

**Prasun Kumar Dev, MS**  
Department of Exercise Science  
Arnold School of Public Health  
University of South Carolina  
921 Assembly St, Columbia SC 29201  
Phone: 8392015530  
Email: pdev@email.sc.edu

## **EDUCATION**

**Doctor of Philosophy**, Exercise Science, Expected May 2025

University of South Carolina, Columbia, SC

Emphasis: Applied Physiology

**Master of Science**, Bioinformatics, May 2018

Central University of South Bihar

Thesis: Resilient back propagation artificial neural network for the classification of homologous thermophilic and mesophilic proteins

GPA: 3.75

**Bachelor of Engineering**, Computer Science & Engineering, 2015

Rajiv Gandhi Technical University

GPA: 3.23

## **PROFESSIONAL EXPERIENCE**

**Graduate Research Assistant**, University of South Carolina

**Aug 2021 - Present**

**Project Assistant**, CSIR – National Chemical Laboratory, India

**Jun 2018 - Mar 2020**

Theoretical and Computational Biology Group- Investigation of the genomics and epigenomics variations responsible for tumorigenesis in (brain cancer and early onset prostate cancer) using statistical, machine learning and systems biology methods

**Intern**, Center for Interdisciplinary Research in Basic Sciences

**Jun - Jul 2017**

- *Insilico* approach for observing the behavior of MARK4 protein with different inhibitor for the development of a therapeutic drug against Alzheimer's disease.

## **ADDITIONAL EXPERIENCE**

**Freelance Work**

**Apr 2020 - Jul 2021**

- Worked remotely and submitted the manuscript with a researcher from RMIT University, Melbourne on the investigation of exercise training induced microRNA clusters and their association with cardiovascular fitness parameters and ageing associated pathways.

## **HONORS AND AWARDS**

1. Graduate Scholar in Aging Research Award - \$1000 **2022**
2. Norman J. Arnold Doctoral Fellowship - \$15000 **2021**
3. Departmental Gold Medalist (Expected), CUSB, Physical convocation postponed due to COVID-19, Cohort of 2016-2018
4. Qualified Nation-wide Central University Entrance Exam by Government of India **2016**

## **RESEARCH**

### **Published Manuscripts**

1. **Dev, P. K.**, Gray, A. J., Scott-Hamilton, J., Hagstrom, A. D., Murphy, A., & Denham, J. (2021). Co-expression analysis identifies networks of miRNAs implicated in biological ageing and modulated by short-term interval training. *Mechanisms of Ageing and Development*, 199, 111552.

### **Abstracts/ Presentation at Conferences**

1. **Dev PK**, Barber JL, Cai G, Robbins JM, Rao P, Mi M, Ghosh S, Clish C, Katz DH, Gerszten RE, Bouchard C, Sarzynski MA. Exercise Training Slows Down Proteomic Age Acceleration in Middle-Aged to Older Adults: HERITAGE Family Study. Poster Presentation at Southeast Regional American College of Sports Medicine Annual Meeting, Greenville, SC February 2022.
2. Clarkson WA, Barber JL, Robbins JM, Rao P, Mi M, **Dev PK**, Ghosh S, Clish C, Katz DH, Gerszten RE, Bouchard C, Sarzynski MA. Associations of Changes in Plasma Proteins and Body Composition Traits in Response to Endurance Training. Poster Presentation at Southeast Regional American College of Sports Medicine Annual Meeting Greenville, SC February 2022.
3. Barber JL, Cai G, **Dev PK**, Robbins JM, Rao P, Mi M, Ghosh S, Clish C, Katz DH, Gerszten RE, Bouchard C, Sarzynski MA. Association Of Plasma Proteome with Inflammatory Markers Crp and Glyca and Their Responses To Exercise Training. Poster Presentation (Given by MA Sarzynski) at American Heart Association Epi/Lifestyle Scientific Sessions, Chicago, IL March 2022.
4. Poster Presentation on Hadoop and Big Data at Vihan Techfest **2014**

## **CERTIFICATIONS AND TRAININGS**

1. University of South Carolina Hazardous Waste Training **2021**
2. Attended “**Emerging Trends in Disease Model Systems**” conference at the National Center of Cell Science, Department of Biotechnology, Pune, India **2019**
3. Certification in **Advanced Java (JEE)** from Sharma Computer Academy, Bhopal, India **2014**
4. Certification in **C programming** from Sharma Computer Academy, Bhopal, India **2012**

## **SKILLS**

**Genomics** - Transcriptomic Data Analysis (RNASeq, Microarray and miRNA ), Gene Expression Analysis (edgeR,limma and DESeq2), Co-expression Analysis, Ontology and Pathway enrichment analysis

**Epigenetics** - Dna Methylation Data Dnalysis (Illumina450k Array), Differential Methylation Analysis (minfi)

**Systems Biology** - WGCNA, ARACNE, Network analysis, Cytoscape, MCODE

**Statistics & Machine Learning** - Inferential Statistics (Hypothesis Testing), Descriptive Statistics Neural Network, SVM, Feature selection, Regression Analysis

**Programming Languages** - C Language, JAVA, R, and Perl

### **PROFESSIONAL SERVICE**

Volunteer at “**National Workshop on Protein Structure Prediction and Drug Design**” at the Center for Biological Sciences, Central University of South Bihar, India

**2016**