

## **Dr. Amitabha Bhattacharjee**

Assistant Professor

Department of Microbiology

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### **Academic profile (Bachelor degree onwards)**

- Bachelor of Science (B. Sc) in Zoology Honors in 2000 from Assam University, Silchar, India
- Master of Science (M. Sc.) in Applied Microbiology in 2003 from University of Madras, Chennai, India
- Ph.D. in Microbiology in 2008 from Department of Microbiology, Institute of Medical Sciences, Banaras Hindu University, Varanasi, India
- Post Doctoral (DBT CREST Associate) in Division of Microbial Diseases, Eastman Dental Institute, University College London, UK in 2011
- Post Doctoral (DBT Overseas Associateship 2016) in Service de Bactériologie, Faculty de Medicine, Universite Paris Sud, Paris, France 2016
- ICMR International fellowship for young biomedical scientist 2018-19 at University of Cambridge, UK

### **Career Profile**

- ☐ **Assistant Professor**, Department of Microbiology, Assam University, Silchar from 27<sup>th</sup> October 2009 till date.
- ☐ Consultant **Microbiologist**, Microbiology-New Drug Discovery, Orchid Research Laboratories, Sholinganallur, Chennai from 1<sup>st</sup> November 2008 to 30<sup>th</sup> April 2009.
- ☐ **Senior Research Fellow**, Department of Microbiology, Institute of Medical Sciences, Banaras Hindu University, Varanasi from 5<sup>th</sup> May 2007 to 20<sup>th</sup> October 2008.
- ☐ **Junior Research Fellow** Department of Microbiology, Institute of Medical Sciences, Banaras Hindu University, Varanasi from 5<sup>th</sup> May 2005 to 4<sup>th</sup> May 2007.
- ☐ **Lecturer**, Department of Microbiology, Gurunanak Institute of Dental Science and Research, Panihati, Kolkata from 24<sup>th</sup> March 2004 to 28<sup>th</sup> February 2005.

### **Awards/ Academic Achievements**

- ICMR International Fellowship for Young Biomedical Scientist 2018-19
- DBT Overseas Associateship 2016
- Young Investigator Award by Asia Pacific Foundation for Infectious Diseases, in ISAAR 2013 in Kuala Lumpur, Malaysia
- DBT-CREST award 2010-2011
- Qualified CSIR – UGC – NET for JRF in June 2004
- Qualified GATE in 2005, conducted by IIT Bombay, Mumbai

### **Reviewer of Journals**

- Clinical Microbiology and Infection

- Journal of Antimicrobial Chemotherapy
- PlosOne
- Microbial Drug Resistance
- Annals of Clinical Microbiology and Antimicrobials
- Journal of Infection and Public Health
- BMC Microbiology
- BMC Biotechnology
- Frontiers in Microbiology
- Future Microbiology
- FEMS Microbiology Letter

#### Research Interest

- Phenotypic and genotypic characterization of beta- lactamases
- Genetics of antibiotic resistance
- Study of gene cassettes and phenotypic marker of gene cassette in relation with antibiotic resistance
- Hospital infection control, mechanism of horizontal transmission of drug resistant determinants in hospital environment

#### On going/completed research Project:

S. No.	Title of Project	Funding Agency	Amount (INR)	Date of sanction and Duration
1.	Molecular characterization of Extended Spectrum beta-lactamase, their genetic environment and association with mobile genetic elements in clinical isolates of Gram negative bacilli.	University Grants Commission	Rs. 9, 61,300/-	04.07.2011 (Three years)
2.	Molecular characterization of the emerging beta-lactamases in Gram negative bacilli.	DBT, Govt. of India (NER Twining scheme)	Rs. 100,51000/-	15.11.2011 (Three years)
3.	Molecular analysis of gene cassette and their correlation with phenotypic marker in multidrug resistant enterobacterial isolates.	SERB, DST, Govt. of India under Fast Track Young Scientist Scheme	Rs. 25,000,00/-	08.01. 2013 (Three years)
4.	Molecular analysis of efflux pump mediated antibiotic resistance in Gram negative bacilli.	DBT, Govt. of India (NER Twining scheme)	Rs. 87,65,000/-	19.02.2014 (Three years)
5.	Analysis of genetic environment and mobile elements associated with carbapenamase gene in multidrug resistant gram negative bacilli.	CSIR	Rs.16,54,400/-	01.01.2015 (Three years)
6.	Molecular insight in to heterogenic resistance and vancomycin creep in <i>Staphylococcus aureus</i> : Optimization of a diagnostic screening marker.	CSIR	3000,880/-	24.07.2017 (Three years)
7	Molecular insight in to Staphylococcal Chromosomal Cassette mec (SCCmec):	DBT	3129600/-	2.8.2017 (Three years)

	Using an epidemiological marker for molecular diagnostics			
8.	Genetic insight in to MLSb resistance in <i>Staphylococcus aureus</i> and identifying a heterogenic resistance marker for diagnostic screening	SERB	2839075/-	04.10.2018 (Three years)
9.	Use of fluorescence foldscope in detection of biofilm formation and their analysis with transcriptomic background of bacteria	DBT	800000/-	11.03.2018 (One year)
10.	Diagnostics for One Health and User Driven solutions for AMR	DBT	39,75600/-	04.09.2018 (Three years)
11.	Molecular analysis of emerging carbapenem hydrolyzing class D beta-lactamases (CHDLs) in Gram negative bacteria and their control using antiplasmid compound	DBT	51,85600/-	28.09.2018 (Three years)

