

CURRICULUM VITAE

Dr. Arabinda Ghosh, M.Sc (NEHU), PGDBI (DU), Ph.D (IIT Guwahati)

Assistant Professor

Department of Molecular Biology and Bioinformatics
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Work Experience

2024-Onward

Assistant Professor
Department of Molecular Biology and Bioinformatics
Tripura University (Central University)
Agartala, Tripura

2023-2024:

Ass. Professor and Head
Department of Computational Biology and Biotechnology
Mahapurasha Srimanta Sankaradeva Viswavidyalaya
Guwahati, Assam- 781032

2015-2023

Assistant Professor
Microbiology Section
Department of Botany
Gauhati University
Guwahati, Assam, India

2023-2024

Visiting Faculty
Department of Molecular Biology and Bioinformatics
Colombo University, Colombo
SriLanka

Educational

2009-2015

Ph.D in Biosciences and Bioengineering, IIT Guwahati, Assam

2007-2009

M.Sc in Biotechnology and Bioinformatics, NEHU, Shillong, Meghalaya

2005-2007

PGD in Bioinformatics, Dibrugarh University, Assam, India

Technical Expertise

1. Expertise in molecular and microbiology techniques, SDS-PAGE, 2D-Gel Electrophoresis, chromatography techniques: Thin layer chromatography, Affinity chromatography, High Pressure Anion Exchange Chromatography, Gel Filtration Chromatography, Mass spectroscopy (LC-MS systems), Gas Chromatography, FT-IR, Dynamic Light Scattering (DLS), Fluorescence Spectroscopy,

Nano Drop, HPLC, PCR, Microplate reader. Have knowledge in Circular Dichroism spectroscopy, DNA sequencing, Blotting techniques, Fluorescence Activated Cell Sorter (FACS) etc.

2. Having proficiency in basics of Bioinformatics tools, protein modeling, docking analysis, MD simulation, DFT and ML.
3. Well versed with basics of computation and computer programming in C, C++, and web page designing using HTML, etc.

Patent/Copyright Applied For/Published

1. Pharmaceutical composition based on Zingerone, Gingerol and 6-Shogaol with therapeutic and prophylactic purposes for COVID-19. Application Number: **BR1020200209930**, (Brazilian Patent). National Invention Application, Utility Model, Invention Addition Certificate and entry into the national phase of the PCT. Submitted at Instituto Nacional Da Propriedade Industrial, Brazil.
2. Indian Patent published on "Computational approaches in ameliorating by inhibition of PALB2/BRCA2 in Ovarian cancer using a novel Isoquinoline Alkaloid Berberine". The allotted application number is: **202231022581**
3. Indian Patent published on "Typtamine: A compound derived from mushrooms inhibits the monkeypox virus computational methods". The allotted application number is: **202231055191**
4. Indian Patent published on "A computational system and method for inhibition of monkeypox virus using a mushroom derived compound". The allotted application number is: **202231053209**
5. Indian Patent published on "Computational approaches in altering the inhibition of acetylcholineesterase receptor in Alzheimer's disease treatment using geranylgeraniol". The allotted application number is: **202231060095**
6. Indian Patent published on "Novel anti-leishmanial plant derivative for effective alternative for leishmaniasis: a computational approach" The allotted application number is: **202331028860**
7. Indian Patent published on "Target specific inhibition of bace-1 using olive compound, wedelosin for inhibition of alzheimer's disease. The allotted application number is: **202241068396**
- 8.

Publication Details (Articles In Refereed Journals)

Year 2024:

1. Partha Saha, Mangala Hegde, Kanak Chakraborty, Achinta Singha, Ajaikumar B. Kunnumakkara, Mohd Shahnawaz Khan, Md Irshad Ahmad, **Arabinda Ghosh**, Ajoy Kumer, Samir Kumar Sil (2024). Targeted inhibition of colorectal cancer proliferation: The dual-modulatory role of 2,4-DTBP on anti-apoptotic Bcl-2 and Survivin proteins. *Journal of Cellular and Molecular Medicine*. (In press). IF: 5.3
2. Bharadwaj, K. K., Rabha, B., Ahmad, I., Mathew, S., Bhattacharjee, C. K., Jaganathan, B. G., Poddar, S., Patel, H., Subramaniyan, V., Chinni, S. V., Ramachawolran, G., Saleem, R. M., Ali, E., Abdel-Daim, M. M., Baishya, D., & **Ghosh, A.** (2023). Rhamnetin, a nutraceutical flavonoid arrests cell cycle progression of human ovarian cancer (SKOV3) cells by inhibiting the histone deacetylase 2 protein. *Journal of Biomolecular Structure & Dynamics*, 1–16. <https://doi.org/10.1080/07391102.2023.2275187>. IF: 4.8
3. Das, P., Majumder, R., Sen, N., Nandi, S. K., **Arabinda Ghosh**, Mandal, M., & Basak, P. (2024). A computational analysis to evaluate deleterious SNPs of GSK3 β , a multifunctional and regulatory protein, for metabolism, wound healing, and migratory processes. *International Journal of Biological Macromolecules*, 256, 128262. IF: 8.20

Year 2023:

