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RESEARCH INTERESTS

Currently my lab aims to elucidate the basic principles that govern interactions within the gastric microbiota and between the microbiota and the host. Specifically, we are exploring the effects of perturbations in the gastric environment, such as changes in diet, microbial community composition, pathogen exposure, host genotype. To pursue these aims, we apply systems approaches and use genetic tools for the host and microbes to gain mechanistic insight into emergent properties of the host-microbial superorganism. My research team is also particularly interested on the genetic diversity, population genetics and genome evolution of *Helicobacter pylori* and to elucidate the mechanisms of susceptibility and resistance to drugs used against *Helicobacter pylori*.

EDUCATIONAL QUALIFICATIONS:

Name of College / University	Degree	Year
Calcutta University	B.Sc	2000
Kalyani University	M.Sc	2002
National Institute of Cholera and Enteric Diseases, Kolkata	PhD	2008

Title of Ph.D. thesis: Molecular characterization of *Helicobacter pylori* strains isolated from patients suffering from different gastroduodenal diseases in Kolkata, India

EXPERIENCE (in chronological order)

Designation	Type of post held (teaching/ research)	Name of the Institute	Year (From – To)
Professor	Teaching and Research	Amity Institute of Biotechnology, Noida	2024-Till Date
Associate Professor	Teaching and Research	Amity Institute of Biotechnology, Noida	2017-2024
Assistant Professor III	Teaching and research	Amity Institute of Biotechnology, Noida	2010- 2017
Senior Lecturer	Teaching and research	Amity Institute of Biotechnology, Noida	2009-2010
Lecturer	Teaching and research	Amity Institute of Biotechnology, Noida	2007-2009
Guest Lecturer	Teaching	Jamia Milia Islamia, New Delhi	2006-2007

No. of Ph.D. students supervised	Awarded: (no. only)-02
	Ongoing: (no. only)02
No. of M.Tech. Students supervised:	14
No. of B.Tech. Students supervised:	50
PUBLICATIONS- TOTAL = 77 (42 original articles, 35 abstracts published)	<ol style="list-style-type: none"> 1. Valentina Gehlot, Akshita Mathur, Kunal Das, Shweta Mahant, Rajashree Das. No association between <i>Helicobacter pylori</i> and Gastroesophageal reflux disease: A comprehensive risk factor analysis in North Indian patients. Biomedical and Biotechnology Research Journal (BBRJ) 8 (2), 243-250. Impact Factor: 1.4 2. Shweta Mahant, Sarika Singh, Sangitanjan Dutta, Nisha Sharma, Prasenjit Das, Asish Kumar Mukhopadhyay, Kunal Das, Rajashree Das. High prevalence of cagA positive Vac A s1m1 <i>Helicobacter pylori</i> strains isolated from patients suffering from various gastroduodenal diseases in Guwahati, Assam, India. Accepted in Indian Journal of Pathology and microbiology. June 4, 2024. DOI: 10.4103/ijpm.ijpm_1002_23 Impact factor- 1 3. Sharma Prateek, Sarika Singh, Aditya Vikram Singh, Kunal Das, Yogendra Bhaskar , Isha Goel, Harpreet Singh, Rajashree Das. Alteration of gastric microbiota in <i>Helicobacter pylori</i> infected individuals suffering from GERD, DU, and gastritis. Indian journal of pathology and microbiology. 2024. Doi: 10.4103/ijpm.ijpm_1015_23. Impact factor-1 4. Safiya Arfi, Prateek Sharma, Mithun Kumar, Shubham Mehra, Kunal Das, Rajashree Das, Ashwini Setya. Antibiotic susceptibility pattern of <i>Helicobacter pylori</i> against eight antibiotics: A study from North India. <i>Helicobacter</i>. 2023. DOI:10.1111/hel.13093. Impact factor-4.2 5. Sarika Singh, Amreesh Kumar Sharma, Anup Som, Valentina Gehlot, Shweta Mahant, Prateek Sharma, Kunal Das, Rajashree Das. Molecular characterization and phylogenetic analysis of babA gene of <i>Helicobacter pylori</i> isolated from Indian patients with gastrointestinal diseases. <i>Gene</i>. 2024 May 3;920:148526. doi: 10.1016/j.gene.2024.148526. Epub ahead of print. PMID: 38703866. Impact factor-3.5 6. Akshita Mathur, Prateek Sharma, Kunal Das, Tarini Shankar Ghosh, Yogendra Bhaskar, Isha Goel, Harpreet Singh, Rajashree Das. Aging-related alterations in gastric microbiota: A potential contributor to gastrointestinal diseases. <i>Journal Of Preventive, Diagnostic And Treatment Strategies In Medicine</i>. 2024.