#### Workshop/CME attended

Attended workshop on "**Emerging antimicrobial resistance, Real time PCR, and tissue culture techniques**" held in SGPGIMS, Lucknow in November 2006

#### Papers published (93)

1. Bhaskar Jyoti Das, Jayalaxmi Wangkheimayum, K. Melson Singha, Deepshikha Bhowmik, Debadatta Dhar (Chanda), Amitabha Bhattacharjee. Propagation of *bla<sub>KPC-2</sub>* within two sequence types of *Escherichia coli* in a tertiary referral hospital of northeast India. *Gene reports* 2021; 24:101283.
2. Nargis Alom Choudhury, Deepjyoti Paul, Bhaskar Jyoti Das, Debadatta Dhar Chanda, **Amitabha Bhattacharjee**. Adaptation of IncX3 Plasmid Encoding *bla<sub>NDM-4</sub>* within A Broad Host Range. *Journal of Microbiology and Infectious Diseases* 2021; 2021; 11 (2):8-14
3. Deepjyoti Paul, Nurjhan Begum Mazumder, Jayalaxmi Wangkheimayum, **Amitabha Bhattacharjee**, Report of a carbapenemase gene *bla<sub>IMP-4</sub>* in multi-drug resistant *Escherichia coli* from sewage water: A threat on clinical-environmental interphase. *Indian Journal of Medical Microbiology*, <https://doi.org/10.1016/j.ijmmb.2021.04.010>
4. Somorita Baishya, Chandrayee Deshamukhya, Jayalaxmi Wangkheimayum, Bhaskar Jyoti Das, Anand Anbarasu, Anupam Das Talukdar, Amitabha Bhattacharjee, Manabendra Dutta Choudhury. Transcriptional expression of secondary resistance genes *ccdB* and *repA2* is enhanced in presence of cephalosporin and carbapenem in *Escherichia coli*. *BMC Microbiology* 2021. 21:79
5. Tuhina Banerjee, Jayalaxmi Wangkheimayum, Swati Sharma, Ashok Kumar, Amitabha Bhattacharjee. Extensively drug resistant hypervirulent *Klebsiella pneumoniae* from a series of neonatal sepsis in a tertiary care hospital, India. *Frontiers in Medicine* 2021. 8:645955

6. Deepshikha Bhowmik. Shiela Chetri. Bhaskar Jyoti Das. Debadatta Dhar Chanda. Amitabha Bhattacharjee. Distribution of virulence genes and SCCmec types among Methicillin-resistant *Staphylococcus aureus* of clinical and environmental origin: A study from the community of Assam, India. *BMC Research Notes* 2021. 14:58
7. Deepshikha Bhowmik· Shiela Chetri· Piyush Pandey· Bhaskar Jyoti Das· Jayalaxmi Wangkheimayum· Nargis Alom Choudhury. K. Melson Singha· Debadatta Dhar Chanda· Amitabha Bhattacharjee. Expressional Pattern of *psm-mec* System in Methicillin-Resistant *Staphylococcus aureus* Under Oxacillin Stress. *Current Microbiology* 2021. <https://doi.org/10.1007/s00284-020-02336-1>
8. Pijush C Dey, Birson Ingti, Amitabha Bhattacharjee, Manabendra Dutta Choudhury, Ratan Das, Siddhartha S Nath. Enhancement of antibacterial activity of synthesized ligand-free CdS nanocrystals due to silver doping. *Journal of Basic Microbiology* 2020; 1-10. DOI: 10.1002/jobm.202000296
9. Chandrayee Deshamukhya, Bhaskar Jyoti Das, Shiela Chetri, Deepjyoti Paul, Debadatta Dhar Chanda , Tuhina Banerjee , Amitabha Bhattacharjee. Use of fluorescence foldscope as an effective tool for detection of biofilm formation in *Pseudomonas aeruginosa*. *Indian J Med Microbiol* 2020;38:397-400.
10. Deepjyoti Paul, Debadatta Dhar, Atanu Chakravarty, **Amitabha Bhattacharjee**. Transcriptional Analysis of IncFrepB-Mediated *bla*<sub>OXA-48</sub>-Positive Plasmid Characterized from *Escherichia coli* ST448. *Microbial Drug Resistance* 2020. DOI: 10.1089/mdr.2019.0486
11. Jayalaxmi Wangkheimayum, Mohana Bhattacharjee, Bhaskar Jyoti Das, K Melson Singha, Debadatta Dhar Chanda, **Amitabha Bhattacharjee**. Expansion of acquired 16S rRNA methyltransferases along with CTX-M-15, NDM and OXA-48 within three sequence types of *Escherichia coli* from northeast India. *BMC Infectious Diseases* 2020. 20:544. <https://doi.org/10.1186/s12879-020-05264-4>
12. Jayalaxmi Wangkheimayum, Trisha Datta Mazumder, Yasmin Begam Tapadar, Bhaskar Jyoti Das, Deepjyoti Paul, Debadatta Dhar, **Amitabha Bhattacharjee**. Occurrence of diverse aminoglycoside modifying enzymes with co-existing extended-spectrum- $\beta$ -lactamases within Enterobacteriaceae isolated in India. *Journal of Global Antimicrobial Resistance* 2020; 21: 369-374.
13. Nargis Alom Choudhury, Deepjyoti Paul, Bhaskar Jyoti Das, Debadatta Dhar(Chanda), **Amitabha Bhattacharjee**. Adaptation of *bla*<sub>NDM</sub> through IncP plasmid within broad host range. *Indian Journal of Medical Microbiology* 2020; 37:527-30.
14. Birson Ingti, Supriya Upadhyay, Monalisha Hazarika, Annie Bakorlin Khyriem, Deepjyoti Paul, Prithwis Bhattacharya, S.R. Joshi, Debajyoti Bora, Debadatta Dhar (Chanda), **Amitabha Bhattacharjee**. Distribution of carbapenem resistant *Acinetobacter baumannii* with *bla*<sub>ADC-30</sub> and induction of ADC-30 in response to beta-lactam antibiotics. *Research in Microbiology* 2020. <https://doi.org/10.1016/j.resmic.2020.01.002>.

