

CURRICULUM VITAE

Rupesh Kumar Kesharwani

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BIOGRAPHICAL DATA

Birth date: 22 July 1987

Place of Birth: Bharwari, India

Citizenship: Indian

Passport No.: J3833433

CAREER OBJECTIVE

To apply my bioinformatics, programming and research aptitudes to tackle new challenges in a research organization and contribute to the advancement and better understanding of science.

CURRENT POSITION

Application Computational Scientist

The Jackson Laboratory for Genomic Medicine,

10 Discovery Dr., Farmington, CT, 06032, USA

EDUCATION

Ph.D. in Bioengineering and Bioinformatics, 27 Jan 2016

University of Pavia, Italy

Specialization: Next Generation Sequencing (Expertise in developing tool and Statistical analysis for RNASeq; miRSeq and 16s rRNA sequences).

Technical and Programming Experience: Bash programming, R/Bioconductor Statistical language, Perl and Python.

M.Sc. in Bioinformatics, June 2009

University of Allahabad, India

Specialization: Bioinformatics (RNA and Protein Docking, MM and Simulation).

PROFESSIONAL EXPERIENCE

Researcher, University of Pavia, Pavia, Italy, 1 March 2017-31 May 2017.

Research Projects:

Developed a bioinformatics analysis for 16s RNA amplicon

PhD+Postdoctoral Researcher, Hospital Centre of Cardiology Monzino, Milan (Italy), 5 Jan 2013–December-2016.

Research Projects:

1. Role of RAGE in age-dependent cardiac remodeling: Integrated time-course expression analysis of cardiac miRNome and transcriptome.
2. Impact of miRNA expression profiling of Zebrafish adult heart exposed to Hypoxia/Reoxygenation cardiac Injury.
3. Integrated co-expression analysis of miRnome and transcriptome of Zebrafish adult heart exposed to Hypoxia/Reoxygenation cardiac Injury.

Junior Researcher, CNR (Consiglio Nazionale delle Ricerche)-ISMAR, Genova (Italy), 11 Jan – 30 Sep, 2012.

Research Project:

Integrative Structural Bioinformatics approach for artificial microRNA designing: an application to let-7 family.

Project Fellow, BB Ambedkar University, Lucknow (India), 25 March 2010 – 31 May 2011.

Research Project:

Designing of putative siRNA against geminiviral suppressors of RNAi to develop geminivirus-resistant papaya crop.

HONORS AND AWARDS

Italian Govt. Scholarship 2011-13.

Chinese Academic Science Fellowship (CAS) 2011-12.

Chinese Govt. Scholarship 2011-12.

CONFERENCE PRESENTATIONS

Summer School on Big Data in Precision Medicine, University of Pavia, Italy- Sep 2016.

Twelfth Annual Meeting of the Bioinformatics Italian Society (BITS)- Milan, Italy - June 2015.

NGS-2015-Milan: "From the clinic To single cell analysis" Istituto Nazionale

Genetica Molecolare, Milan, Italy – March 2015.

Bioinformatics Workshop organized by European Bioinformatics Institute collaboration with University of Pavia, Italy - Feb 2014.

BITS-2014, Annual Congress of the Italian Society of Bioinformatics, Rome, Italy.

IB-PAS, International conference and workshop, University of Bielefeld, Germany - June 2012.

PUBLICATIONS

Meraviglia V, Azzimato V, Piacentini L, Chiesa M, **Kesharwani RK**, Frati C, Capogrossi MC, Gaetano C, Pompilio G, Colombo GI*, Rossini A*. *Syngeneic Cardiac and Bone Marrow Stromal Cells display tissue-specific microRNA signatures and microRNA subsets restricted to diverse differentiation processes*. PLoS One 2014. doi: 10.1371/journal.pone.0107269.

Saxena S, **Kesharwani RK**, Singh V, Singh S. *Designing of putative siRNA against geminiviral suppressors of RNAi to develop geminivirus-resistant papaya crop*. Int J Bioinform Res Appl. 2013;9(1):3-12. doi: 10.1504/IJBRA.2013.050655.

Rupesh K. Kesharwani, Mattia Chiesa, Luca Piacentini, Gualtiero I. Colombo and Ricordo Bellazzi. *CBS-miRSeq: A comprehensive tool for accurate and extensive analysis of microRNA-sequencing data* (Under Review; BMC genomics 2017).

Kesharwani RK, Bono E, Bellazzi R, Colombo GI*. *Impact of miRNA expression profiling of Zebrafish adult heart exposed to Hypoxia/Reoxygenation cardiac Injury*. (Manuscript in preparation).

Kesharwani RK, Simone Marini and Ricordo Bellazzi. *Bioinformatics analysis pipeline for 16S rRNA Gene Amplicon*. (Manuscript in preparation).

Kesharwani RK. MiRGeneExpress: An R package for integrated analysis of miRNA and Gene expression counts (On going project).

PROFESSIONAL REFERENCES

Dr. Gualtiero Colombo

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The Unit of Immunology and Functional
Genomics
Milan, Italy
Email: gualtiero.colombo@ccfm.it

Dr. anuj Srivastava

The Jackson Laboratory, Bar Harbor,
Maine, USA
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Prof. Riccardo Bellazzi

Labs Biomedical Informatics
"Mario Stefanelli"
University of Pavia-27100,
Pavia, Italy
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Prof. Anoop Chaturvedi

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