7. Aditya Vikram Singh, Prateek Sharma, Kunal Das, Yogendra Bhaskar, Isha Goel, Harpreet Singh, **Rajashree Das**. Alteration in the gastric microbiota of erosive reflux disease and non-erosive reflux disease patients: An indicator for disease progression. *Biomedicine*: 2024; 44(1): 79-88 January-March 2024. <https://doi.org/10.51248/v44i1.4154>
8. Spriha Dutta, Surbhi Jain, Kunal Das, Prasant Verma, Anup Som, **Rajashree Das**. Primary antibiotic resistance of *Helicobacter pylori* in India over the past two decades: A systematic review. *Helicobacter*. 28 Feb 2024. 29:e13057. [10.1111/hel.13057 \(https://pubmed.ncbi.nlm.nih.gov/38415810/\)](https://pubmed.ncbi.nlm.nih.gov/38415810/). **Impact factor-4.2**
9. Safiya Arfi, Prateek Sharma, Kunal Das, Yogendra Bhaskar, Isha Goel, Harpreet Singh and Rajashree Das. Low abundance of healthy bacteria in the gastric microbiota can be a potential biomarker for gastrointestinal diseases: A pilot study. *Indian J Med Res*. 159 p-254-258. 2024. DOI: 10.4103/ijmr.ijmr_864_23. Impact factor: 5.5 (https://journals.lww.com/ijmr/fulltext/2024/02000/low_abundance_of_healthy_bacteria_in_the_gastric.15.aspx). **Impact factor-4.2**
10. Akshita Mathur, Kunal Das, Valentina Gehlot, Shweta Mahant, Sangitanjan Dutta, asish Kumar Mukhopadhyay and **Rajashree Das**. Gastritis in Northeast India and North India: A Regional Comparison of Prevalence and Associated Risk Factors. *Biomed Biotechnol Res J*. 2024. Impact factor: 1.4 (https://journals.lww.com/bbrj/fulltext/2024/08010/gastritis_in_northeast_india_and_north_india_a.10.aspx). **Impact factor-1.4**
11. Sharma P, Phatak SM, Warikoo P, Mathur A, Mahant S, Das K, Das R. Crosstalk between *Helicobacter pylori* and gastrointestinal microbiota in various gastroduodenal diseases-A systematic review. *3 Biotech*. 2023 Sep;13(9):303. doi: 10.1007/s13205-023-03734-5. Epub 2023 Aug 14. PMID: 37588796; PMCID: PMC10425313. **Impact factor-2.8**
12. Prateek Sharma, Sarika Singh, Kunal Das, Shweta Mahant, **Rajashree Das**. Dysbiosis of gut microbiota due to diet, alcohol intake, body mass index, and gastrointestinal diseases in India. *Applied Microbiology and Biotechnology*. March 16, 2023. 107 (2547-2560). Impact factor 5.5 (<https://pubmed.ncbi.nlm.nih.gov/36929191/>). doi: 10.1007/s00253-023-12470-y. Epub 2023 Mar 16. PMID: 36929191
13. Bipul Chandra Karmakar, Sangita Paul, Surajit Basak, Manisha Ghosh, Piyali Mukherjee, Rajashree Das, Sujit

Chaudhuri, Shanta Dutta and Asish Kumar Mukhopadhyay. Development and evaluation of a simple PCR assay and nested PCR for rapid detection of clarithromycin-resistant *Helicobacter pylori* from culture and directly from the biopsy samples in India. Gut Pathogens (2023) 15:7 <https://doi.org/10.1186/s13099-023-00530-7>. **Impact factor** -4.2