15. Shiela Chetri, Bhaskar Jyoti Das, Deepshikha Bhowmik , Debadatta Dhar Chanda, Atanu Chakravarty, **Amitabha Bhattacharjee**. Transcriptional response of mar, sox and rob regulon against concentration gradient carbapenem stress within Escherichia coli isolated from hospital acquired infection. *BMC Research Notes* 2020. 13:168, <https://doi.org/10.1186/s13104-020-04999-2>
16. Deepjyoti Paul, Debadatta Dhar Chanda, Atanu Chakravarty, **Amitabha Bhattacharjee**. An insight into analysis and elimination of plasmids that encodes metallo- $\beta$ -lactamases in Pseudomonas aeruginosa. *Journal of Global Antimicrobial Resistance* 2020;21(2020):3-7. <https://doi.org/10.1016/j.jgar.2019.09.002>
17. Varsha Rani Gajamer, **Amitabha Bhattacharjee**, Deepjyoti Paul, Birson Ingti, Arunabha Sarkar, Jyotsna Kapil, Ashish Kumar Singh, Nilu Pradhan, Hare Krishna Tiwari. High prevalence of carbapenamase genes, AmpC genes and aminoglycoside resistance genes in extended spectrum  $\beta$ -lactamase positive uropathogens from Northern India. *Journal of Global Antimicrobial Resistance* 2020. <https://doi.org/10.1016/j.jgar.2019.07.029>
- 18.
19. Jayalaxmi Wangkheimayum, Mohana Bhattacharjee, Bhaskar Jyoti Das, K Melson Singha, Debadatta Dhar Chanda, Deepshikha Bhowmik, **Amitabha Bhattacharjee**. Diverse Aminoglycoside Phosphotransferase Types Conferring Aminoglycoside Resistance in Enterobacteriaceae: A Single-centre Study from Northeast India. *Indian Journal Of Medical Microbiology* 2019; 37 (3): 1-6.
20. Gaurav Kumar, Bagre Issa, Sarmistha Biswal, Diamond Jain, **Amitabha Bhattacharjee**, Anindya S. Ghosh. Glutamic acid at position 152 and Serine at position 191 are the key residues required for the metallo- $\beta$ -lactamase activity of NDM-7. *International Journal of Antimicrobial agents* 2019. <https://doi.org/10.1016/j.ijantimicag.2019.10.005>.
21. Deepshikha Bhowmik, Bhaskar Jyoti Das, Piyush Pandey, Shiela Chetri, Debadatta Dhar Chanda, **Amitabha Bhattacharjee**. An array of multiplex PCR assays for detection of staphylococcal chromosomal cassette *mec* (SCC*mec*) types among staphylococcal isolates. *Journal of Microbiological Methods* 2019; 166: 105733. <https://doi.org/10.1016/j.mimet.2019.105733>
22. Shiela Chetri, Deepshikha Bhowmik, Deepjyoti Paul, Piyush Pandey, Debadatta Dhar Chanda, Atanu Chakravarty , Debajyoti Bora, **Amitabha Bhattacharjee**. AcrAB-TolC efflux pump system plays a role in carbapenem non-susceptibility in Escherichia coli. *BMC Microbiology* 2019; 19:210. <https://doi.org/10.1186/s12866-019-1589-1>
23. Shiela Chetri, Deepshikha Bhowmik, Debadatta Dhar Chanda, Atanu Chakravarty, **Amitabha Bhattacharjee**. Effect of concentration gradient carbapenem exposure on expression of *bla*<sub>NDM-1</sub> and *acrA* in carbapenem resistant *Escherichia coli*. *Infection Genetics and Evolution* 2019. <https://doi.org/10.1016/j.meegid.2019.05.024>

