# ACADEMIC PROFILE

- 1. Name of the Faculty Member: Dr. ACHINTYA MOHAN GOSWAMI
- 2. Designation: Assistant Professor in Physiology (W.B.E.S.)
- 3. Qualification: M.Sc.(Burdwan University), Ph.D. (University of Calcutta)
- 4. Specialization: Endocrinology & Reproductive Physiology
- 5. E-mail address: achintya02@gmail.com
- 6. Date of Joining in W.B.E.S.: 13.04.2010
- 7. Date of Joining in this College: 13.04.2010
- 8. Total Teaching experience in College level:12 years
- 9. Research Interests: Bioinformatics and Computational Biology
- 10. Title of thesis (Ph.D.) with year: "Studies on the production, characterization and application of silver and gold nanoparticles synthesized by *Penicillium citrinum* MTCC9999" (awarded in 2015; *Supervisor*: Dr. Sanjay Ghosh, Dept. of Biochemistry, University of Calcutta)
- 11. Research guidance: Nil
- 12. Research Projects (Completed):01

Year	Name of PI	Title of Project	Amount (in Rs.)	Duration	Funding Agencywith date
2015 - 2017	Dr. Achintya Mohan Goswami	Bioinformatics approach to study the effect of nsSNP in some genes associated with hypertension in human.	4,00,000/-	Two Year	UGC (Eastern Regional Office)

### **13.** List of publications:

### A) Published papers in Journals:

- Achintya Mohan Goswami (2022) Comprehensive in silico prioritization of pathogenic nsSNPs in humanβ-adducin gene towards finding its relation with cancer. Human Gene. December; 34: 201119 (ISSN: 2773-0441). https://doi.org/10.1016/j.humgen.2022.201119
- AmaleshMondal, Debarati Paul, Shubhra Ghosh Dastidar, TanimaSaha, Achintya Mohan Goswami<sup>\*</sup> (2022)In silico analyses of Wnt1 nsSNPs reveal structurally destabilizing variants,



altered interactions with Frizzled receptors and its deregulation in tumorigenesis. Scientific Reports. 02<sup>nd</sup> September; 12:14934 (ISSN: 2045-2322; IF:5.516) \*- Corresponding author. <u>https://doi.org/10.1038/s41598-022-19299-x</u>

- Sanjib Das, Achintya Mohan Goswami\*, Tanima Saha (2022) An insight into the role of protein kinases as virulent factors, regulating pathogenic attributes in *Candida albicans*. Microbial Pathogenesis. 29<sup>th</sup> January; 164:105418. (ISSN: 0882-4010; IF: 3.738).
   \*- Corresponding author. <u>https://doi.org/10.1016/j.micpath.2022.105418</u>
- Sanjib Das, RajabrataBhuyan, Achintya Mohan Goswami\*, TanimaSaha (2021) Kinome analyses of *Candida albicans*, *C. parapsilosis* and *C. tropicalis* enable novel kinases as therapeutic drug targets in candidiasis. Gene. 23<sup>rd</sup>February;780:145530. (ISSN 0378-1119; IF: 2.984). \*- Corresponding author.<u>https://doi.org/10.1016/j.gene.2021.145530</u>
- AmaleshMondal, Achintya Mohan Goswami \*, Tanima Saha (2021)Insilico prediction of the functional consequences of nsSNPs in human beta-catenin gene. Gene Reports. 25<sup>th</sup>February;23:101066 (ISSN2452-0144). \*- Corresponding author. https://doi.org/10.1016/j.genrep.2021.101066
- 6. Achintya Mohan Goswami (2020) Computational analyses prioritize and reveal the deleterious nsSNPs in human angiotensinogen gene. Computational Biology and Chemistry. January; 84:107199.(ISSN1476-9271;IF:2.877). https://doi.org/10.1016/j.compbiolchem.2019.107199
- 7. Achintya Mohan Goswami (2018) α-Adducin nsSNPs affect mRNA secondary structure, protein modification and stability. Meta Gene. June;17:153-162. (ISSN2214-5400). https://doi.org/10.1016/j.mgene.2018.06.002
- 8. Achintya Mohan Goswami (2017) Codon usage patterns of 3β-hydroxysteroid dehydrogenase type 2 gene across mammalian species and the influence of mutation and selection pressure. Gene Reports. August; 9:20–31.(ISSN 2452-0144).https://doi.org/10.1016/j.genrep.2017.08.007