14. Sarika Singh, Prateek Sharma, Shweta Mahant, Kunal Das, Anup Som, **Rajashree Das**. Analysis of functional status of genetically diverse OipA gene in Indian patients with distinct gastrointestinal disease. Current Microbiology, 13 Dec 2023. Impact factor-2.3 (<https://pubmed.ncbi.nlm.nih.gov/36512098/>). **Impact factor-2.6**
15. Nisha Sharma, Prasenjit Das, **Rajashree Das**, Shweta Mahant, Mani Kalaivani , Rajni Yadav, Madhu Rajeshwari , Saurav Kedia , Govind K Makharia , Anoop Saraya , Siddhartha D Gupta , Vineet Ahuja. Correlation of Helicobacter pylori virulence genotype & severity of mucosal inflammation in gastric biopsies from two geographically diverse regions in India. Indian J Pathol Microbiol.2022;65:535-44.
16. Ray AK, Luis PB, Mishra SK, Barry DP, Asim M, Pandey A, Chaturvedi M, Gupta J, Gupta S, Mahant S, **Das R**, Kumar P, Shalimar, Wilson KT, Schneider C and Chaturvedi R (Dec 2021) Curcumin Oxidation Is Required for Inhibition of Helicobacter pylori Growth, Translocation and Phosphorylation of Cag A. Front. Cell. Infect. Microbiol. 11:765842. doi: 10.3389/fcimb.2021.765842. Impact Factor-4.83 . .
17. Shweta Mahant, Amlan Chakraborty, Anup Som, Shubham Mehra, Kunal Das, Asish Kumar Mukhopadhyay, Valentina Gehlot, Sudeep Bose and **Rajashree Das**. The Synergistic Role of Tip α , Nucleolin and Ras in Helicobacter pylori Infection Regulates the Cell Fate Towards Inflammation or Apoptosis. Current Microbiology, Sep 2021. 78:3720-3732. Impact Factor- 2.16
18. Mahant S, Mehra S, Chhawchharia A, Karmakar BC, Paul S, Mukhopadhyay AK, Bose S, Das K, **Das R**. Prevalence of tumor necrosis factor alpha inducing protein (*tifa*) gene of *Helicobacter pylori* and its association with upper gastrointestinal diseases in India. 3 Biotech. 2021 May;11(5):246. doi: 10.1007/s13205-021-02804-w. Epub 2021 Apr 30. PMID: 33968589; PMCID: PMC8087736. Impact Factor 2.45
19. Manoj Kumar, Prachi Goyal*, Zafar Mehmood, Prateek Sharma, Rajashree Das, Kunal Das and Shweta Mahant. Potential of Plumbago zeylanica to develop as a drug against Helicobacter pylori. Plant Cell Biotechnology and Molecular Biology.2021. 21. 38-43. Impact Factor- 0.4
20. Kumar,Manoj, Goyal Prachi, Mehmood Zafar, Sharma Prateek and Das Rajashree & Das, Kunal & Mahant, Shewta. (2021). Exploring an Indian Herb Sphaeranthus indicus for

- Antimicrobial Efficacy against *Helicobacter pylori* and Effect of Combination Therapy against Drug Resistant Human Pathogens. *Int. Journal of Pharmaceutical Sciences and Medicine (IJPSM)*, Vol.6 Issue. 1, January- 2021, pg. 51-74
21. Shafi, S., **Das, R.**, & Mukherjee, G. (2020). Association of *Helicobacter pylori* in causing stomach problems. ***Plant Cell Biotechnology and Molecular***. 21(17-18), 83-88
 22. Manoj Kumar, Prachi Goyal, Zafar Mehmood, Prateek Sharma, **Rajashree Das**, Kunal Das and Shweta Mahant. Potentials of *Plumbago zeylanica* to develop as a drug against *Helicobacter pylori*. ***Plant Cell Biotechnology and Molecular Biology***. 21(53&54):38-43; 2020.
 23. Saumya Das, Manas Kumar Das, **Rajashree Das**, Valentina Gehlot, Shweta Mahant, Papiya Mitra Mazumder, Sanjita Das, Neha Fallse, Vikas Kumare. Isolation, characterization of Berberine from *Berberis aristata* DC for eradication of resistant *Helicobacter pylori*. ***Biocatalysis and Agricultural Biotechnology***. Volume 26, July 2020, 101622. Impact Factor-0.9. DOI-<https://doi.org/10.1016/j.bcab.2020.101622>
 24. Pragadeeshwara R Rao, Shalini Sharma, Tithi Mehrotra, **Rajashree Das**, Ranjit Kumar, Rachana Singh, Indrajit Roy, Tinku Basu. Rapid Electrochemical Monitoring of Bacterial Respiration for Gram-Positive and Gram-Negative Microbes: Potential Application in Antimicrobial Susceptibility Testing. ***Analytical Chemistry***. 2020. Impact factor-6.4
 25. Shweta Mahant, Amresh Kumar Sharma, Valentina Gehlot, Asish Kumar Mukhopadhyay, Ayushi Chhawchharia, Sangitanjan Dutta, Anil Agarwal, Anup Som, Kunal Das, **Rajashree Das**. Geographically distinct North-East Indian *Helicobacter pylori* strains are highly sensitive to Clarithromycin but are Levofloxacin resistant. *Indian Journal of Medical Microbiology.*, 2019; 37:337-44.
 26. Shweta Mahant, Valentina Gehlot, Seema Bhatnagar, Megha Rikhi, Asish Kumar Mukhopadhyay, Sangitanjan Dutta, Anil Agarwal, Kunal Das, **Rajashree Das**. AntibioGram profiling of *Helicobacter pylori* strains and the efficacy of *Brassica capitata* against resistant strains isolated from the patients suffering from gastroduodenal diseases in Guwahati, Assam. *Asian Journal of Pharmaceutical and Clinical Research.*, 2018; 11 (8)76-180. ISSN: 2455-3891. Impact factor-0.7
 27. Shweta Mahant, Valentina Gehlot, Shanu Hoda, Pooja Vijayaraghavan, W. Selvamurthy, N. Thirumurthy and **Rajashree Das**. *Morinda coreia* has an anti-*Helicobacter pylori* effect against the multi drug resistant clinical Isolate of North-East India. *Asian Journal of Pharmaceutical and Clinical Research*. 2018; 11(12) 143-148. ISSN: 2455-3891. Impact Factor-0.7
 28. Yu-Ting Kuo, Jyh-Ming Liou, Emad M El-Omar, Jeng-Yih Wu, Alex Hwong Ruey Leow, Khean Lee Goh, **Rajashree Das**, Hong Lu, Jaw-Town Lin, Yu-Kang Tu, Yoshio Yamaoka, Ming-Shiang Wu. Primary antibiotic resistance in *Helicobacter pylori* in the Asia-Pacific region: a systematic review and meta-analysis. ***The Lancet: Gastroenterology and***