24. Shiela Chetri, Melson Singha, Deepshikha Bhowmik, Kathakali Nath, Debadatta Dhar Chanda, Atanu Chakravarty , **Amitabha Bhattacharjee**. Transcriptional response of OmpC and OmpF in *Escherichia coli* against differential gradient of carbapenem stress. *BMC Research Notes* 2019. 12:138
25. Deepshikha Bhowmik, Pinki Chakraborty, Rituparna Bhowmick, Rakesh Sarkar, Shiela Chetri, **Amitabha Bhattacharjee**. Occurrence of II and V Staphylococcal Cassette Chromosome mec Types among Coagulase-Negative Staphylococci from Northeastern Part of India. *Indian Journal of Medical Microbiology* 2019; 36(4): 522-525.
26. Shiela Chetri, Anutee Dolley, Deepshikha Bhowmik, Debadatta Dhar Chanda, Atanu Chakravarty, **Amitabha Bhattacharjee**. Transcriptional Response of AcrEF-TolC against Fluoroquinolone and Carbapenem in *Escherichia coli* of Clinical Origin. *Indian Journal of Medical Microbiology* 2018; 36(4): 537-540.
27. Shiela Chetri, Kabita Singha, Deepshikha Bhowmik, Debadatta Dhar Chanda, Atanu Chakravarty, **Amitabha Bhattacharjee**. Sub-inhibitory Concentration of Ertapenem Induces Overexpression of Regulator of Antibiotic Resistance A in *Escherichia coli*. *Indian Journal of Medical Microbiology* 2018; 36(4): 569-571.
28. Somorita Baishya, Sheuli Kangsa Banik, Anupam Das Talukdar, Anand Anbarasu, **Amitabha Bhattacharjee**, Manabendra Dutta Choudhury. Full title: Identification of potential drug targets against carbapenem resistant Enterobacteriaceae (CRE) strains using in silico gene network analysis. *Gene Reports* 2019; 14, 129-137.
29. Varsha Rani Gajamer, **Amitabha Bhattacharjee**, Deepjyoti Paul, Chandrayee Deshamukhya, Ashish kumar Singh, Nilu Pradhan, Hare Krishna Tiwari. *Escherichia coli* encoding *bla*<sub>NDM-5</sub> associated with community-acquired urinary tract infections with unusual MIC creep-like phenomenon against imipenem. *Journal of Global Antimicrobial Resistance* 2018; 14:228-32.
30. Varsha Rani Gajamer, **Amitabha Bhattacharjee**, Deepjyoti Paul, Jyotsna Kapil, Arunabha Sarkar, Ashish Kumar Singh, Nilu Pradhan, Hare Krishna Tiwari. The First Report of Phenotypic and Molecular Characterization of Extended-Spectrum Beta-Lactamase-Producing Uropathogens in Sikkim and Darjeeling Hills of India. *Microbial Drug Resistance* 2018; doi: 10.1089/mdr.2017.015
31. Deepshikha Bhowmik, Shiela Chetri, Deepjyoti Paul, Debadatta Dhar Chanda, **Amitabha Bhattacharjee**. Detection and molecular typing of methicilli-resistance *Staphylococcus aureus* from northeastern part of India. *Medical Journal Armed Forces India* 2018; 1-4
32. Birson Ingti, Pranjit Saikia, Deepjyoti Paul, Ananad Prakash Maurya, Debadatta Dhar (Chanda), Atanu Chakravarty, Chandrayee Deshamukhya, **Amitabha Bhattacharjee**.

- Occurrence of *bla*<sub>CMY-42</sub> on an Inc11 plasmid in multidrug-resistant *Escherichia coli* from a tertiary referral hospital in India. *Journal of Global Antimicrobial Resistance* 2018; 14:78-82.
33. Nivedita Dasgupta, Deepjyoti Paul, Debadatta Dhar Chanda, Shiela Chetri, Atanu Chakravarty, **Amitabha Bhattacharjee**. Observation of a new pattern of mutations in *gyrA* and *parC* within *Escherichia coli* exhibiting fluroquinolone resistance. *Indian Journal of Medical Microbiology* 2018; 36:131-135.
  34. Rajkumari Elizabeth, Debadatta Dhar Chanda, Atanu Chakravarty, Deepjyoti Paul, Shiela Chetri, Deepshikha Bhowmik, Jayalaxmi Wangkheimayum, **Amitabha Bhattacharjee**. Association of glycerol kinase gene with class 3 integrons: A novel cassette array within *Escherichia coli*. *Indian Journal of Medical Microbiology* 2018; 36: 104-107.
  35. Supriya Upadhyay, Annie Barkolin Khyriem, Prithwis Bhattacharya, **Amitabha Bhattacharjee**, Santa Ram Joshi. High-level aminoglycoside resistance in *Acinetobacter baumannii* recovered from Intensive Care Unit patients in Northeastern India. *Indian Journal of Medical Microbiology* 2018; 36:43-8.
  36. Sayani Roy, Deepjyoti Paul, Rajkumari Elizabeth, Debadatta Dhar, Atanu Chakravarty, **Amitabha Bhattacharjee**. Transcriptional expression of *PmrB* and *arnA* within polymyxin-resistant nosocomial isolates of *Pseudomonas aeruginosa* from India. *Journal of Microbiology and Infectious Diseases* 2018; 8(2): 61-68.
  37. Nargis Alom Choudhury, Deepjyoti Paul, Atanu Chakravarty, **Amitabha Bhattacharjee**, Debadatta Dhar (Chanda). IncX3 plasmid mediated occurrence of *bla*<sub>NDM-4</sub> within *Escherichia coli* ST448 from India. *Journal of Infection and Public Health* 2018;11: 111114.  
**IF:1.43**
  38. Birson Ingti, Deepika B Krishnatreya, Anand Prakash Maurya, Debadatta Dhar (Chanda), Atanu Chakravarty, **Amitabha Bhattacharjee**. Role of inducers in detection of *bla*<sub>PDC</sub>-mediated oxyminocephalosporin resistance in *Pseudomonas aeruginosa*. *Indian Journal of Medical Research* 2017;145: 659-664. **IF: 1.44**
  39. Jayalaxmi Wangkheimayum, Deepjyoti Paul, Debadatta Dhar, Rajlakshmi Nephram, Shiela Chetri, Deepshikha Bhowmik, Atanu Chakravarty, **Amitabha Bhattacharjee**. Occurrence of acquired 16s methyltransferase mediated aminoglycoside resistance in clinical isolates of enterobacteriaceae within a tertiary referral hospital of northeast India. *Antimicrobial Agents and Chemotherapy* 2017. doi:10.1128/AAC.01037-16. **IF- 4.47**
  40. Deepjyoti Paul, Birson Ingti, Dibyojyoti Bhattacharjee, Anand Prakash Maurya, Debadatta Dhar, Atanu Chakravarty, **Amitabha Bhattacharjee**. An unusual occurrence of plasmid-mediated *bla*<sub>OXA-23</sub> carbapenemase in clinical isolates of *Escherichia coli* from India. *International Journal of Antimicrobial Agents* 2017. Doi. 10.1016/j.ijantimicag.2017.01.012.  
**IF- 4.09**
  41. Supriya Upadhyay, Abbas Hussain, Birson Ingti, Monjur Ahmed Laskar, Manabendra Dutta Choudhury, **Amitabha Bhattacharjee**, Santaram Joshi. Detection of a new class C beta-