- 9. Achintya Mohan Goswami (2017) Computational analysis, structural modeling and ligand binding site prediction of *Plasmodium falciparum* 1-deoxy-d-xylulose-5-phosphate synthase. Computational Biology and Chemistry. February; 66:1-10. (ISSN 1476-9271; IF: 1.380). <a href="https://doi.org/10.1016/j.compbiolchem.2016.10.010">https://doi.org/10.1016/j.compbiolchem.2016.10.010</a>
- 10. Achintya Mohan Goswami (2016) Insights into structural features of *Plasmodium falciparum* 4-hydroxy-3-methylbut-2-en-1-yl diphosphate synthase enzyme. InternationalJournal of Research on Social and Natural Sciences. December; Vol. I, Issue 2 (ISSN 2455-5916)
- 11. Achintya Mohan Goswami (2015) Structural modeling and in silico analysis of non-synonymous single nucleotide polymorphisms of human 3β-hydroxysteroid dehydrogenase type 2. Meta Gene. August; 5: 162–172. (ISSN 2214-5400). https://doi.org/10.1016/j.mgene.2015.07.007
- **12.** Achintya Mohan Goswami(2012) "Attention Deficit Hyperactivity Disorder: A Childhood Psychiatric Problem", Conscientia. 1(3), 98-112 [ISSN 2278-6554].
- 13. Achintya Mohan Goswami, and Sanjay Ghosh (2013) Biological synthesis of colloidal gold nanoprisms using *Penicilliumcitrinum* MTCC9999. Journal of Biomaterials and Nanobiotechnology (SCRIP Open Access Journal). 4 (2A):20-27 DOI: 10.4236/jbnb.2013.42A003
- 14. Achintya Mohan Goswami, Tuhin Subhra Sarkar, Sanjay Ghosh (2013) An Ecofriendly synthesis of silver nano-bioconjugates by *Penicilliumcitrinum* (MTCC9999) and its antimicrobial effect. AMB Express. February; 23;3(1):16. (ISSN 2191-0855; IF: 2.659) <a href="https://doi.org/10.1186/2191-0855-3-16">https://doi.org/10.1186/2191-0855-3-16</a>
- 15. Tuhin Subhra Sarkar, Arindam Bhattacharjee, Uddalak Majumdar, Anirban Roy, Debasis Maiti, Achintya Mohan Goswamy, Subrata Kumar Ghosh and Sanjay Ghosh (2011) Biochemical characterization of compatible plant-viral interaction: A case study with a Begomovirus-Kenaf host-pathosystem. Plant Signaling & Behavior. 6(4):501-509. (ISSN 1559-2324) https://doi.org/10.4161/psb.6.4.13912
- Arindam Bhattacharjee, Uddalak Majumdar, Debasis Maity, Tuhin Subhra Sarkar, Achintya Mohan Goswami, Rupam Sahoo, and Sanjay Ghosh (2010) Characterizing the effect of

nitrosative stress in *Saccharomyces cerevisiae*. Archives of Biochemistry and Biophysics 496, 109-116. (ISSN 0003-9861; IF: 3.118) <u>https://doi.org/10.1016/j.abb.2010.02.003</u>

- Tuhin Subhra Sarkar, Uddalak Majumdar, Anirban Roy, Debasis Maiti, Achintya Mohan Goswamy, Arindam Bhattacharjee, Subrata Kumar Ghosh and Sanjay Ghosh (2010) Production of Nitric Oxide in host-virus interaction: A case study with a compatible Begomovirus-Kenaf host-pathosystem. Plant Signaling and Behavior. Plant Signaling & Behavior. Dec 2;5(6):668-676. (ISSN 1559-2324) <a href="https://doi.org/10.4161/psb.5.6.11282">https://doi.org/10.4161/psb.5.6.11282</a>
- Arindam Bhattacharjee, Uddalak Majumdar, Debasis Maity, Tuhin Subhra Sarkar, Achintya Mohan Goswami, Rupam Sahoo, Sanjay Ghosh (2009) In vivo protein tyrosine nitration in *S. cerevisiae*: Identification of tyrosine-nitrated proteins in mitochondria. Biochemical and Biophysical Research Communications. Oct 23;388(3):612-617. (ISSN 0006-291X; IF: 2.559). https://doi.org/10.1016/j.bbrc.2009.08.077