Hepatology. 2017; 2(10)707-715. Impact Factor-45.

29. Valentina Gehlot, Shweta Mahant, Asish Kumar Mukhopadhyay, Kunal Das, Jawed Alam, Prachetash Ghosh, **Rajashree Das**. Low prevalence of clarithromycin-resistant *Helicobacter pylori* isolates with A2143G point mutation in the 23S rRNA gene in North India. *Journal of Global Antimicrobial resistance*. 2016; 6, 39-43. Impact Factor- 4.3, Citation-3, ISSN: 2213-7165.
30. Valentina Gehlot, Shweta Mahant, Pooja Vijayraghwan, Kunal Das, Shanu Hoda, **Rajashree Das**. Therapeutic potential of lichen *Parmelia perlata* against the dual drug resistant *Helicobacter pylori*. *International Journal of Pharmacy and Pharmaceutical Sciences* 2016; 8(1). Citation 4. Impact Factor- 0.5, ISSN - 0975 - 1491
31. Valentina Gehlot, Shweta Mahant, , Kunal Das, **Rajashree Das**. Most of the *Helicobacter pylori* isolates are resistant to levofloxacin in North India. *International Journal of Pharmacy and Pharmaceutical Sciences* 2016; 8(1) 454-456. ISSN - 0975 – 1491.
32. Valentina Gehlot, Shweta Mahant, Asish Kumar Mukhopadhyay, Kunal Das, Ronita De, Premashis Kar, **Rajashree Das**. Antimicrobial susceptibility profiles of *Helicobacter pylori* isolated from patients in North India. *Journal of Global Antimicrobial resistance* 2016; 5, 51-56. Citation 3, Impact factor- 4.3.
33. Silpi Chanda, Valentina Gehlot, **Rajashree Das**, Shweta Mahant, Kunal Das, Kuldeep Singh, Sayeed Ahmad. Antimicrobial activity of herbal extract against drug resistant *H. pylori* isolated from India. 2014. *World Journal of Pharmaceutical Research*. Vol. 3, Issue 4.
34. Narender Kumar, Asish Mukhopadhyay, **Rajashree Patra**, Ronita De, Ramani Baddam, Sabiha Shaik, Jawed Alam, Tiruvayipati Suma, and Niyaz Ahmed. Next generation sequencing and analysis of the genomes of two *Helicobacter pylori* isolates from duodenal ulcer patients in India: de-novo assembly, genome organization and comparative genomics. **2012. Journal of Bacteriology**. 194 (21) 5963-5964. Citation:9. Impact factor- 3.2. ISSN- 0021-9193. DOI 10.1128/JB.01371-12
35. **Rajashree Patra**, Santanu Chattopadhyay, Ronita De, Prachetash Ghosh, Abhijit Chowdhury, T. Ramamurthy, G. Balakrish Nair, and Asish K. Mukhopadhyay. **2012** Multiple infection and microdiversity among *Helicobacter pylori* isolates in a single host in India. **PLoS One**. 7(8):e43370. Citation: 28. Impact factor-3.2. ISSN - 1932-6203
36. Chattopadhyay S, **Patra R**, Chatterjee R, De R, Alam J, Ramamurthy T, Chowdhury A, Nair GB, Berg DE, Mukhopadhyay AK. **2012** Distinct repeat motifs at the C-terminal region of Cag A of *Helicobacter pylori* strains isolated from diseased patients and asymptomatic individuals in West Bengal, India. **Gut Pathog**. 25; 4(1):4. Citation:14. Impact factor- 2.8. ISSN- 1757-4749