- lactamase (CMY- 139) in *Klebsiella pneumoniae* of food origin from India. *Journal of Global Antimicrobial Resistance* 2017. 8:46-47. **IF- 1.087**
42. Deepjyoti Paul, **Amitabha Bhattacharjee**, Dibyojyoti Bhattacharjee, Debadatta Dhar, Anand Prakash Maurya, Atanu Chakravarty. Transcriptional analysis of *bla<sub>NDM-1</sub>* and copy number alteration under carbapenem stress. *Antimicrobial Resistance and Infection Control* 2017. 6:26 **IF-2.71**
  43. Deepjyoti Paul, Atul Garg, **Amitabha Bhattacharjee**. Occurrence of *bla<sub>NDM-1</sub>* and *bla<sub>NDM-5</sub>* in a tertiary referral hospital of north India. *Microbial Drug Resistance* 2017. DOI: 10.1089/mdr.2016.0124 **IF-2.52**
  44. Anand Prakash Maurya, Debadatta Dhar, Mridul Kumar Basumatary, Deepjyoti Paul, Birson Ingti, Debarati Choudhury, Anupam Das Talukdar, Shweta Mishra, **Amitabha Bhattacharjee**. Expansion of highly stable *bla<sub>OXA-10</sub>*  $\beta$ -lactamase family within diverse host range among nosocomial isolates of Gram-negative bacilli within a tertiary referral hospital of Northeast India. *BMC Research notes* 2017; 10:145
  45. Swati Sharma, Deepshikha Bhowmik, Shiela Chetri, Deepjyoti Paul, Debadatta Dhar(Chanda), Atanu Chakravarty, **Amitabha Bhattacharjee**. Tigecycline Resistance among Clinical Isolates of *Staphylococcus aureus* from North-east India. *Journal of Microbiology and Infectious Diseases* 2017; 7(4): 173-177.
  46. Nivedita Dasgupta, Deepjyoti Paul, Debadatta Dhar(Chanda), Birson Ingti, Dibyojyoti Bhattacharjee, Atanu Chakravarty, **Amitabha Bhattacharjee**. An insight into selection specificity of quinolone resistance determinants within Enterobacteriaceae family. *Journal of Global Antimicrobial Resistance* 2017; 10(2017):40-46
  47. Birson Ingti, Deepjyoti Paul, Anand Prakash Maurya, Debajyoti Bora, Debadatta Dhar(Chanda), Atanu Chakravarty, **Amitabha Bhattacharjee**. Expansion of plasmid mediated *bla<sub>ACT-2</sub>* among *Pseudomonas aeruginosa* associated with hospital infection and its transcriptional response under cephalosporin stress. *Journal of Microbiology and Infectious Diseases* 2017; 7 (2): 75-82
  48. Birson Ingti, Deepjyoti Paul, Anand Prakash Maurya, Debajyoti Bora, Debadatta Dhar Chanda, Atanu Chakravarty, **Amitabha Bhattacharjee**. Occurrence of *bla<sub>DHA-1</sub>* mediated cephalosporin resistance in *Escherichia coli* and their transcriptional response against cephalosporin stress: a report from India. *Annals of Clinical Microbiology and Antimicrobials* 2017. 16.13. **IF- 2.08**
  49. Debarati Choudhury, Anupam Das Talukdar, Manabendra Dutta Choudhury, Anand Prakash Maurya, Debadatta Dhar Chanda, Atanu Chakravarty, **Amitabha Bhattacharjee**. Carbapenem nonsusceptibility with Modified *OprD* in Clinical Isolates of *Pseudomonas aeruginosa* from India. *Indian Journal of Medical Microbiology* 2017. 35:137-139. **IF-1.006**