4. Agarwala, Pratibha; **Ghosh, Arabinda**; Hazarika, Priyanka; Acharjee, Debopam; Ghosh, Shirsendu; Rout, Debasish; Sasmal, Dibyendu (2023) Unraveling the Interaction of Diflunisal with Cyclodextrin and Lysozyme by Fluorescence Spectroscopy. *The Journal of Physical Chemistry Part B*. (Accepted in press). IF: 3.25

5. Kumar, R. R., Jain, R., Akhtar, S., Parveen, N., **Ghosh Arabinda**, Sharma, V., & Singh, S. (2023). Characterization of thiamine pyrophosphokinase of vitamin B1 biosynthetic pathway as a drug target of *Leishmania donovani*. *Journal of Biomolecular Structure & Dynamics*, 1–17. <https://doi.org/10.1080/07391102.2023.2227718>. IF: 4.8
6. Mukerjee, N., Maitra, S., **Ghosh Arabinda**, Subramaniyan, V., & Sharma, R. (2023). Exosome-mediated PROTACs delivery to target viral infections. *Drug Development Research*. <https://doi.org/10.1002/ddr.22091>. IF: 3.8
7. Mukerjee, N., & **Ghosh Arabinda***. (2023). Revolutionizing viral disease treatment: PROTACs therapy could be the ultimate weapon of the future. *Journal of Medical Virology*, 95(8). <https://doi.org/10.1002/jmv.28981>. IF: 12.7
8. Gurnani, M., Chauhan, A., Ranjan, A., Gopi, P., **Ghosh Arabinda**, Tuli, H. S., Haque, S., Pandya, P., Lal, R., & Jindal, T. (2023). Cyanobacterial compound Tolyporphine K as an inhibitor of Apo-PBP (penicillin-binding protein) in *A. baumannii* and its ADME assessment. *Journal of Biomolecular Structure & Dynamics*, 1–12. <https://doi.org/10.1080/07391102.2023.2218930>. IF: 4.8
9. Pinky Rani Biswas, Pinaki Chattopadhyay, Sudeshna Nandi, **Arabinda Ghosh**, Krishnendu Acharya and Arun Kumar Dutta (2023) Investigation of antioxidant activity, myco-chemical content, and GC-MS based molecular docking analysis of bioactive chemicals from *Amanita konajensis*, a tribal myco-food from India. *International Journal of Medicinal Mushrooms*. (Accepted in Press). IF: 1.3
10. Alqahtani, T., Deore, S. L., Kide, A. A., Shende, B. A., Sharma, R. K., Chakole, R. D., Nemade, L. S., Kale, N., Borah, S., Deokar, S. S., Behera, A., Bhandari, D. D., Gaikwad, N., Ferdosh, S., & **Ghosh Arabinda***. (2023). Mitochondrial dysfunction and oxidative stress in Alzheimer's disease, and Parkinson's disease, Huntington's disease and Amyotrophic Lateral Sclerosis -An updated review. *Mitochondrion*, 71, 83–92. <https://doi.org/10.1016/j.mito.2023.05.007>. IF: 4.4
11. Bharti. S. Fegade, Shailaja. B. Jadhav, Somadatta Y. Chaudhari, Deepak T. Tandale, Shams Tabrez, Mohd Shahnawaz Khan, Syed Kashif Zaidi, **Arabinda Ghosh*** (2023) Synthesis and Computational Insights of flavone derivatives as Potential Estrogen Receptor Alpha (ER- α) antagonist. *Journal of Biomolecular Structure & Dynamics*. (Accepted In press). IF: 4.8
12. Kanak Chakraborty, Partha Saha, **Arabinda Ghosh**, and Samir K. Sil (2023) Exploration of Rhinacanthone, a Natural Naphthoquinone, as a Potential Human Papilloma Virus E7 Oncoprotein Inhibitor (HPV-E7i) Through AI-Based Protein Modeling, Molecular Docking, and Simulation Studies. *Proceedings of the NIELIT's International Conference on Communication, Electronics and Digital Technology (Springer Nature)*. 676:577-591.
13. Mukerjee, N., Maitra, S., **Arabinda Ghosh**, & Sharma, R. (2023). Impact of CAR-T cell therapy on treating viral infections: unlocking the door to recovery. *Human Cell*, 36(5), 1839–1842. <https://doi.org/10.1007/s13577-023-00942-2>. IF: 4.374
14. Soumyadip Chakrobarty, Swarnava Garai, **Arabinda Ghosh**, Nobendu Mukerjee & Deeplina Das (2023): Bioactive plantaricins as potent anti-cancer drug candidates: double docking, molecular dynamics simulation and *in vitro* cytotoxicity analysis, *Journal of Biomolecular Structure and Dynamics*, DOI: 10.1080/07391102.2023.2177732. IF: 5.235
15. Shinjini Bandopadhyay, Sujata Mandal, Mimosa Ghorai, Niraj Kumar Jha, Manoj Kumar, Radha, **Arabinda Ghosh**, Jarosław Proćków, José M. Pérez de la Lastra, Abhijit Dey. (2023). Therapeutic properties and pharmacological activities of asiaticoside and madecassoside: A review. *Journal of Cellular and Molecular Medicine*. <https://doi.org/10.1111/jcmm.17635>. IF: 5.295
16. Tusheema Dutta, Tuyelee Das, Abilash Valsala Gopalakrishnan, Suchismita Chatterjee Saha, Mimosa Ghorai, Samapika Nandy, Manoj Kumar, Radha, **Arabinda Ghosh**, Nobendu Mukerjee, Abhijit Dey (2023) Mangiferin: the miraculous xanthone with diverse pharmacological properties. *Naunyn-Schmiedeberg's Archives of Pharmacology*. <https://doi.org/10.1007/s00210-022-02373-6>. IF: 3.195
17. Smriti Singh, Papia Chowdhury, **Arabinda Ghosh**, Seema Nara (2023) Virtual screening of truncated single stranded DNA aptamers for Staphylococcal enterotoxin type A. *Journal of Biomolecular Structure and Dynamics*. <https://doi.org/10.1080/07391102.2022.2164057>. IF: 5.235
18. **Arabinda Ghosh***, Debanjana Ghosh, Nobendu Mukerjee, Swastika Maitra, Padmashree Das, Abhijit Dey, Souty M.Z. Sharkawi, Georgios D. Zouganelis, Athanasios Alexiou, Somdatta Yashwant Chaudhari, Ritika Sharma, Sonali Arun Waghmare, Marios Papadakis, Gaber El-Saber Batiha. (2023) Efficient activity of Glabridin and its derivatives against EGFR-mediated inhibition of breast cancer. *Current Medicinal Chemistry*. (In press). IF: 4.740