37. Mehrotra, S., R. Jamwal, R. Shyam, D. K. Meena, K. Mishra, **R. Patra**, R. De, A.K. Mukhopadhyay, A.K. Srivastava, S. Paul Nandi. **2011**. Anti-*Helicobacter pylori* and antioxidant properties of *Embllica officinalis* pulp extract; a potential source for therapeutic use against gastric ulcer. **J Med Plants Res.** 5(12) :2577-2583. Citation:16. Impact factor-0.6. ISSN-1996-0875
38. **Patra R.**, S. Chattopadhyay, R. De, S. Datta, A. Chowdhury, T. Ramamurthy, G. B. Nair, D. E. Berg, and A. K. Mukhopadhyay. **2011**. Intact *cag* Pathogenicity Island of *Helicobacter pylori* without Disease Association in Kolkata, India. **Int. J Med Microbiol.** 301:293-302. Citation:14. Impact Factor-4.17. ISSN- 1438-4221
39. Saha D. R., S. Datta, S. Chattopadhyay, **R. Patra**, R. De, K. Rajendran, A. Chowdhury, T. Ramamurthy, and A. K. Mukhopadhyay. **2009**. Indistinguishable cellular changes in gastric mucosa between *Helicobacter pylori* infected asymptomatic tribals and duodenal ulcer patients. **World J. Gastroenterology.** **15**:1105-1112. Citation:9. Impact Factor: 2.8
40. Kundu P, A.K. Mukhopadhyay, **R. Patra**, A. Banerjee, D.E. Berg, and S. Swarnakar. **2006**. Cag pathogenicity island-independent up-regulation of matrix metalloproteinases-9 and -2 secretion and expression in mice by *Helicobacter pylori* infection. **J. Biol. Chem.** **281**: 34651-34662. Citation: 53. Impact Factor:5.8
41. Datta, S., S. Chattopadhyay, **R. Patra**, R. De, T. Ramamurthy, J. Hembram, A. Chowdhury, S.K. Bhattacharya, D.E. Berg, G.B. Nair, and A.K. Mukhopadhyay. **2005**. Most *Helicobacter pylori* strains of Kolkata in India are resistant to metronidazole but susceptible to other drugs commonly used for eradication and ulcer therapy. **Aliment. Pharmacol. Ther.** **22**: 51-57. Citation-63. Impact Factor: 5.7
42. Chattopadhyay, S., **R. Patra**, T. Ramamurthy, A. Chowdhury, A. Santra, G. K. Dhali, S.K. Bhattacharya, D.E. Berg, G.B. Nair, and A.K. Mukhopadhyay. **2004**. Multiplex PCR assay for rapid detection and genotyping of *Helicobacter pylori* directly from biopsy specimens. **J. Clin. Microbiol.** **42**: 2821-2824. Citation:72. Impact Factor: 4.2

ABSTRACTS

INTERNATIONAL

43. Kunal Das, **Rajashree Das**, Harpreet Singh, Isha Goel, Yogendra Bhaskar, Prateek Sharma, Safiya Arfi. Loss of healthy bacteria in the gastric microbiota: Can it be an early biomarker for upper gastrointestinal disease? 64th Annual Conference of the Indian Society of Gastroenterology – ISGCON 2023 - December 21st-24th, 2023, Bengaluru. Indian Journal of Gastroenterology (December 2023) 42 (Suppl 2):S125–S263. <https://doi.org/10.1007/s12664-023-01471-4>. **Impact factor-2**

