

Anurag Raj

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Education

- Pursuing Ph.D. (Bioinformatics) 2016-Present, CSIR- Institute of Genomics and Integrative Biology, New Delhi
- M.Sc. (Bioinformatics) 2013-2015, Pondicherry University, Puducherry, India.
- B.Sc. (Life sciences) 2010-2013, Dyal Singh College, Delhi University, New Delhi, India.

Research Experience

Designation: PhD Student

Organization: Council of Scientific and Industrial Research-Institute of Genomics and Integrative Biology (CSIR-IGIB), New Delhi, India

Duration: Aug 2016 – present

Project: Development of algorithms and tools for peptidofoms identification from mass spectrometry data.

Responsibilities:

- Designing computation tool for proteogenomic analysis. Developement of multi-algorithmic proteogenomic tools EuGenoSuite.
- Automation and integration of multiple peptide identification algorithms like OMSSA, X! Tandem and MSGF Plus.

Technical skills Used: PERL, Bioperl, R, RNA-Seq and Proteomics

Designation: BIITP trainee

Organization: BCIL India and SciGenomes Labs Pvt Ltd

Duration: October 2015 – March 2016

Project: Development of a partial de novo genome assembler to enhance the current quality of de novo genome assembly.

Technical skills Used: PERL, NGS tools, Genomics

Work Experience

Designation: Bioinformatics Programmer

Organization: AgriGenomes Labs Pvt Ltd

Duration: April 2016 – July 2016

Project: Next Generation Sequencing data analysis

Responsibilities:

- *de novo* genomics data analysis of NGS data.
- Developing and maintaining automated pipelines for various bioinformatics analysis.

Technical skills Used: PERL, NGS tools, Genomics

Technical Skills

Operating System: UNIX (Mainly Ubuntu), Windows

Programming languages: Perl, R

Data Visualization: R, CytoScape

Databases: MySQL

Statistical Computing: R

HPC job management: PBS

Awards and Fellowships

- Best Poster award at International Conference on Proteomics for System integrated Bio-omics, one Health and food Safety 2019, India.
- DST-INSPIRE PhD fellowship 2010 awarded by Department of Science and Technology, Ministry of Science and Technology, Government of India.
- University Gold medal for M.Sc. (Bioinformatics) (2015) Pondicherry University, India.
- First Rank for B.Sc. (Life Sciences)(2013) Dyal Singh College, Delhi University, New Delhi, India.

Publications

- Mehani, B; Narta, K; Paul, D; Raj, A; Kumar, D; et al. (2020-01-28). "Fusion transcripts in normal human cortex increase with age and show distinct genomic features for single cells and tissues". *Scientific Reports*. **10** (1): 1–10. doi:10.1038/s41598-020-58165-6. PMCID:PMC6987184. PMID:31992760.
- Singh, P; Chakraborty, R; Marwal, R; et al. (2020-08-24). "A rapid and sensitive method to detect SARS-CoV-2 virus using targeted-mass spectrometry". *Journal of Proteins and Proteomics*. **11** (3): 159–165. doi: 10.1007/s42485-020-00044-9. PMCID:PMC7457902. PMID:33132628.

Citations

Scholar Profile: <https://scholar.google.co.in/citations?hl=en&user=eD4vnk8AAAAJ>

Posters Presentations

- 11th Annual Meeting of Proteomics Society, India, 2019 and International Conference on Proteomics for System integrated Bio-omics, one Health and food Safety, December 2-4, 2019 at ICAR-National Dairy Research institute, Karnal, India.
- INSPIRE Review Meet on 20th September, 2019 at Chandigarh University, Mohali
- International Conference on Proteomics for cell Biology and Molecular Medicine during December 12-14, 2018 at National Center for Cell Science, Pune.
- International conference on Bioinformatics (InCoB) 2018, September 26-28, 2018 at JNU, New Delhi

Workshops and Conferences

- 12th Annual Meeting of Proteomics Society, India (PSI) and International Virtual Symposium on "Integrated Omics Approaches in Health and Agriculture", December 22-24 2020 (Virtual Event).
- MS-based Proteomics: Concepts, Data analysis & Visualisation (Virtual Workshop), Dec 21 2020 organised by IIT Bombay.
- Cancer Proteogenomics Workshop (CPG-2018), December 6-11, 2018 at IIT Bombay, Mumbai, India.
- 9th Annual Meeting of Proteomics Society, India (PSI) & International Conference on Proteomics in Health and Disease during November 30-Dec 02, 2017 at Institute of Life Sciences (ILS), Bhubaneswar, India.