#### B) Chapter in Books:

 "Regulation of FOX O Signaling and its Impact on Cardiac Function", A.M. Goswami, In *'Physiology Update'*, Published by Department of General Human Physiology, Haldia Institute of Dental Sciences & Research, Haldia, Purba Midnapore, West Bengal, 2010, Vol. 2, 40-49.

#### 14. Membership of Learned Societies/ Editorial Boards, etc.: Life Member of Society of Biological Chemists (India)

#### 15. Patents:Nil

#### 16. Awards:

- 1. Received NET-LS in Life Science jointly conducted by CSIR and UGC in 2006.
- 2. Awarded 1<sup>st</sup> prize for the Poster Presentation in the seminar titled 'National Conference on Nanoscience and Nanotechnology (NCNN-2011)', organized by National Centre forNanoscience and Nanotechnology, at Maraimalai Campus, University of Madras, Chennai, held during 25<sup>th</sup> -27<sup>th</sup> August 2011.
- Received "Invention Award" from Intellectual Ventures India, 701, Raheja Paramount, 138 Residency Road, Bangalore-560025, India for invention titled "Synthesis of Gold Nanoprism by Fungal Mycellia" [Invention ID: IN-812050].

#### 17. <u>A) Participation in Seminars/Symposia/Conferences:</u>

- Presented an invited lecture (Oral presentation) entitled "Non-synonymous Single Nucleotide Polymorphisms in Human Angiotensinogen Affect its Stability, Post-translational Modifications, and Interaction with Renin" in the International conference "Contemporary Innovative Issues and Future Challenges in Physiology and Allied Sciences", organized by Department of Human Physiology Vidyasagar University, Midnapore during 21-22 January, 2020.
- 2. One of my Research Scholar (Amalesh Mondal) presented (poster) a paper entitled "Computational analyses of non-synonymous polymorphisms in human β-catenin gene towards predicting their functional consequences" in the International conference 'Contemporary Innovative Issues and Future Challenges in Physiology and Allied Sciences', organized by Department of Human Physiology Vidyasagar University during 21<sup>st</sup>-22<sup>nd</sup> January, 2020.
- 3. Presented an invited lecture (Oral presentation) entitled "Non-synonymous Single Nucleotide Polymorphisms in Human Angiotensinogen Affect its Stability, Post-translational Modifications, and Interaction with Renin" in the XXXIst Annual Conference of the Physiological Society of India (PHYSICON-2019) on "Recent Trends in Physiology and Healthcare Research for Salubrious Society" organized by Bankura Christian College, Bankura, West Bengal during 15<sup>th</sup> – 17<sup>th</sup> November, 2019.
- Presented a paper (Oral presentation) entitled "Plasmodium Falciparum DXP Synthase: A Putative Target For Anti-Malarial Drug Designing" in the State Level West Bengal Science & Technology Congress (Sothern Region) at Bidhannagar Govt. College, Salt Lake, Kolkata during 18<sup>th</sup> -19<sup>th</sup> December, 2018.
- 5. Presented a paper (Oral presentation) entitled "Understanding the Effects of Coding Variants of Human 3β-HSD2 and its Molecular Evolution Among Mammals" in the National Seminar on "Biological Sciences for Human Welfare: Teaching and research in Modern Perspective" organized by Berhampore Girls' College, Murshidabad, West Bengal during 29<sup>th</sup> -30<sup>th</sup> September, 2018.
- 6. One of my student (Tista Dutta) **presented (poster)** entitled "*Comparative Homology Modelling* of  $3\beta$ -HSD1 across Different Species" in the National Seminar on "Biological Sciences for Human

Welfare: Teaching and research in Modern Perspective" organized by Berhampore Girls' College, Murshidabad, West Bengal during **29<sup>th</sup> -30<sup>th</sup> September**, **2018**.