44. Prateek Sharma, **Rajashree Das**, Harpreet Singh, Isha Goel, Yogendra Bhaskar, Kunal Das. Aditya Vikram Singh, Sarika Singh. Dysbiosis of gastric microbiota due to gender and different gastroin- testinal diseases. 64th Annual Conference of the Indian Society of Gastroenterology – ISGCON 2023 - December 21st-24th, 2023, Bengaluru. Indian Journal of Gastroenterology (December 2023) 42 (Suppl 2):S125–S263. <https://doi.org/10.1007/s12664-023-01471-4>. **Impact factor-2**
45. Kunal Das, **Rajashree Das**, Asish Kumar Mukhopadhyay , Prasenjit Das, Nisha Sharma, Sangitanjan Dutta, Sarika Singh, Shweta Mahant. Molecular characterization and histology of *Helicobacter pylori* using formalin fixed paraffin wax embedded tissue in patients with upper gastrointestinal diseases from North-East India. 64th Annual Conference of the Indian Society of Gastroenterology – ISGCON 2023 - December 21st-24th, 2023, Bengaluru. Indian Journal of Gastroenterology (December 2023) 42 (Suppl 2):S125–S263. <https://doi.org/10.1007/s12664-023-01471-4>. **Impact factor-2**
46. Warikoo Prisha, Sharma Prateek, Mahant Shweta, Das Kunal, Das Rajashree. Effect on gut microbiota due to lifestyle factors and gastrointestinal disease, among the north Indian patients. Indian Journal of Gastroenterology, Feb 2022. 41 (Suppl 1)S1-S194.
47. Phatak M Shravani, Sharma Prateek, Mahant Shweta, Das Kunal, Das Rajashree. Relation between gut microbiota and *Helicobacter pylori* status in gastroduodenal diseases. Indian Journal of Gastroenterology. Feb 2022.41 (Suppl 1)S1-S194.
48. Sarika Singh, Rajashree Das, Kunal Das. Prevalence of oipA and BabA genes and their correlation with virulent genes in GERD and Non GERd patients and their correlation with virulent genes in GERD and Non GERD patients. Indian Journal of Gastroenterology, Feb 2022. 41 (Suppl 1)S1-S194.
49. Sarika Singh, Rajashree Das, Kunal Das. The presence of outer inflammatory protein (OipA) of *Helicobacter pylori* in predicting Gastritis-A gender based study. Presented in Gastro 2021, Prague held on 9-11th Dec 2021.
50. Sarika Singh, Rajashree Das. Biomarker study for analysis of gastric cancer by *Helicobacter pylori*. 5th World cancer congress, 25-26 September, 2021.
51. Sharma, Prateek & Mahant, Shewta & Das, Rajashree & Das, Kunal. 2021. Effect of vegetarians and non-vegetarian diet on gut microbiota and gastrointestinal diseases among the Indian patients. Journal of Gastroenterology and Hepatology 36 (Suppl. 2) (2021) 74–283.
52. Prateek Sharma, Kunal Das, Rajashree Das, Shweta Mahant. Study of gut microbiota in gastro esophageal reflux disease

- with or without helicobacter pylori infection in India. Gastrointestinal endoscopy. 2020. Volume 91, No. 6S : 2020
53. Rajashree Das. A systematic review of primary antibiotic resistance of Indian *Helicobacter pylori* strains. Journal of Gastroenterology and Hepatology. Volume 34, Issue 53/p.72-582
54. Rajashree Das. Geographical Difference in the resistance of North and North East Indian *Helicobacter pylori* strains. Journal of Gastroenterology and Hepatology. 2019. Volume 34, Issue 53/p.72-582
55. Valentina Gehlot, Rajashree Das, Shweta Mahant, Kunal Das. GERD and Helicobacter pylori: Prevalence, characteristics of virulent genes of Helicobacter pylori and evaluation of lifestyle factors associated with GERD in North East India. Journal of Gastroenterology and Hepatology. 2019. Volume 34, Issue 53/p.72-582.
56. Shweta Mahant, Rajashree Das, Kunal Das. North-East Indian Helicobacter Pylori Strains are highly virulent than the North Indian strains. Journal of Gastroenterology and Hepatology. 2019. Volume 34, Issue 53/p.72-582.
57. Rajashree Das, Valentina Gehlot, Shweta Mahant, Asish Kumar Mukhopadhyay. Correlation of *Helicobacter pylori* virulent genes (*cagA*, *vacA* and *iceA*) with various clinical outcomes and GERD in North India. International Union of Microbial Societies, Singapore, 17th July -21st July, 2017.
58. V. Gehlot, S. Mahant, K. Das, R. Das Risk or lifestyle factors associated with Gastroesophageal Reflux Disease (GERD) in north India. *Helicobacter*. 2016; 21 (Suppl. 1): P10.01.
59. R. Das, V. Gehlot, S. Mahant, K. Das Virulent genes of *Helicobacter pylori* are not associated with clarithromycin resistance in north. *Helicobacter* 2016; 21 (Suppl. 1): P08.08.
60. P. Tyagi, K. Srivastava, S. Mahant, S. Bose and R. Das. "Edible vaccines for controlling *Helicobacter pylori* infection" at International seminar on Biosafety and Regulatory Affairs on GMOs and GE Plants', Amity institute of Biotechnology, Amity University, Noida, 9th Sep 2016.
61. Valentina Gehlot, Rajashree Das, Shweta Mahant, Seema Bhatnagar, Kunal Das, Megha Rikhi, Jyotika Swaraj "Antimicrobial activity of *Brassica oleracea* variety capitata (cabbage) against drug-resistant *Helicobacter pylori* isolates" in International Symposium on Role of Herbals in Cancer Prevention and Treatment held on February 09-10, 2016, School of Life Sciences, Jawaharlal Nehru University, New Delhi.
62. R. Das, V. Gehlot, S. Mahant, A.K. Mukhopadhyay and K. Das. "High prevalence of single, dual and multidrug resistant *Helicobacter pylori* infection in India" at XXVIIIth International workshop on Helicobacter and Microbiota in Inflammation and Cancer, Nicosia, Cyprus, September 24-26, 2015. *Helicobacter* Vol. 20 (Suppl. 1): P03.18.
63. V. Gehlot, S. Mahant, K. Das and R. Das. "Relationship

between *Helicobacter pylori* CagA, VacA gene status with clinical outcomes and association of cagA gene with more severe Gastro-Esophageal Reflux Disease in North India” at XXVIIIth International workshop on Helicobacter and Microbiota in Inflammation and Cancer, Nicosia, Cyprus, September 24-26, 2015. *Helicobacter* Vol. 20 (Suppl. 1): P05.07.

