Maria Altaf Satti

Education

2016-2021	*Ph.D.*, Bioinformatics, **The Graduate University for Advanced Studies, SOKENDAI**, Japan
2018-2021	*Ph.D.*, Agricultural, Environmental and Food Science and Technology, **University of Bologna**, Italy (Dual doctoral degree -cotutelle agreement)
2016	*M.S.*, Computational Sciences and Engineering, **National University of Sciences and Technology, NUST**, Islamabad, Pakistan
2014	*B.S.*, Bioinformatics, **Mohammad Ali Jinnah University, MAJU**, Islamabad, Pakistan

Research Experience

2021Oct-2022 July	*Postdoctoral Research Associate*, **Department of Cellular and Molecular Medicine, Texas A&M**, USA
	Project: "Development of computational method for de novo identification of intronic polyadenylation from standard RNA-seq data, focusing on Cancer dynamics"
2018-2021	Worked in collaboration with Paola Mattarelli, Ph.D., Department of Agricultural and Food Sciences, University of Bologna, Italy. (Dual doctoral degree -cotutelle agreement signed)
2018 (Oct-Dec), 2019 (Sep-Oct)	Visiting fellow, Department of Agricultural and Food Sciences, University of Bologna Viale Fanin 44, 40127 Bologna, Italy. Principal investigator: Paola Mattarelli, Ph.D.
	Project: Genomic analysis of *Bifidobacterium* novel species
2017	Attendee, The 28th International conference on Genome Informatics GIW/BIOINFO, Seoul Korea
2016	Masters thesis Title: "Development of a Computational Method for Identification of Genomic Structural Variants Using Next Generation Sequencing"

2016	Attendee, 2 days hand-on Workshop Next Generation Sequence (NGS) data analysis, COMSATS Institute of Information Technology Islamabad, Pakistan
2014	Bachelors Project Title: "Visualization and Mining of Human Microbiota using Computational Techniques"
2013	Assisted, 4th One day workshop, Mohammad Ali Jinnah University, Islamabad, Pakistan
Languages	R, Python, C++, MATLAB, C

Work Experience

June 2013- August 2013	Internship, Genetic Resource Centre, Rawalpindi, Pakistan
2011-2013	Student Assistant Ship, Department of Computer Science, Mohammad Ali Jinnah University, Islamabad, Pakistan

Honors and Distinctions

2021	Morishima Award for outstanding performance during doctoral program in the institute (National institute of Genetics)
2018, 2019	Traveling grant, The Graduate University for Advanced Studies, Japan
2016-Present	National Institute of Genetics Japan, MEXT scholarship, 5- year Doctoral program
Fall 2010-Fall 2014	Mohammad Ali Jinnah University, Islamabad, Pakistan, PGC Scholarship
2014	Mohammad Ali Jinnah University, Islamabad, Pakistan, Silver Medal, *B.S.* Convocation
2014	Mohammad Ali Jinnah University, Islamabad, Pakistan, 2nd Prize, Open House
2014	1st Prize Poster Presentation, 2nd Conference on emerging trends in Bioinformatics and Computational Biology
2010-2013	Mohammad Ali Jinnah University, Islamabad, Pakistan, Chancellor's Honor Roll / Dean's Honor Roll

Presentations

Oral Presentations

Comparative genomic analysis of *Bifidobacterium* species isolated from Egyptian fruit bat *Rousettus egyptiacus*, The COMBINE/AYRCOB Symposium, Sydney Australia, 2019

Bifidobacterial occurrence in giant bats: the two new species *Bifidobacterium vespertilionis* and *Bifidobacterium rousettii*, 10th National Conference or Research in Parks, Verona Italy, 2019

Comparative analysis of probiotic genus *Bifidobacterium*, Workshop on Commemoration of the centenary of the birth of Prof. Vittorio Scardovi, one of the most relevant Italian microbiologist and taxonomist on the probiotic bacteria, Bologna Italy, 2018

Comparative analysis of probiotic genus *Bifidobacterium* and *Lactobacillus* based on new definition of core genome, The 28th International Conference on Genome Informatics GIW/ BIOINFO, Seoul Korea, 2017

Poster Presentations

Comparative genomic analysis of *Bifidobacterium* species isolated from Egyptian fruit bat *Rousettus egyptiacus*, Joint 30th International Conference on Genome Informatics (GIW) & Australian Bioinformatics and Computational Biology Society (ABACUS) Annual Conference, Sydney Australia, 2019

Comparative Analysis of probiotic genus *Bifidobacterium* and *Lactobacillus*, AIST-RIKEN joint exchange meeting for computational biology, Tokyo, Japan, 2018

Insight into the immunomodulatory role of *Bifidobacterium bifidum*, The 12th Annual Meeting of the Japanese Society for Genomic Microbiology, Kyoto, Japan, 2018

Visualization and Mining of Human Microbiota using Computational Techniques, 2nd Conference on emerging trends in Bioinformatics and Computational Biology, Islamabad Pakistan, 2014

Publications

1. **Satti M**, Tanizawa Y, Endo A, Arita M. Comparative analysis of probiotic bacteria based on a new definition of core genome. Journal of Bioinformatics and Computational Biology; 2018.
2. Modesto M, Watanabe K, Arita M, **Satti M**, et al. *Bifidobacterium jacchi* sp. nov., isolated from the faeces of a baby common marmoset (*Callithrix jacchus*). International journal of systematic and evolutionary microbiology; 2019.
3. Modesto M*, **Satti M***, Watanabe K, Puglisi E, Morelli L, et al. Characterization of *Bifidobacterium* species in feaces of the Egyptian fruit bat: Description of *B.*

vespertilionis sp. nov. and _B. rousetti_ sp. nov. Systematic and applied microbiology; 2019.

4. Modesto M, Satti M, Watanabe K, Sciavilla P, Felis GE, et al. Alloscardovia theropitheci sp. nov., isolated from the faeces of gelada baboon, the'bleeding heart'monkey (Theropithecus gelada). International Journal of Systematic and Evolutionary Microbiolo

5. Modesto M*, Satti M*, Watanabe K, Scarafile D, Huang CH, et al. Phylogenetic characterization of two novel species of the genus Bifidobacterium: Bifidobacterium saimiriisciurei sp. nov. and Bifidobacterium platyrrhinorum sp. nov. Systematic and applied mi

6. Modesto M, Satti M, Watanabe K, Huang CH, Liou JS, et al. Bifidobacteria in two-toed sloths (Choloepus didactylus): phylogenetic characterization of the novel taxon Bifidobacterium choloepi sp. nov. International Journal of Systematic and Evolutionary Mic

7. **Satti M,** Modesto M, Endo A, Kawashima T, Mattarelli P, Arita M. Host-Diet Effect on the Metabolism of Bifidobacterium. Genes; 2021.

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References

1. **Masanori Arita**
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   National Institute of Genetics, Yata 1111, Mishima, 411-8540 Japan
   Email: arita@nig.ac.jp

2. **Paola Mattarelli**
   Assistant Professor
   Department of Agricultural and Food Sciences
   University of Bologna, Viale Fanin 44, 40127 Bologna, Italy
   Email: paola.mattarelli@unibo.it

3. **Sahar Fazal**
   Professor, Head of Biosciences Department
   Capital University of Science & Technology, Islamabad, Pakistan
   Email: sahar@cust.edu.pk