50. Birson Ingti, Monjur Ahmed Laskar, Sudip Choudhury, Anand Prakash Maurya, Deepjyoti Paul, Anupam Das Talukdar, Manabendra Dutta Choudhury, Debadatta Dhar (Chanda), Atanu Chakravarty, **Amitabha Bhattacharjee**. Molecular and in silico analysis of a new plasmid-mediated AmpC  $\beta$ -lactamase (CMH-2) in clinical isolates of *Klebsiella pneumoniae*. *Infection Genetics and Evolution* 2017. 48:34-39. **IF- 2.59**
51. Deepjyoti Paul, **Amitabha Bhattacharjee**, Birson Ingti, Nargis Alom Choudhury, Anand Prakash Maurya, Debadatta Dhar, Atanu Chakravarty. Occurrence of *bla*<sub>NDM-7</sub> within IncX3-type plasmid of *Escherichia coli* from India. *Journal of Infection and Chemotherapy* 2016. <http://dx.doi.org/10.1016/j.jiac.2016.12.009>. **IF- 1.42**
52. Tuhina Banerjee, **Amitabha Bhattacharjee**, Supriya Upadhyay, Shweta Mishra, Shampa Anupurba. Long Term outbreak of extended spectrum beta lactamases (ESBLs) producing *Klebsiella pneumoniae* in relation to third generation cephalosporin use: A report from neonatal intensive care unit of north India. *Indian Journal of Medical Research* 2016. 144: 622-629. **IF-1.44**
53. Deepjyoti Paul, Anand Prakash Maurya, Debadatta Dhar(Chanda), Gauri Dutt Sharma, Atanu Chakravarty, **Amitabha Bhattacharjee**. Carriage of *bla*<sub>NDM-1</sub> in *Pseudomonas aeruginosa* through multiple Inc type plasmids in a tertiary referral hospital of northeast India. *Indian Journal of Medical Research* 2016. 143:826-829. **IF-1.44**
54. Debarati Choudhury, Deepjyoti Paul, Anindya Sundar Ghosh, Anupam Das Talukdar, Manabendra Dutta Choudhury, Anand Prakash Maurya, Debadatta Dhar (Chanda), Atanu Chakravarty, **Amitabha Bhattacharjee**. Effect of single-dose carbapenem exposure on transcriptional expression of *bla*<sub>NDM-1</sub> and *mexA* in *Pseudomonas aeruginosa*. *Journal of Global Antimicrobial Resistance* 2016. 7:72-77.
55. P Singha , DD Chanda, AP Maurya, D Paul, A Chakravarty, **A Bhattacharjee** . Distribution of Class II integrons and their contribution to antibiotic resistance within *Enterobacteriaceae* family in India. *Indian J Med Microbiol* 2016;34:303-7.
56. Nivedita Dasgupta, Debadatta Dhar (Chanda), Nathaneal Kharkongor, Atanu Chakravarty, **Amitabha Bhattacharjee**. Molecular detection of *aac(6')-Ib-cr* among clinical Enterobacterial isolates conferring quinolone resistance:A study from North east India. *Journal of Microbiology and Infectious Diseases* 2016. 6 (3): 97-102
57. Deepjyoti Paul, Debadatta Dhar, Anand Prakash Maurya, Shweta Mishra, Gauri Dutt Sharma, Atanu Chakravarty, **Amitabha Bhattacharjee**. Occurrence of co-existing *bla*<sub>VIM-2</sub> and *bla*<sub>NDM-1</sub> in clinical isolates of *Pseudomonas aeruginosa* from India. *Annals of Clinical Microbiology and Antimicrobials* 2016. 15:31

