(1), 117–124.
2. Dennis, R., Farhart, P., Goumas, C., & Orchard, J. (2003). Bowling workload and the risk of injury in elite cricket fast bowlers. *Journal of science and medicine in sport*, 6(3), 359–367.