19. Sumira Malik, Nobendu Mukerjee, **Arabinda Ghosh** (2023) Yellow fever virus, a mosquito-borne flavivirus posing high public health concerns and imminent threats to travellers – An update. Accepted In press. **International Journal of Surgery**. IF: 13.4
20. Nobendu Mukerjee, **Arabinda Ghosh***, Rohit Sharma* (2023) Advancements in cutting-edge Cancer treatments using Nanotechnology. Accepted In press. **International Journal of Surgery**. IF: 13.4
18. Sujata Mondol, **Arabinda Ghosh**, Abhijeet Dey (2023) Biotechnological and endophytic mediated production of centellosides in *Centella asiatica*. 0123456789, <https://doi.org/10.1007/s00253-022-12316-z>. IF: 5.560
19. Tuyelee Das, Nobendu Mukerjee, **Arabinda Ghosh**, Jose M. Lorenzo, Kuldeep Dhama, Abhjit Dey (2023) Growing risk of aristolochic acid nephropathy in the era of COVID-19- Correspondence. **International Journal of Surgery** (Accepted In press). IF:13.4
20. Nobendu Mukerjee, Khattab Al-Khafaji, Swastika Maitra, Jaafar Suhail Wadi, Punya Sachdeva, **Arabinda Ghosh***,.. Rohit Sharma*. (2023) Recognizing novel drugs against Keap1 in Alzheimer's disease using machine learning grounded computational studies. **Frontiers in Neuroscience**. (Accepted In press) **Corresponding Author**. IF: 5.156
21. Satarupa Dey, Utpal Anand, Vineet Kumar, Sunil Kumar, Mimosa Ghorai, **Arabinda Ghosh**, Nishi Kant, S. Suresh, Sayan Bhattacharya, Elza Bontempi, Sartaj Ahmad Bhat, Abhijit Dey. (2023) Microbial strategies for degradation of microplastics generated from COVID-19 healthcare waste. **Environmental Research**. 216, 114438. IF: 8.314

Year 2022:

23. Nobendu Mukerjee, Swastika Maitra, Padmashree Das, Sumira Malik, Athanasios Alexiou, **Arabinda Ghosh** (2022) Omicron with threatened antagonistic consequences and are conveyed by new-fangled risks – Correspondence. **International Journal of Surgery (Corresponding Author)** (Accepted, In press). IF: 13.4
24. Rajib Dhar, Dattatreya Mukherjee, Nobendu Mukerjee, Ariketh Devi, Abhijit Dey, **Arabinda Ghosh*** (2022) Exosome based diagnostic and therapeutic approach in breast cancer, a new answer for the Indian breast cancer-associated health crisis–correspondence. **International Journal of Surgery (Corresponding Author)** (Accepted, In press). IF: 13.4
25. Emrias M. Terefe, **Arabinda Ghosh** (2022) Molecular docking, validation, dynamics simulations, and pharmacokinetic prediction of phytochemicals isolated from *Croton dichogamus* against the HIV-1 reverse transcriptase. **Bioinformatics and Biology Insights** (Accepted, In press). IF: 0.84
26. Nobendu Mukerjee, Swastika Maitra, Subhradeep Roy, Shaswata Modak, Mohammad Mehedi Hasan, Biswajit Chakraborty, **Arabinda Ghosh**, Asmita Ghosh, Mohammad Amjad Kamal, Abhijit Dey, Ghulam Md Ashraf, Athanasios Alexiou (2022) Treatments against Polymorphousal discrepancies in Glioblastoma Multiforme. **Metabolic Brain Disease (Accepted in press)**. IF: 3.655
27. Haruna Isiyaku Umar, Adeola Temitayo Ajayi, Nobendu Mukerjee, Abdullahi Tunde Aborode, Mohammad Mehedi Hasan, Swastika Maitra, Ridwan O. Bello, Hafsat O. Alabere, Afees A. Sanusi, Olamide O. Awolaja, Mohammed M. Alshehri, Prosper O. Chukwuemeka, Nada H. Aljarba, Saad Alkahtani, Sumira Malik, Athanasios Alexiou, **Arabinda Ghosh**, Md. Habibur Rahman. (2022) Discovery of novel HSP27 inhibitors as prospective anti-cancer agents utilizing computer-assisted therapeutic discovery approaches. (Accepted in Press). **Cells (MDPI)**. IF: 7.666
28. Praveen Sharma, Neetesh Jain, Rahul D Jawarkar, Ajaykumar Gandhi, **Arabinda Ghosh**, Nobendu Mukherjee, Magdi EA Zaki, Sami Al- Hussain, Abdul, Samad, Vijay H Masand, Ravindrakumar L. Bakal. (2022) QSAR, Molecular Docking, MD Simulation and MMGBSA Calculations approaches to recognized concealed Pharmacophoric features requisite for the optimization of ALK Tyrosine kinase inhibitors as Anticancer leads. **Molecules**. (Accepted in press). IF: 4.927
29. Gaurav Chhetri, Yuting Ke, Ping Wang, Muhammad Usman, Yan Li, Ellen Sapp, Jing Wang, **Arabinda Ghosh**, Md Ariful Islam, Xiaolong Wang, Adel Boudi, Marian DiFiglia, Xueyi Li. (2022) Impaired XK recycling for importing manganese underlies striatal vulnerability in Huntington disease. **Journal of Cell Biology**. 221(10):e202112073. IF: 8.077
30. Rahul Dadaraoji Jawarkar, Ravindrakumar L. Bakal, Nobendu Mukerjee, **Arabinda Ghosh***, Magdi EA Zaki, Samil Al Hussain, Aamal A. Al-Mutairi, Abdul Samad, Ajaykumar Gandhi, Vijay H. Masand. (2022) QSAR Evaluations to Unravel the Structural Features in Lysine-Specific Histone Demethylase

- 1A Inhibitors for Novel Anticancer Lead Development Supported by Molecular Docking, MD Simulation and MMGBSA. *Molecules*. (**Corresponding Author**). IF: 4.927.
31. Biswajit Chakraborty, Nobendu Mukerjee, Swastika Maitra, Mehrukh Zehravi, Dattatreya Mukherjee, **Arabinda Ghosh**, Ehab El Sayed Massoud, Md. Habibur Rahman. (2022) Therapeutic potential of different natural products for the treatment of Alzheimer's disease. *Oxidative Medicine and Cellular Longevity*. (Accepted in Press). IF: 7.310
 32. Nobendu Mukerjee, Anubhab Das, Rahul D. Jawarkar, Swastika Maitra, Padmashree Das, Melvin A. Castrosanto, Soumyadip Paul, Abdul Samad, Magdi E.A. Zaki, Sami Al-Hussain, Vijay H. Masand, Mohammad Mehedi Hasan, Syed Nasir Abbas Bukhari, Asma Perveen, Badrah S. Alghamdi, Athanasios Alexiou, Mohammad Amjad Kamal, Abhijit Dey, Sumira Malik, Ravindra L. Bakal, Adel Mohammad Abuzenadah, Arabinda Ghosh*, Ghulam Md Ashraf. (2022) Repurposing food molecules as a potential BACE1 inhibitor for Alzheimer's disease. *Frontiers Aging Neuroscience*. (**Corresponding Author**). IF: 5.702
 33. Melvin A. Castrosanto, Nobendu Mukerjee, Ana Rose Ramos, Swastika Maitra, John Julius P. Manuben, Padmashree Das, Sumira Malik, Mohammad Mehedi Hasan, Athanasios Alexiou, Abhijit Dey, Mohammad Amjad Kamal, Nada H. Aljarba, Saad Alkahtani, **Arabinda Ghosh*** (2022) Abetting Host Immune Response by Inhibiting Rhipicephalus sanguineus Evasin-1: An In Silico Approach. *Plos One*. (Accepted in press). IF: 3.727 (**Corresponding Author**)
 34. Terefe, E.M., Okalebo, F.A., Derese, S. **Ghosh Arabinda et al.** (2022) *In vitro* anti-HIV and cytotoxic effects of pure compounds isolated from *Croton macrostachyus* Hochst. Ex Delile. *BMC Complementary Medicine and Therapies*. 22, 159. <https://doi.org/10.1186/s12906-022-03638-6>. IF: 3.659
 35. Maniruzzaman, M., Islam, M.M., Ali, M.H., **Arabinda Ghosh et al.** (2022) COVID-19 diagnostic methods in developing countries. *Environmental Science and Pollution Research*. <https://doi.org/10.1007/s11356-022-21041-z>. IF: 5.190
 36. Hemchandra Deka Padmashree Das, Debabrat Baishya and **Arabinda Ghosh*** (2022) Deciphering Thermostability of Family GH30 (XynC) From *Bacillus licheniformis*: An *In-Silico* Approach. *Trends in Carbohydrate Research*. 14(1), 25-28. (**Corresponding Author**). IF: 0.57
 37. R. L. Bakal, R. D. Jawarkar, J. V. Manwar, M.S. Jaiswal, **Arabinda Ghosh**, Ajaykumar Gandhi, Magdi E.A. Zaki, Sami Al-Hussain, Abdul Samad, V. H. Masand, Nobendu Mukerjee, Syed Nasir Abbas Bukhari, Praveenkumar Sharma, Israa Lewaa (2022) Identification of Potent Aldose Reductase Inhibitors as Antidiabetic (Anti-hyperglycemic) agents using QSAR Based Virtual Screening, Molecular Docking, MD Simulation and MMGBSA Approaches. *Saudi Pharmaceutical Journal*. (Accepted In press). IF: 4.562
 38. Sayanti Mandal, Mimosa Ghorai, Uttpal Anand, Debaleena Roy, Nishi Kant, Tulika Mishra, Abhijit Bhagwan Mane, Niraj Kumar Jha, Milan Kumar Lal, Rahul Kumar Tiwari, Manoj Kumar, Radha, **Arabinda Ghosh**, Rahul Bhattacharjee, Jarosław Proćkow, Abhijit Dey (2022) Cytokinins: a genetic target for increasing yield potential in the CRISPR era. *Frontiers in Genetics* (Accepted In press). IF: 4.772
 39. Prangya Rath, Anuj Ranjan, **Arabinda Ghosh***, Abhishek Chauhan, Manisha Gurnani, Hardeep Singh Tuli, Hamza Habeeballah, Mustfa F. Alkhanani, Shafiul Haque, Kuldeep Dhama, Naval Kumar Verma 11 and Tanu Jindal. (2022). Potential Therapeutic Target Protein Tyrosine Phosphatase-1B for Modulation of Insulin Resistance with Polyphenols and Its Quantitative Structure–Activity Relationship. *Molecules*. 27, 2212. IF: 4.927. (**Corresponding Author**).
 40. Kaushik Kumar Bharadwaj, Iqar Ahmad, Siddhartha Pati, **Arabinda Ghosh**, Tanmay Sarkar, Bijuli Rabha, Harun Patel, Debabrat Baishya, Hisham Atan Edinur, Zulhisyam Abdul Kari, Muhammad Rajaei Ahmad Mohd Zain Ahmad, Wan Rosli Wan Ishak. Potent bioactive compounds from seaweed waste to combat cancer through bioinformatics investigation. *Frontiers in Nutrition*. (Accepted, in press). IF: 6.590
 41. Manisha Gurnani, Prangya Rath, Abhishek Chauhan, Anuj Ranjan, **Arabinda Ghosh**, Rup Lal, Nobendu Mukerjee, Nada H. Aljarba, Saad Alkahtani, Vishnu D. Rajput, Svetlana Sushkova, Evgenya V. Prazdnova, Tatiana Minikina and Tanu Jindal. Inhibition of Filamentous Thermosensitive Mutant-Z Protein in *Bacillus subtilis* by Cyanobacterial Bioactive Compounds. *Molecules (MDPI)*. 27(6), 1907. IF: 4.927.
 42. Kamal Tabti, Larbi Elmchichi, Abdelouahid Sbai, Mohammed Bouachrine, Tahar Lakhli, **Arabinda Ghosh** (2022) In silico design of novel PIN1 inhibitors by combined of 3D-QSAR, molecular docking,