64. S. Mahant, **R. Das**, V. Gehlot, S. Dutta, K. Das, A. Mukhopadhyay, A. Aggarwal, S. Bartaria and V. Raina. “Genotyping and AntibioGram profiling of *Helicobacter pylori* strain from the patients suffering from various Gastrointestinal diseases in Guwahati, Assam” at XXVIIIth International workshop on Helicobacter and Microbiota in Inflammation and Cancer, Nicosia, Cyprus, September 24-26, 2015. *Helicobacter* Vol. 20 (Suppl. 1): P05.13.
65. Valentina Gehlot, **Rajashree Das**, Kunal Das, Shweta Mahant, Sheena Bartaria, Achal Gupta, AsishKumar Mukhopadhyay. Association of cagA gene of *Helicobacter pylori* with more severe Gastro esophageal reflux Disease in North India. Oral presentation at Afro Asian Congress on Microbs for Human and Environmental health, 29th Sep to Oct 1st , 2014 held at Amity University, Noida, U.P,India
66. **Rajashree Das**, Valentina Gehlot, Kunal Das, Asish Kumar Mukhopadhyay and Shweta Mahant. Gene mutations of 23S rRNA is associated with clarithromycin resistance in *Helicobacter pylori* strains isolated from North Indian patients. Digestive Disease Week (DDW), Orlando, Florida, May 18th to May 21st, 2013. *Gastroenterology* Vol. 144, Issue 5, Supplement 1, Pages S-337-S-338.
67. Valentina Gehlot, **Rajashree Das**, Shweta Mahant, Kunal Das, Sangitanjan Dutta, Asish Kumar Mukhopadhyay. “Comparative analysis of virulent gene of *Helicobacter pylori* from Delhi NCR and Guwahati, Assam” in Indraprastha International conference on Biotechnology IICB-2013 held on 22nd -25th October, 2013, New Delhi, India.
68. Y. Fujita, N. Ono, T. Takata, **R. Patra**, M. DeVelasco, H.Yokote, T. Arao, K. Matsumoto, M. Maegawa, K. Tanaka, H.Kaneda, Y. Abe, K. Nishio. Antitumor activity and mode of action of a unique interlocked molecule rotaxane. Abstract AACR, Japan, 2008.
69. S. Chattopadhyay, **R. Patra**, R. Chatterjee, R. De, T. Ramamurthy, A. Chowdhury, G. B. Nair, and A. K. Mukhopadhyay. Analysis of the 3’ end of cagA of *Helicobacter pylori* in India: Evidence for the evolution of this diverse human gastric pathogen. US-Japan Cholera Meeting, 2007
70. S. Chattopadhyay, **R. Patra**, R. De, A. Chowdhury, G. B. Nair, A. K. Mukhopadhyay. Correlation between distinct mosaic structure of the 3’end of the cagA gene in *Helicobacter pylori* and its biological activity in India. 11th Asian Conference on Diarrhoeal Diseases and Nutrition, 8-10 March 2006, Bangkok, Thailand.

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71. Valentina Gehlot , Shweta Mahant , Kunal Das, Asish Kumar Mukhopadhyay, **Rajashree Das** haracterization of *Helicobacter pylori* virulent genes and their correlation with clinical outcomes in gastroesophageal reflux disease in North India. Indian society of gastroenterology conference (ISGCON), Dec 15-18, 2016 at New Delhi (India).
72. Shweta Mahant, **Rajashree Das**, Valentina Gehlot, Kunal Das, Sangitanjan Dutta, Asish Kumar Mukhopadhyay. “Prevelence of *CagA* positive gene in Guwahati, Assam as compare to Delhi, NCR” at Biosangam 2013 held on 21st – 23rd November, 2013, Allahabad, U. P., India
73. Shweta Mahant, **Rajashree Das**, Sangitanjan Dutta, Valentina Gehlot, Asish Kumar Mukhopadhyay, Kunal Das. “ Genotyping of virulent gene of *Helicobacter pylori* from Guwahati, Assam” in 54th annual conference of the Indian society of gastroenterology 2013 at Ahemdabad (India).
74. **Rajashree Patra Das**, Kunal Das, Asish Kumar Mukhopadhyay, Valentina Gehlot, Ashish Tambi, Mallika, Shiva Joshi, Supratim Sen and A K Srivastava. *CagA* negative *H. pylori* strain is associated with grade A&B Gastro esophageal reflux disease (GERD) Presented at ISGCON, 2011. Received 3rd prize for poster presentation.
75. Rohitash, S. Mehrotra, S. Paul Nandi, **R. Patra**. Antibacterial activity of *Bacopa monnieri* against some pathogenic bacteria. Department of Biotechnology sponsored National seminar on ‘Biodiversity and Agribiotechnology’ to be held on April 25, 2009 at Jaypee Institute of Information Technology University, NOIDA, India.
76. Rohitash, S. Mehrotra, **R. Patra**, A. K Mukhopadhyay, A. K Srivastava, S. Paul Nandi. Screening of the plant extracts with anti-*Helicobacter pylori* activity. International Symposium on Novel Strategies for Targeted Prevention and Treatment of Cancer (Dec 19-20, 2008) at School of Life Sciences, Jawaharlal Nehru University (JNU), New Delhi, India.
77. **R. Patra**, A. Chowdhury and A. K. Mukhopadhyay. Multiple infection and microdiversity among *Helicobacter pylori* isolates in a single host in Kolkata, India. 93rd session of The Indian Science Congress, January 3rd-7th, 2006, Hyderabad, India.

