

NAME	<i>Dr. Shoma Paul Nandi</i>		
DESIGNATION	Professor; Centre Head for Cellular and Molecular Biotechnology; Ph.D. Coordinator of Amity Institute of Biotechnology		
EMAIL ID	spaul@amity.edu ; shoma.amity@gmail.com		
CONTACT NUMBER	9810324673; 01204392426		
RESEARCH INTERESTS	Microbiome and diseases; Bioprospecting; Plant- microbe interaction; Phytomedicine; Microsphere –flow cytometric based techniques for detection of various diseases.		
EDUCATIONAL QUALIFICATIONS:			
Name of College / University	Degree	Year	
Dibrugarh University	B.Sc.	1990	
Gauhati University	M.Sc.	1993	
Gauhati University	Ph.D.	1997	
Title of Ph.D. thesis: Studies on beta-lactamase induced resistance and its reversion by beta-lactamase inhibitor			
EXPERIENCE (in chronological order)			
Designation	Type of post held (teaching/ research)	Name of the Institute	Year (From – To)
Post - doctorate	Research	Indian Institute of Science, Bangalore	1997-1999
Post – doctorate	Research	Kansas State University, USA	1999-2004
Lecturer	Teaching and research	Amity Institute of Biotechnology, AUUP, Noida	Feb 2005- June 2007
Senior Lecturer	Teaching and research	Amity Institute of Biotechnology, AUUP, Noida	July 2007-Dec 2007
Assistant Professor	Teaching and research	Amity Institute of Biotechnology, AUUP, Noida	Jan 2008- Nov 2009
Professor	Teaching and research	Amity Institute of Biotechnology, AUUP, Noida	Since Dec 2009

Professor and Centre Head for Cellular and Molecular Biotechnology	Teaching, Research and Administration	Amity Institute of Biotechnology, AUUP, Noida	Since 2015
No. of Ph.D. Students Supervised		Awarded: (no. only) 2.	
		<ol style="list-style-type: none"> Ms. Shubhi Mehrotra joined as Associate Manager in Eli Lilly and Company Ms. Sneha Arora joined as Scientist B in AIIMS 	
		Ongoing: (no. only) 4	
<u>Projects</u>			
Completed : (total no.) 3 Ongoing : (total no.) 1 Approved : (total no.) 1		<ol style="list-style-type: none"> Identification and partial purification of medicinal plant extract effective against <i>Helicobacter pylori</i>. funded by CSIR Aug 2006- 2009 Identification of medicinal plants effective against <i>Vibrio cholera</i> strains that are prevailing in north-east India and characterization of bioactive components funded by DBT Mar, 2011-2013 Identification of bioactive compound from medicinal plants effective against multi-drug resistant <i>Escherichia coli</i> funded by DBT Mar, 2012- 2014. Studies on role of endophytes in variation of acaricidal properties of two acaricide producing plant species NBA 22/F1 and NBA18/D1 from North Eastern states funded by DBT Jan, 2017-2020. 	
PUBLICATIONS 27		<p><i>Give details here:</i></p> <p><u>Publications:</u></p> <ol style="list-style-type: none"> S.Paul, G. Bhowmik, P.Baruah, M.K.Roy and A.C.Ghosh. Studies on <i>Rhizobium</i> spp. associated with few wild leguminous plants of North East India: Advances in Forestry Research in India, Vol XIII, Pg 139 (1995) Shoma Paul, G.Bhowmik, P.Baruah and M.K. Roy, (1995). S.Paul, R.L. Bezbaruah, M.K.Roy and A.C.Ghosh.(1997) Multiple antibiotic resistance (MAR) index and its reversion in <i>Pseudomonas aeruginosa</i>: Letters in Applied Microbiology, 27:169-171 S. Paul, R.L.Bezbaruah, R.S. Prakasam, M.K.Roy and A.C. Ghosh, (1997). Enhancement of growth and antibiotic titer in <i>Cephalosporium acremonium</i> induced by Sesame oil: Folia Microbiologica 42:211-213 	