- molecular dynamic simulation and ADMET studies. **Journal of Molecular Structure**. 1253, 132291. IF: 3.841
43. Arabinda Ghosh, Pranjal Sarmah, Harun Patel, Nobendu Mukerjee, Rajbardhan Mishra, Saad Alkhatani, Rajender S. Varma, Debabrat Baishya (2022) Nonlinear Molecular Dynamics of Quercetin in *Gynocardia odorata* and *Diospyros malabarica* fruits : Its mechanistic role in hepatoprotection. **Plos One**. 17(3):e0263917. IF: 3.727
 44. Nobendu Mukerjee, Anubhab Das, Swastika Maitra, Arabinda Ghosh*, Prattusha Khan, Athanasios Alexiou, Abhijit Dey, Debabrat Baishya, Faizan Ahmad, Punya Sachdeva, Muhanna K. Al-Muhanna (2022) Dynamics of natural product Lupenone as a potential fusion inhibitor against the spike complex of novel Semliki Forest Virus. **Plos One**. 17(2):e0263853. IF: 3.727 (Corresponding Author)
 45. Arabinda Ghosh*, Nobendu Mukerjee, Bhavdeep Sharma, Anushree Pant, Yugal Kishore, Rahul D. Jawarkar, Ravindrakumar L. Bakal, Ermias Mergia Terefe, Gaber El-Saber Batiha, Gomaa Mostafa-Hedeab, Nisreen Khalid Aref Albezrah, Abhijit Dey, Debabrat Baishya (2022). Target Specific inhibition of Protein Tyrosine Kinase in conjunction with Cancer and SARS-COV-2 by Olive nutraceuticals. *Frontiers in Pharmacology*. 12:812565. doi: 10.3389/fphar.2021.812565. IF: 5.981 (Corresponding Author)
 46. Castrosanto, Melvin, Arabinda Ghosh (2022) *In Silico* evaluation of binding of phytochemicals from Bayati (*Anamirta cocculus* Linn) to the Glutathione-S-Transferase of Asian Corn Borer (*Ostrinia furnacalis* Guenée). **Journal of Biomolecular Structure and Dynamics** (Accepted In Press). IF: 5.235
 47. Tuyelee Das, Suchismita Chatterjee Saha..., Arabinda Ghosh, Abhijit Dey (2022) Promising botanical-derived monoamine oxidase (MAO) inhibitors: pharmacological aspects and structure-activity studies. **South African Journal of Botany**. 146: 127-145. IF: 3.111
 48. Shradha Lakhera, Kamal Devlal, Arabinda Ghosh, Papia Chowdhury, Meenakshi Rana (2022) Modelling the DFT structural and reactivity study of feverfew and evaluation of its potential antiviral activity against COVID-19 using molecular docking and MD simulations. **76**, 2759–2776. **Chemical Papers**. IF: 2.146
 49. Felix Zuhendri, Conrad O. Perera, Kavita Chandrasekaran, Arabinda Ghosh, Steven Tandean, Rizky Abdulah, Herry Herman, Ronny Lesmana (2022) Propolis of stingless bees for the development of novel functional food and nutraceutical ingredients: A systematic scoping review of the experimental evidence. **Journal of Functional Foods**. 88:104902. IF: 5.223
 50. Sicon Mitra, Uttpal Anand, Rupa Sanyal, Niraj Kumar Jha, Tapan Behl, Avinash Mundhra, Arabinda Ghosh, Radha, Manoj Kumar, Jaroslaw Prockow, Abhijit Dey (2022) Neoechinulins: molecular, cellular, and functional attributes as promising therapeutics against cancer and other human diseases. **Biomedicine & Pharmacotherapy**. 145: 112378. IF: 7.419
 51. Md Bashir Uddin...Arabinda Ghosh (2022) Genomic Diversity and Molecular Dynamics Interaction on Mutational Variances among RB Domains of SARS-CoV-2 Interplay Drug Inactivation. **Infection, Genetics and Evolution**. Nov 6;97:105128.doi: 10.1016/j.meegid.2021.105128.. IF: 4.393
 52. Rahul Jawarkar, Nobendu Mukerjee, Arabinda Ghosh (2022) QSAR Based Virtual screening derived Identification of a Novel Hit as a SARS CoV-229E 3CLpro Inhibitor: GA-MLR QSAR modeling supported by Molecular Docking, Molecular Dynamics Simulation and MMGBSA calculation Approaches. **Arabian Journal of Chemistry**. 15(1):103499. doi: 10.1016/j.arabjc.2021.103499. IF: 6.212
 53. Swastika Maitra, Nobendu Mukerjee, Abhijit Dey, Arabinda Ghosh, Athanasios Alexiou (2022) Drug Development Strategies and Immunological Aspects of SARS-CoV-2. **The Open Public Health Journal** (accepted in press)