<p>PATENTS (total no.) 4</p>	<p>Details: Complete patent filed on Antibacterial property of Green Seaweed <i>Chaetomorpha sp</i> against <i>Helicobacter Pylori</i>. Subhasha Nigam, Rajashree Das, Valentina Gehlot and Surbhi Sinha (Patent File No CRN 1073)</p> <p>Complete patent filed on “Methanolic extract of Anabaena 7120 showing antimicrobial activity against <i>Helicobacter pylori</i>. Subhasha Vigam and Rajashree Das (Patent File No: CRN 787).</p> <p>Complete Patent filed on, “A methanolic extract of Lichen Parmelia as a potent anti <i>Helicobacter pylori</i> agent”. Inventors: Rajashree Das, V Pooja, Hina Sanwal, Shweta Mahant and Seema Bhatnagar (CRN 808)</p> <p>Antimicrobial activity if aqueous extract of Aswagandha (<i>Withania somnifera</i>) to inhibit the growth of methicillin resistant <i>Staphylococcus aureus</i> Inventors: Shoma Paul Nandi, Shubhi Mehrotra, Ashwani Kumar Srivastava, Rajashree Das (Patent file No 857/Del/2009)</p>
<p>RESEARCH PROJECTS Completed: 4 Ongoing: 1</p>	<p>Ongoing Project as Co-Principal Investigator</p> <p>1. To study effect of Curcumin Cyclodextrin Inclusion complex to target CFTR protein as potentiator for treatment of Cystic Fibrosis. (Funded by Indian Council of Medical research) 2023-2026.</p> <p>Completed Projects as Principal Investigator</p> <ol style="list-style-type: none"> 1. The role of gut microbiota by Metagenomics study in Gastro esophageal reflux diseases (GERD) associated with or without <i>Helicobacter pylori</i> infection. (Funded by Department of Science and Technology) 2018-2022 2. Role of tumour necrosis factor alpha inducing protein in causing gastro duodenal diseases including gastric cancer. (Funded by Indian Council of Medical research) 2017-2021. 3. Role of <i>Helicobacter pylori</i> in causing Gastro Esophageal reflux diseases (GERD) in India (Funded by Department of Science and Technology) 2009-2012. 4. Comparative analysis of the <i>Helicobacter pylori</i> strains isolated from North East India with other parts of India in causing gastro-duodenal diseases. (Funded by Department of Biotechnology)- 2012-2014

<p>AWARDS & HONOURS/ DISTINCTIONS</p>	<ul style="list-style-type: none"> i. Awarded ICMR Shakuntala Amir Chand Prize, 2016 from Indian council of Medical Research, Government of India. ii. Received international travel award from DST, INSA to attend International Union of Microbial Societies, Singapore, 17th July- 21st July, 2017. iii. Received international travel award from DST, DBT, CSIR and AUUP to attend Digestive Disease Conference in the year 2013. iv. Received international travel award from DBT – 2013 v. Received third prize in poster presentation at ISGCON, 2011 vi. Received the Young Scientists Award in Medical Section (including physiology) from the President of India Dr. A.P.J. Abdul Kalam at the 93rd Indian Science Congress held at Hyderabad, 3rd-7th January 2006. vii. Received National Talent Search Examination award (NTSCE) , 1994 viii. Qualified NET - 2003 ix. Qualified GATE - 2003 x. Qualified ICMR- 2003
<p>MEMBERSHIP with Professional/ Academic bodies</p>	<p>Indian Society for Gastroenterology Indian Science Congress</p>