- One of my student (Ankita Paul) presented (poster) entitled "Insights into the Sequence and Structural Similiarity of 3β-HSD1 mRNA Across Different Species" in the National Seminar on "Biological Sciences for Human Welfare: Teaching and research in Modern Perspective" organized by Berhampore Girls' College, Murshidabad, West Bengal during 29<sup>th</sup> -30<sup>th</sup> September, 2018.
- One of my student (PriyankanMajumder) presented (poster) entitled "Insights Into The Evolutionary Relationship of Aromatase Among the Vertebrates" in the National Seminar on "Biological Sciences for Human Welfare: Teaching and research in Modern Perspective" organized by Berhampore Girls' College, Murshidabad, West Bengal during 29<sup>th</sup> -30<sup>th</sup> September, 2018.
- 9. Presented a paper (Oral presentation) entitled "Understanding the Molecular Effects of Coding Variants of Human 3β-Hydroxysteroid Dehydrogenase Type 2 Enzyme: A Computational Approach" in the UGC sponsored two day National Seminar on 'Trends of Physiological Researches from Laboratory to Community', organized by Department of Human Physiology with Community Health, Vidyasagar University during 30<sup>th</sup> to 31<sup>st</sup> March, 2016.
- 10. Participated and Presented a poster entitled "In silico prediction and prioritization of nonsynonymous single nucleotide polymorphisms in relation to human 3β-hydroxysteroid dehydrogenase type 2 enzyme" in the 17<sup>th</sup> All India Congress of Cytology and Genetics and International Symposium on 'Exploring Genomes: The New Frontier', jointly organized by CSIR-Indian Institute of Chemical Biology, Kolkata and Archana Sharma Foundation of Calcutta, during 22<sup>nd</sup> -24<sup>th</sup> December, 2015.
- 11. Participated and Presented a poster entitled "Ecofriendly extracellular synthesis of silver nanoparticles and evaluation on its application as antimicrobial compound" in National Conference on 'Nanoscience and Nanotechnology (NCNN-2011)', organized by National Centre for Nanoscience and Nanotechnology, held at Maraimalai Campus, University of Madras, Chennai, during 25<sup>th</sup> -27<sup>th</sup> August, 2011.
- 12. Participated and Presented a poster entitled "Biological synthesis of stable gold nanoprism: An eco-friendly approach" in the National level Seminar on 'Regulation of Biochemical and Cellular Processes in Diverse Systems' organized by Society of Biological Chemists, India, held at

the National Science Seminar Complex, Indian Institute of Science, Bangalore, during 13<sup>th</sup> -15<sup>th</sup> December, 2010.

13.Participated in the National level 'B.C. Guha Symposium for Young Investigators' jointly organized by the Department of Biotechnology and Dr. B.C. Guha Centre for Genetic Engineering and Biotechnology (GCGEB), University of Calcutta, held at Puri, Orissa, during 9<sup>th</sup> -11<sup>th</sup> March, 2010.

## B) Workshops:

Participated in the workshop titled "*Trends in Bioinformatics*", organized by Berhampore Girls' College in collaboration with DBT Centre for Bioinformatics, Presidency University, Kolkata and Centre for Interdisciplinary Research in Biology and Bioinformatics, during 8<sup>th</sup> - 9<sup>th</sup> March, 2013.

## C) Participation OP/RC:

- Participated in the UGC sponsored Orientation Programme organized by UGC-HRDC, University of Burdwan from 17<sup>th</sup> November to 14<sup>th</sup> December, 2015.
- 2. Participated in the UGC sponsored **Refresher Course** in '*Biological Sciences*'organized by UGC-HRDC, University of North Bengal from 26<sup>th</sup> August to 15<sup>th</sup> September, 2016.
- Participated in the UGC sponsored Refresher Course in 'Emerging areas of Life Science (IDC)' organized by UGC-HRDC, Jadavpur University from 27<sup>th</sup> January 2020 to 08<sup>th</sup> February 2020.
- Participated in the UGC sponsored Refresher Course in "Environmental Studies", organized by UGC-HRDC, Aligarh Muslim University, Aligarh from 27<sup>th</sup>September 2022 to 11<sup>th</sup> October 2022.