Year 2021:

54. Kaushik Kumar Bharadwaj, Tanmay Sarkar, Arabinda Ghosh, Debabrat Baishya, Bijuli Rabha, Manasa Kumar Panda, Bryan Raveen Nelson, Akbar B John, Hassan I Sheikh, Bisnu Prasad Dash, Hisham Atan Edinur, Siddhartha Pati (2021) Macrolactin A as a Novel Inhibitory Agent

- for SARS-CoV-2 Mpro: Bioinformatics Approach. **Applied Biochemistry and Biotechnology**. 193:3371–3394. IF: 3.091
55. Deeksha Salaria, Rajan Rolta, Nitin Sharma, Chirag N Patel, **Arabinda Ghosh**, Kamal Dev, Anuradha Sourirajan, Vikas Kumar (2021) In vitro and in silico antioxidant and anti-inflammatory potential of essential oil of *Cymbopogon citratus* (DC.) Stapf. of North-western Himalayas. **Journal of Biomolecular Structure and Dynamics**. Jul 8;1-20. doi: 10.1080/07391102.2021.1943530 IF: 5.223
 56. Vikas Kumar, **Arabinda Ghosh** (2021) Antihypertensive activity of phytochemicals from selected medicinal plants via inhibition of angiotensin-converting enzyme (ACE) protein: An insilico approach. **Natural Product Research**. 26;1-4. doi: 10.1080/14786419.2021.1990917 IF: 2.861
 57. Meenakshi Rana, **Arabinda Ghosh** (2021) Insilico investigation of phytoconstituents from medicinal herb 'Piper longum' against SARS-CoV2 by molecular docking and molecular dynamics. **Results In Chemistry**. 3. 100199.
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32. **Arabinda Ghosh**, Shadab Ahmed, Anil Kumar Verma, Carlos M.G.A. Fontes and Arun Goyal (2011) Cloning, expression and biochemical characterization of family 26 glycoside hydrolase (GH26-CBM35) and carbohydrate binding module (CBM35) from *Clostridium thermocellum*. 9th Carbohydrate Bioengineering Meeting, May 15-18, 2011, Technical University of Lisbon. Portugal.
33. Shadab Ahmed, **Arabinda Ghosh**, Carlos M.G.A. Fontes and Arun Goyal (2011) Biochemical characterization of a family 43 glycoside hydrolase (GH43) from *Clostridium thermocellum*. 9th Carbohydrate Bioengineering Meeting, May 15-18, 2011, Technical University of Lisbon. Portugal.
34. Anil Kumar Verma, **Arabinda Ghosh** and Arun Goyal (2011) *In silico* structure and substrate binding analyses of family 35 carbohydrate binding module (CBM35) from cellulosome of *Clostridium thermocellum*. World Congress on Biotechnology, March 21-23, 2011, Hyderabad, India.
35. Shadab Ahmed, **Arabinda Ghosh** and Arun Goyal (2010) Cloning of family 43 glycoside hydrolase (GH43) and its derivative from *Clostridium thermocellum*. 51st Annual Conference of AMI, Dec 14-17, 2010, Birla Institute of Technology, Mesra, Ranchi, India.