5. **S. Paul**, M.J. Wilkerson, W. Shuman, and K.R Harkin (2005) Development and evaluation of a flow cytometry microsphere assay to detect anti-histone antibody indog:. *Veterinary Immunology and Immunopathology*, **107**, 315-325
6. Shubhi Mehrotra, Ashwani K. Srivastava, **Shoma Paul Nandi** (2010): Comparative antimicrobial activities of Neem, Amla, Aloe, Assam Tea and Clove extracts against *Vibrio cholerae*, *Staphylococcus aureus* and *Pseudomonas aeruginosa*: *Journal of Medicinal Plants Research*. **4** (22): 2393-2398
7. Shubhi Mehrotra, Rohitash Jamwal, Radhey Shyam, Dharmendra Kumar Meena, Kshipra Mishra, Rajashree Patra, Ronita De, Asish Mukhopadhyay, Ashwani Kumar Srivastava, **Shoma Paul Nandi** (2011): Anti-*Helicobacter pylori* and antioxidant properties of *Emblica officinalis* pulp extract; a potential source for therapeutic use against gastric ulcer: *Journal of Medicinal Plants Research* **5** (12):2577-2583
8. Vidhi Mehrotra, Shubhi Mehrotra, Vandna Kirar, Radhey Shyam, Kshipra Misra, Ashwani Kumar Srivastava, **Shoma Paul Nandi** (2011): Antioxidant and antimicrobial activities of aqueous extract of *Withania somnifera* against methicillin- resistant *Staphylococcus aureus*: *Journal of Microbiology and Biotechnology Research* **1** (1): 40-45.
9. Shubhi Mehrotra, Vandana Kirar, Kshipra Misra, **Shoma Paul Nandi** (2013): Quantitative estimation of Gallic acid in *Rosa sinensis*, *Emblica officinalis* and *Syzygium aromaticum* by HPLC: *International Research Journal of Pharmacy* **4** (7): 87-89.
10. Ajai K Gupta, Vandana Kashyap, Bipin Kumar Gupta, , **Shoma Paul Nandi**, Kanchan Saxena, , Neeraj Khare (2013): Synthesis of ZnO Nanorods by Electrochemical Deposition Method and Its Antibacterial Activity: *Journal of Nanoengineering and Nanomanufacturing*, **3**, (4). 348-352.
11. Angana Payne Mandal, Mohd Hamza Hanfi, Lahari Saikia, Subhajyoti Deka, **Shoma Paul Nandi** (2014) : Effect of extraction temperature on antimicrobial and antioxidant properties of Assam tea: *International Journal of Phytomedicine* **6**, (2)225-231.
12. Mamta, Mehrotra, S., Amitabh, V.Kirar, P. Vats, **Shoma Paul Nandi**, Negi P.S.,Misra K.(2015): Phytochemical and antimicrobial activities of Himalayan *Cordyceps sinensis*.*Indian Journal of Experimental Biology*. [Nisclair Journal; Vol.53, pp. 36-43.
13. Kirar, V., Mehrotra, S., Negi P.S., **Shoma Paul Nandi**, Misra K. (2015): HPTLC fingerprinting, antioxidant potential and antimicrobial efficacy of Indian Himalayan lingzhi: *Ganoderma lucidum*. *International Journal of Biological & Pharmaceutical Research* [Elsevier Journal].

14. Payne, Asish Mukhopadhyay, Subhajyoti Deka, Lahari Saikia, **Shoma Paul Nandi** (2015). Anti-*Vibrio* and antioxidant properties of two weeds: *Euphorbia serpens* and *Amaranthus viridis*. Research Journal of Medicinal Plant; Vol.9(4), pp. 170-178.
15. Soni, S., Vaidya, D., Mehrotra, S., Sharma, S., **Shoma Paul Nandi** (2016): A comparative study on antibacterial and antioxidant activity of honey at different processing stages. National Academy Science Letters. Vol.39 (6), pp. 435-439 [Springer Journal].
16. Sneha Arora, **Shoma Paul Nandi** (2017): Reversion of antibiotic resistance with beta-lactamase inhibitor from medicinal plants: Asian Journal of Pharmaceutical and Clinical research **10** (10): 1-5.
17. Sneha Arora, Mamta Pal, Manabjyoti Bordoloi, **Shoma Paul Nandi** (2018): Effect of hexane extract of *Syzygium aromaticum* on haematological profile in rats: Journal of Environmental Biology; **39**, 347-352.
18. Rajni Chauhan, Dharmendra Jain, Pranav Dorwal, Gaurav Roy, Vimarsh Raina, **Shoma Paul Nandi** (2019): The incidence of immunofluorescence patterns and specific autoantibodies observed in autoimmune patients in a tertiary care centre: European Annals Allergy Clinical Immunology; **51**,(4)165-173.
19. Rajni Chauhan, Vimarsh Raina, **Shoma Paul Nandi** (2019) : Prevalence of Autoimmune Diseases and Its Challenges in Diagnosis: Critical Reviews in Immunology. 39(3), pp.189-201
20. Deepak Upadhaya, Bhanu Kumar , Sachin Kumar, Anil Kumar Sharma, Ashutosh Fular, Nisha Bisht ,Sharad Srivastava, Rashmi Rekha Boruah, Gaurav Nagar, Mukesh Shakya, Tankeswar Nath, **Shoma Paul Nandi**, Karivaradharaja S, Srikant Ghosh (2020): Characterization of acaricide resistance in Rhipicephalus microplus population infesting cattle of North eastern region of India and identification of potent anti-tick plants for tick management: [Veterinary Parasitology 277](#), 1-10 .
21. Rajni Chauhan, Nikita Gupta, Aseem Kumar Tiwari, Vimarsh Raina, **Shoma Paul Nandi** (2020): Development of a flow cytometric novel multiplex bead-based multiplex assay for measuring autoantibodies on flow cytometric platform. Immunological Investigations. <https://doi.org/10.1080/08820139.2020.1854782> (Published online)
22. Ankita Saxena, Asish Kumar Mukhopadhyay and **Shoma Paul Nandi** (2020): *Helicobacter pylori*: perturbation and restoration of gut microbiome: Journal of Biosciences **45**;110; 2-15; <http://www.ias.ac.in/jbiosci>.
23. Pooja Singh, Angkita Sharma, Manobjyoti Bordoloi and **Shoma Paul Nandi** (2020): Molecular Identification of Endophytic Fungi Isolated from Medicinal Plant: Biointerface Research in

