

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 2026

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. Norman J. Arnold Doctoral Fellowship - \$15000 **2021**
2. Departmental Gold Medalist (Expected), CUSB, Physical convocation postponed due to COVID-19, Cohort of 2016-2018
3. 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.

Presentations

1. 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 Analysis (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**