36. Seema Patel, **Arabinda Ghosh** and Arun Goyal (2010) 16S rRNA based identification of a bioactive dextran producing *Pediococcus pentosaceus* isolated from soil of biodiversity hotspot Assam. International Conference on Environmental Health and Technology, Mar 15-17, 2010, Indian Institute of Technology Kanpur, Kanpur India.
37. Seema Patel, Damini Kothari, **Arabinda Ghosh** and Arun Goyal (2009) Optimization of critical medium components using Response Surface Methodology for enhancing the dextran production by the mutant of a new isolate of lactic acid bacteria. 50th Annual Conference of Association of Microbiologists of India. December 15-18, 2009, National Chemical Laboratory.
38. Participated in the workshop on IPR and Ethics on Human Research (2016) catalyzed by ASTEC and organized by Gauhati University, Guwahati, Assam, held on 14th September 2016.
39. Participated in the Technical Communication and Writing Workshop organized by the students affairs section during 13-17 April, 2015.
40. Participated in "Biotech Hub Symposium-2014" organized by biotech hub, centre for the environment, indian institute of technology Guwahati held on 2nd December, 2014.
41. Participated in International Symposium on "Bioengineering 2012" (ISBE 2012) organized by Biotech Hub, Centre for the Environment, Indian Institute of Technology Guwahati held on December 10, 2012.
42. Participated in the workshop on "Genome Annotation 2011" organized by Biotech Hub, Centre for the Environment, Indian Institute of Technology Guwahati held on October 15, 2011.
43. Participated in 96th Indian Science Congress and Children Science Congress held at North Eastern Hill University, Shillong, Meghalaya on 3-7th and 8th January, 2009.

Memberships

1. Life member of The Society of Biological Chemistry, India, 2014 onward.
2. Life member of Biotech Research Society, India (BRSI), 2009.
3. Former annual member of Indian Science Congress Association (ISCA), India, 2007.
4. Former member of Biological Science Forum, J.B College, Jorhat, Assam, India, 2004.
5. Life Member of InSc, Karnataka, India 2020 onward.
6. Life Member of Bioinformatics and Drug Discovery Society, Alagappa University, Karaikudi, Tamil Nadu, India. 2022

Editorial Board Member/Active Reviewer/Member International committee

1. Reviewer of African Journal of Microbiology Research (Open access) (Academic Journals)
2. Editorial member of Enliven: Journal of Genetics, Molecular and Cellular Biology.
3. Editorial member of International Journal of Biology and Nature
4. Editorial board member of Research Journal of Biology.
5. Reviewer of International Journal of Genetics and Genomics. (Science Publishing)
6. Associate Editor MOJ Biology and Medicine Journal (Med Crave)
7. Reviewer Journal of Infectious Medicine.(OMICS International)
8. Member of research team MOU signed by Gauhati University, India and University of Naples, Italy.
9. Reviewer of Indian Phytophology Journal (Springer Nature)
10. Reviewer of Journal of Biomedical Materials Research: Part A (Wiley, John Wiley and Sons)
11. Reviewer of Journal of Pure and Applied Microbiology (JAPM).
12. Reviewer of Journal of Medicine Unlocked (Elsevier)
13. Reviewer of Frontiers in Bioengineering and Biotechnology (<https://www.frontiersin.org>)
14. Editorial Board Member of Biotechnology and Bioinformatics Journal
15. Review Editor of Frontiers in Bioinformatics (<https://www.frontiersin.org/>)
16. Reviewer in Computer in Biology and Medicine (Elsevier)
17. Reviewer in South African Journal of Botany (Elsevier)
18. Reviewer in Applied Biochemistry and Biotechnology (Springer Nature)
19. Reviewer in ACS OMEGA (American Chemical Society)
20. Reviewer in Journal of Biomolecular Structure and Dynamics (Taylor and Francis)
21. Reviewer in Frontiers in Chemistry (<https://www.frontiersin.org>)
22. Reviewer in Frontiers in Molecular Biosciences (<https://www.frontiersin.org>)
23. Reviewer in Frontiers in Pharmacology (<https://www.frontiersin.org>)
24. Academic Editor of Plos One (<https://journals.plos.org/plosone>)
25. Associate Editor IET Nanotechnology (Wiley Online Library)

26. Review Editor Frontiers in Modeling of Viral Replication and Pathogenesis
27. Chief Editor in Archives of Industrial Biotechnology (<https://www.alliedacademies.org/>)

