

# **Srinivas University**

**Mangalore - India**



## **Atomic Research Centre (ARC)**

### **RESEARCH CENTRE IN MOVEMENT SCIENCES**



**Dr. Ajay Kumar**

**Professor**

**Institute of Physiotherapy**

#### **1. Purpose of ARC:**

The Movement sciences research centre aims to bring together leading academicians, researchers and research scholars to exchange and share their experiences and research results on all aspects of physical therapy and movement sciences. To provides a premier interdisciplinary platform for researchers, practitioners and educators to present and discuss the most recent innovations, trends and concerns as well as physical challenges encountered and solutions adopted in the fields of Physical therapy and movement sciences.

#### **2. Objectives of ARC:**

- ❖ Application of the recent research outcomes in the clinical practice.
- ❖ To analyse the different movement impairments and correct the deviations.
- ❖ Designed to advance the student's abilities to independently develop and carry out research projects that strive to establish the scientific basis for the prevention, evaluation and treatment of impairments, functional limitations and disability.

#### **3. Description on Proposed Research:**

1. RULA
2. Postural Analysis
3. Ergonomics

#### **4. Expected Outcome:**

The outcome may provide insight the understanding of work related musculoskeletal disorders among white color Job. Also give a better understand of assessment and Physiotherapy treatment of various Musculoskeletal pain conditions.

#### **5. List of the Team Members:**

- Pathak Anupama Anand
- Carolin Menezes
- Vidhya Krishna

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

- ❖ Intra- rater & inter- rater reliability of the landing error scoring system –real time (less-RT) in college level volleyball and basketball players.
- ❖ Cross-cultural adaptation, test-retest reliability and validity of construct central sensitization inventory (CSI) questionnaire in chronic musculoskeletal pain conditions.
- ❖ Risk of developing musculoskeletal disorders among traffic police in and around Mangaluru using rapid entire body assessment.
- ❖ Association of supraspinatus, infraspinatus, and triceps trigger point in patients with lateral epicondylalgia: 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. Reliability and validity of Kannada version of Victorian Institute of Sports Assessment for patellar tendinopathy (VISA-P-K) questionnaire. Journal of Clinical Orthopaedics and trauma (2018).
2. Prevalence of Temporomandibular joint disorders in competitive swimmers: a cross sectional Study. Journal of Advances in Sports and Physical Education (2019).
3. Rapid upper limb assessment (RULA): validity and reliability evidences in identifying workplace ergonomics among bank employee's using computers. Journals BAHIANA School of Medicine and Public Health (2019).
4. Rapid upper limb assessment (RULA) in ergonomic assessment: A comprehensive review. Journals BAHIANA School of Medicine and Public Health (2019).
5. A study of reliability and validity of Rula against Reba among the employees operating computers in the bank. Journal of Advances in Sports and Physical Education (2019).
6. Association between Non dominant Hip and Dominant Shoulder Internal Rotation Range of Motion and Shoulder Injury in Cricket fast Bowlers: A Cross-Sectional Study. (2019).
7. Prevalence of TMJ Disorders in Competitive Swimmers: A Cross Sectional Study (2019).
8. Cross cultural study of adaptation and validation of Kannada version of self-administered Leeds assessment of neuropathic symptoms and signs (s-lanss)pain scale in chronic pain patients. International Journal of Physical Education, Sports and Health (2021).
9. Cross-cultural adaptation, reliability, and validity of Kannada version of fear avoidance belief questionnaire in chronic low back pain. Journals BAHIANA School of Medicine and Public Health (2020).
10. A Review on Use of Rapid Entire Body Assessment (REBA) Tool to Evaluate Musculoskeletal Disorder among Health Professionals (2022).