Applied Chemistry; **10** (5), pp.6436-6443.
<https://doi.org/10.33263/BRIAC105.64366443>

24. Angkita Sharma, Pooja Singh, Bidyut Kumar Sarmah and **Shoma Paul Nandi** (2020): Isolation of Cellulose-Degrading Endophyte from *Capsicum chinense* and Determination of its Cellulolytic Potential: Biointerface Research in Applied Chemistry. 10(6), pp.6964-6973.
<https://doi.org/10.33263/BRIAC106.69646973>
25. Angkita Sharma, Pooja Singh, Bidyut Kr Sarmah and **Shoma Paul Nandi** (2020): Quorum sensing network designs: Its role in microbial social networking: Research in Microbiology. 171(5-6), pp.159-164.
26. Rajni Chauhan, Aseem Kumar Tiwari, Chhavi Rajvanshi, Simmi Mehra, Abhishek Saini, Geet Aggarwal, Shyam Bihari Bansal, Vijay Kher and **Shoma Paul Nandi** (2020): Prevalence of clinically significant anti-HLA antibodies in renal transplant patients: Single-centre report from India. Indian Journal of Nephrology (Accepted).
27. Rajni Chauhan, Dharmendra Jain, Aseem Kumar Tiwari, Pranav Dorwal, Vimarsh Raina and **Shoma Paul Nandi** (2020): An Algorithm for Identification and Interpretation of Anti-Neutrophil Cytoplasmic Antibodies (ANCA) for classification of patients with ANCA-associated vasculitis: Single center report from India; Reumatologia Clinica (Accepted)
- Copy right No. **L-95152/2020** IDENTIFICATION OF POTENT INHIBITORS OF COVID-19 MAIN PROTEASE ENZYME BY MOLECULAR DOCKING STUDY: SHOMA PAUL; POOJA SINGH; ANGKITA SHARMA, AMITY UNIVERSITY SECTOR 125, NOIDA, UP-201313; INDIAN

Posters:

1. **Obtained first prize** in 64th Indian Pharmaceutical Congress organized by Indian Pharmaceutical Congress Association on 7-9th Dec. 2012 held at SRM University, Chennai.
2. **“Positively charged Curcumin-Tocopherol self microemulsifying system for the treatment of *H. pylori* infection”**
Ketan Patel, Nitin Jadhav, Sneha Arora, **Shoma Paul**², Pradeep Vavia¹, Center for Novel Drug Delivery Systems, Department of Pharmaceutical Sciences and Technology, Institute of Chemical Technology, Mumbai, India and Amity Institute of Biotechnology, Amity University, Noida, India.