58. Anand Prakash Maurya, Debadatta Dhar Chanda, Debajyoti Bora, Anupam das Talukdar, Atanu Chakravarty, **Amitabha Bhattacharjee**. Transcriptional Response of Multiple ESBL Genes Within *Escherichia coli* Under Oxyimino-Cephalosporin Stress. *Microbial Drug Resistance* 2016. DOI: 10.1089/mdr.2015.0340
59. Debarati Choudhury, Anamika Ghosh, Debadatta Dhar Chanda, Das Anupam Das Talukdar, Manabendra Dutta Choudhury, Deepjyoti Paul, Anand Prakash Maurya, Atanu Chakravarty, **Amitabha Bhattacharjee**. (2016) Premature Termination of MexR Leads to Overexpression of MexAB-OprM Efflux Pump in *Pseudomonas aeruginosa* in a Tertiary Referral Hospital in India. *PLoS ONE* 2016.11(2): e0149156. doi:10.1371/journal.pone.0149156
60. Anand Prakash Maurya, Shweta Mishra, Anupam Das Talukdar, Debadatta Dhar (Chanda), Atanu Chakravarty, **Amitabha Bhattacharjee**. Diverse genetic array of CTX-M-15 in *Escherichia coli*: A single centre study from India. *Microbial Drug Resistance* 2016;22(1): 7-14 doi:10.1089/mdr.2014.0312.
61. Anand Prakash Maurya, Anupam Das Talukdar, Debadatta Dhar (Chanda), Atanu Chakravarty, **Amitabha Bhattacharjee**. First description of SHV-148 mediated extended spectrum cephalosporin resistance among clinical isolates of *Escherichia coli*. *Indian Journal of Medical Microbiology* 2016;34:33-7.
62. Deepjyoti Paul, Debadatta Dhar Chanda, Anand Prakash Maurya, Shweta Mishra, Atanu Chakravarty, Gauri Dutt Sharma, **Amitabha Bhattacharjee**. Co- Carriage of blaKPC-2 and blaNDM-1 in Clinical Isolates of *Pseudomonas aeruginosa* Associated with Hospital Infections from India. *PLoS ONE* 10(12): e0145823. doi:10.1371/journal.pone.0145823
63. Pranabika Singha, Debadatta Dhar (Chanda), Anand Prakash Maurya, Atanu Chakravarty, **Amitabha Bhattacharjee**. Diversity of Class 1 Integrons and Carriage of Trimethoprim Resistance in Clinical Isolates of Enterobacteriaceae from India. *Archives of Clinical Microbiology* 2015; 6(4:3), 1-6
64. Nivedita Dasgupta, Nurjahan Begum Laskar, Nargis Alom Choudhury, **Amitabha Bhattacharjee**. Carriage and Transferability of Quinolone Resistant Determinants Harboured within Environmental Isolates of Enterobacteriaceae. *Archives of Clinical Microbiology* 2015; 6(4:5), 1-5
65. Atul Garg, Jaya Garg, GC Upadhyay, Anurag Agarwal, **Amitabha Bhattacharjee**. Evaluation of the RAPIDEC CARBA NP Test Kit for detection of Carbapenemase Producing Gram Negative Bacteria. *Antimicrobial Agents and Chemotherapy* 2015; doi: **10.1128/AAC.01783-15**.
66. Supriya Upadhyay, Abbas Hussain, Shweta Mishra, Anand Prakash Maurya, **Amitabha Bhattacharjee**, Santa Ram Joshi (2015) Genetic Environment of Plasmid Mediated CTX-M-15 Extended Spectrum Beta-Lactamases from Clinical and Food Borne Bacteria in North-Eastern India. *PLoS ONE* 10(9): e0138056. doi:10.1371/journal.pone.0138056.

67. Debarati Choudhury, Anupam Das Talukdar, Manabendra Dutta Choudhury, Anand Prakash Maurya, Deepjyoti Paul, Debadatta Dhar (Chanda), Atanu Chakravarty, **Amitabha Bhattacharjee**. Transcriptional analysis of MexAB-OprM efflux pump system of *Pseudomonas aeruginosa* and its role in carbapenem resistance in tertiary referral hospital in India. *PLoS ONE* 2015; 10(7):e0133842. doi:10.1371/journal.pone.0133842
68. Pranabika Singha, Anand Prakash Maurya, Debadutta Dhar (Chanda), Atanu Chakravarty **Amitabha Bhattacharjee**. Sulphonamide resistance in clinical isolates of *Escherichia coli* and their association with Class I integron: A study from India. *Archives of Clinical Microbiology* 2015; 6(3:2), 1-5
69. Anand Prakash Maurya, Debarati Choudhury, Anupam Das Talukdar, Debadatta Dhar (Chanda), Atanu Chakravarty, **Amitabha Bhattacharjee**. Emergence of Integron borne PER-1 mediated extended spectrum Cephalosporin resistance among nosocomial isolates of Gram negative bacilli. *Indian Journal of Medical Research* 2015; 141(6), 816-822 .
70. Anand Prakash Maurya, Anupam Das Talukdar, Debadatta Dhar (Chanda), Atanu Chakravarty, **Amitabha Bhattacharjee**. Genetic environment of OXA-2 beta-lactamase producing Gram negative bacilli from a tertiary referral hospital of India. *Indian Journal of Medical Research* 2015; 141(3), 368-369.
71. Shweta Mishra, Supriya Upadhyay, Malay Ranjan Sen, Anand Prakash Maurya, Debarati Choudhury, **Amitabha Bhattacharjee**. Genetic acquisition of NDM gene offers sustainability among clinical isolates of *Pseudomonas aeruginosa* in clinical settings. *PLOS ONE* 2015 . 10(1):e0116611. Doi: 10.1371/journal.pone.0116611
72. D Choudhury, A Das Talukdar, A Maurya, M Dutta Choudhury, D Dhar (Chanda), A Chakravarty, **A Bhattacharjee**. Contribution of efflux pumps in fluoroquinolone resistance in multi drug resistant nosocomial isolates of *Pseudomonas aeruginosa* from a tertiary referral hospital in north east India. *Indian Journal of Medical Microbiology* 2015; 33 (1), 84-86.
73. M Ajj, D Paul, **A Bhattacharjee**. Carriage of quinolone resistance in faecal coliforms among healthy individuals: a study from northeast India. *Indian Journal of Medical Microbiology* 2015; 33 (1), 190-191
74. Anand prakash Maurya, Anupam Das Talukdar, Debadatta Dhar (Chanda), Atanu Chakravarty, **Amitabha Bhattacharjee**, Integron-Borne Transmission of VEB-1 Extended Spectrum  $\beta$ - Lactamase in *Pseudomonas aeruginosa* in a Tertiary care Hospital in India. *Antimicrobial Agents of Chemotherapy*. 2014; 58 (11):6966-6969
75. Anand Prakash Maurya, Debarati Choudhury, Anupam Das Talukdar, Debadatta Dhar (Chanda), Atanu Chakravarty, **Amitabha Bhattacharjee**. A report of the GES-5 extended spectrum beta-lactamase producing *Pseudomonas aeruginosa* with urinary tract infection from north-east India. *Indian Journal of Medical Research*. 2014; 140: 565-567.
76. T Banerjee, **A Bhattacharjee**. Prebiotics: A New Hope Against Antibiotic Associated Diarrhea. *Anti-Infective Agents* 2014: 12 (2), 139-144