Chairing a session/Invited talk/Resource person/Oral Presentation

1. Training session on “ligand Based” Computational Drug Discovery at Institute of Biochemistry, Molecular Biology and Biotechnology (IBMBB), University of Colombo, Sri Lanka from 29th June 30th June, 2023
2. Invited as resource person for 7days certificate course on Industrial Application on Bioinformatics organized by Department of Applied Biology, USTM, Meghalaya. 10-16 July, 2019
3. Dulxanthone A, from the fruit of *Garcinia pedunculata* (Roxb.): A potential lead compound and drug candidate against dandruff (Seborrheic dermatitis). Oral presentation in the Young Scientist Session at National Conference on Translational Drug Discovery: Current Trends and Future Interventions (TDDCTFI-2018) organized by Assam Down town University, Tea Improvement Consortium and Society of Biological Chemists, 10-11 Nov, 2018.
4. Presented a talk on “Bioinformatics and Computational Biology” as a **resource person** in a five days training cum work shop “Bioinformatics and Biostatistics” organized by institutional biotech hub (IBH-GU), Department of Biotechnology, Gauhati University, 08-12 May, 2018.
5. Presented a talk on “Bioinformatics: Basics and application” as a **resource person** in a seven days work shop “Prospecting traditional and herbal therapy to modern drug delivery” organized by institutional biotech hub (IBH-GU), department of biotechnology and Guwahati biotech park, 22-28 May, 2017.
6. Coconut: A source of prebiotics and anticarcinogenic agent. National seminar on “Prospects and Challenges of Plant science Research in India”. Nov 25-26, Department of Botany, Gauhati University, Guwahati, Assam, India. (Oral presentation)
7. Mannanase: A potent enzyme for future industry, its isolation, characterization and application. 57th Annual conference of Association of Microbiologists India. Nov 25-27, 2016. Gauhati University, Guwahati, Assam, India. (Oral talk in Young Scientist Session)
8. Oligosaccharides as potential candidate in colon cancer therapy. Recent advances in cancer biology and therapeutics-2014 (RACBT 2014). Dec 5, 2014, Department of Biotechnology, Indian Institute of Technology Guwahati, India.
9. Novel thermostable recombinant endo- β -mannanase of *Clostridium thermocellum* for manno-oligosaccharides production. National Seminar On Metabolomics-A new frontier in natural products research. May 23-24, 2014. Department of Biotechnology, North Eastern Hill University, Shillong, India.

Awards and Achievements

1. **Recognized as worlds Top 2% scientists** in Biomedical Sciences by Elsevier and Staford University, 2024.
2. **Best poster presentation award for the research paper** “Therapeutic potential of a wild indigenous edible mushrooms: A holistic Approach” in the National Seminar on “Pharmacists Strengthening Health Systems (PHAMAGENESIS 2023)”, 25th September 2023, Rahman Institute of Pharmaceutical Science and Research, Sonapur, Guwahati, Assam.
3. **Most Prominent Researcher award conferred** by Edumatrix Foundation, registered under Ministry of MSME, Govt. of India on 9th of September 2023, on the occasion of Teacher’s Day celebration under Sikshak Utkrishthata Sanman award scheme 2023.
4. Fully funded fellowship for visiting research scientist for the period of Two years at University of Nebraska, Lincoln, USA, 2022.

5. Recipient of InSc Research Excellence Award 2019 for the outstanding contributions in science and research. Awarded by Institute of Scholars under ministry of MSME, Govt. of India, #1338, 2nd Cross, 7th Block, Sir M V Layout, Muddhinapalya, Bengaluru-560091, Karnataka, India.
6. Recipient of Research Achievement Award in "International Business and Academic Excellence Awards (IBAE-2019)" by GISR Foundation, Noida, UP, India.
7. Recipient of Young Achiever Award 2020 in INFES 2020 by Eudoxia Research Council, Guwahati, Assam, registered under Ministry of Corporate Affairs, Govt. of India.
8. SLET (NE region), Life Science, 2014.
9. CSIR-UGC NETJRF (UGC Fellowship), Life Science, 2009.
10. Graduate Aptitude Test in Engineering (GATE), Life Science, 2009.
11. Recipient of DBT studentship from Department of Biotechnology, Govt. of India during P.G program in Biotechnology. 2007-2009.
12. Acquired 1st class 5th position in M.Sc (Biotechnology), 2009 in North Eastern Hill University, Shillong, Meghalaya.
13. Acquired 1st class 2nd position in Bioinformatics (PGDBI), 2007 jointly conducted in Dibrugarh University and ECIT, Govt. of India.
14. Acquired 1st class 1st position in B.Sc (Zoology), 2005 in Dibrugarh University

Personal Details

Web pages: https://www.researchgate.net/profile/Arabinda_Ghosh2?ev=prf_highl. (Research Gate)
<http://scholar.google.co.in/citations?user=eK8wfilAAAAJ>. (Google Scholar).
<https://www.scopus.com/authid/detail.uri?authorId=57315456100>

ORCID: <https://orcid.org/0000-0002-3891-5949>

Total Research publications: Published 134

Number of citations: 2887

h-index: 31, **i-index:** 71

No. of PG Students Supervision: 27

No. of UG students Supervision: 6

Ph.D. Supervision : 02 (On going)

Co-Supervision : 01 (On going)

Worlds

All the information's furnished above are true and best of my knowledge. I can work in a group and work as a team leader to dissipate knowledge and experiences that I have gained during my learning phase of life.

Arabinda Ghosh