3. Rajni Chauhan, Dharmendra Jain, Pranav Dorwal, Vimarsh Raina, Shoma Paul Nandi (22-10-2016) “**Identification and interpretation of anti neutrophil cytoplasmic antibodies (ANCA): An algorithm for developing countries**” in Update in Diagnostic Microbiology- I”, in National Conference on Theme: Newer Diagnostic interventions: Race Against Time. Organized by SGRRIMHS, Shri Mahant Indiresh Hospital, Dehradun
4. Ankita Saxena and Shoma Paul Nandi (14th May, 2020). “**Hygiene and Herbs, Potent weapons against infection: Example *Helicobacter pylori***” in AYF-2020.
5. Himanshu Dhanda, Shivam Saini, Siddhant Kumar, Ankita Saxena and Shoma Paul Nandi (21st – 22nd October, 2019). “**A study on prevalence of antibiotic resistant bacteria from major water sources across Delhi (NCR)**” in National Conference on Water Crisis, Public Health and Sustainable Solutions organized by www.stenvironment.org
6. Leepakshi Dhingra, Ankita Saxena and Shoma Paul Nandi (21st – 22nd October, 2019). “**Ignorance is not always a bliss**” in National Conference on Water Crisis, Public Health and Sustainable Solutions www.stenvironment.org
7. Keerthana Kalyanraman, Ankita Saxena and Shoma Paul Nandi (21st – 22nd October, 2019). “**Fungus-secreted antibiotic for treating cholera, water-borne disease**” in National Conference on Water Crisis, Public Health and Sustainable Solutions organized by www.stenvironment.org
8. Rajni Chauhan, Vimarsh Raina, Shoma Paul Nandi (08-05-2020) “**Autoimmune Diseases: Challenges in Diagnosis**” in National Conference organized by Amity Youth Forum Online (AYF 2020).
9. Rajni Chauhan, Nikita Gupta, Vimarsh Raina, Shoma Paul Nandi (12-02-2020); “**Development and validation of a flow cytometric bead-based assay for measuring autoantibodies against Scl-70 antigen for the diagnosis of systemic sclerosis**” in International Conference organized by Shivagi college, University of Delhi
10. Rajni Chauhan, Dharmendra Jain, Pranav Dorwal, Vimarsh Raina, Shoma Paul Nandi (22-10-2016) “**Identification and interpretation of anti neutrophil cytoplasmic antibodies (ANCA): An algorithm for developing countries**” in Update in Diagnostic Microbiology- I”, in National Conference on Theme: Newer Diagnostic interventions: Race Against Time.

	<p>Organized by SGRRIMHS, Shri Mahant IndiresH Hospital, Dehradun</p> <p>11. “Heavy metals act as co-selecting agents in proliferation of antibiotic resistance in human pathogens in various environmental reservoirs.” 2020. ENVIRONMENT, WATER, AGRICULTURE, SUSTAINABILITY AND HEALTH (EWASH -2020) : EXPANDING OUR VISION POST COVID-19 . www.stenvironment.org</p>
<p>PATENTS (Total no.) 6</p>	<p>Details:</p> <ol style="list-style-type: none"> 1. Shoma Paul Nandi, Shubhi Mehrotra, Ashwani Kumar Srivastava: Antimicrobial activity of ethanolic extract of Solanum xanthocarpum to inhibit the growth of Vibrio cholerae (Patent File No. 1632/Del/2009) 2. Shoma Paul Nandi, Shubhi Mehrotra, Ashwani Kumar Srivastava 1635/DEL/2009 Antimicrobial activity of ethanolic extract of Cleome viscosa to inhibit the growth of the pathogenic bacterium, Vibrio cholerae (Patent File No. 1635/DEL/2009) 3. Shoma Paul Nandi, Shubhi Mehrotra, Dr. Asish Kumar Mukhopadhyay, Dr. Ashwani Kumar Srivastava: A Bioactive Datura extract to inhibit the growth of Helicobacter pylori (Patent File No. 2469 /Del/2011) 4. Shoma Paul Nandi, Angana Payne, Dr. Asish Kumar Mukhopadhyay, Dr. Ashwani Kumar Srivastava: A bioactive extract of Euphorbia thymifolia plant to inhibit the growth of Vibrio cholera (Patent File No. 2636/DEL/2011) 5. Shoma Paul Nandi, Angana Payne, Dr. Asish Kumar Mukhopadhyay, Dr. Ashwani Kumar Srivastava A novel composition and method of preparation of the composition to inhibit the growth of pathogenic bacterium, Vibrio cholerae (Patent File No.2667/DEL/2011) 6. Shoma Paul Nandi, Shubhi Mehrotra, Asish Kumar Mukhopadhyay and Kshipra Misra, Quercetin isolated from Datura metel has anti- helicobacter pyloric activity (Patent File No.2741 /Del/2012)
<p>AWARDS & HONOURS/ DISTINCTIONS</p>	<ul style="list-style-type: none"> ❖ Merit scholarship during B.Sc. and M.Sc. from State Bank of India ❖ First class first position from Dibrugarh University in B.Sc. ❖ First class first position and gold medalist from Gauhati University in M.Sc.

	<ul style="list-style-type: none">❖ GATE Qualified (1993).❖ CSIR JRF and SRF fellowship during Ph.D.❖ National Biotechnology Fellowship for Post-doctoral research in Indian Institute of Science, Bangalore.
MEMBERSHIP with Professional/ Academic bodies	Live member of “Save The Environment”. (A SOCIETY FOR RESEARCH, AWARENESS & SOCIAL DEVELOPMENT) (Reg. No. S/66/489 of 1990-91)