77. S Upadhyay, S Mishra, M R Sen, T Banerjee, **A. Bhattacharjee**. Co-existence of *Pseudomonas*-derived cephalosporinase among plasmid encoded CMY-2 harbouring isolates of *Pseudomonas aeruginosa* in north India. *Indian Journal of Medical Microbiology* 2013; 31(3): 257-260.
78. Shweta Mishra, Malay Ranjan Sen, Supriya Upadhyay, **Amitabha Bhattacharjee**. Genetic Linkage of *bla*<sub>NDM</sub> among nosocomial isolates of *Acinetobacter baumannii* from a tertiary referral hospital in northern India. *International Journal of Antimicrobial Agents* 2013; 41(5): 452-456.
79. Supriya Upadhyay, **Amitabha Bhattacharjee**, Malay Ranjan Sen. Identification and Characterization of carbapenem hydrolyzing beta-lactamase – KPC among enterobacteriaceae: a report from north India. *Asian Journal of Medical Science* 2012;3:11-15.
80. Supriya Upadhyay, Malay Ranjan Sen, **Amitabha Bhattacharjee**, Pradyot Prakash, Ram Chandra Bajpai, Shampa Anupurba. Diagnostic utility of combination of inducer and inhibitor based assay in detection of *Pseudomonas aeruginosa* producing AmpC  $\beta$ -lactamase. *Journal of Microbiological Methods*. 2011; 87:116-118.
81. Kumari Seema, Malay Ranjan Sen, Supriya Upadhyay, **Amitabha Bhattacharjee**. Dissemination of the New Delhi metallo-beta-lactamase (NDM-1) among Enterobacteriaceae in a tertiary referral hospital in north India. *Journal of Antimicrobial Chemotherapy*. 2011; 66(7): 1646-1647
82. Supriya Upadhyay, Malay Ranjan Sen, **Amitabha Bhattacharjee**. Diagnostic utility of boronic acid inhibition with different cephalosporins against *Escherichia coli* producing AmpC  $\beta$ -lactamases. *Journal of Medical Microbiology*. 2011; 60: 691-693
83. Supriya Upadhyay, Malay Ranjan Sen, Pradyot Prakash, Shampa Anupurba, Gopal Nath, **Amitabha Bhattacharjee**. Detection and characterization of AmpC  $\beta$ -Lactamase producing isolates of *Acinetobacter* species in North India. *International Journal of Antimicrobial Agents*. 2010; 36: 472- 473
84. **A Bhattacharjee**, M R Sen, P Prakash, S Anupurba, A Gaur, G Nath. Observation on integron carriage among clinical isolates of *Klebsiella pneumoniae* producing extended spectrum beta-lactamases. *Indian Journal of Medical Microbiology* 2010; 28(3): 207-10.
85. Supriya Upadhyay, Malay Ranjan Sen and **Amitabha Bhattacharjee**. Presence of different  $\beta$ -lactamase classes among clinical isolates of *Pseudomonas aeruginosa* expressing AmpC  $\beta$ -lactamase enzyme. *Journal of Infection in developing countries* 2010; 4(4):239-242.
86. **Amitabha Bhattacharjee**, Malay Ranjan Sen, Pradyot Prakash, Shampa Anupurba. Role of  $\beta$ -lactamase inhibitors in enterobacterial isolates producing extended-spectrum  $\beta$ -lactamases. *Journal of Antimicrobial Chemotherapy* 2008;61:309– 14.
87. **Amitabha Bhattacharjee**, Malay Ranjan Sen, Pradyot Prakash, Abhishek Gaur, and Shampa Anupurba. Increased Prevalence of ESBL Producers in Neonatal Septicemic

- Cases at a Tertiary Referral Hospital. *Indian journal of Medical Microbiology* 2008; 26(4): 356 – 60.
88. **Amitabha Bhattacharjee**, Shampa Anupurba, Abhishek Gaur, Malay Ranjan Sen. Prevalence of inducible AmpC beta-lactamase producing *Pseudomonas aeruginosa* in a tertiary care hospital in Northern India. *Indian journal of Medical Microbiology* 2008; 26: 89 – 90. **IF-**
  89. Sen M R, **Bhattacharjee A**. ESBL producing bacteria: Growing problem for antibiotic resistance. "Phuture - 2008" educational supplement of *International Pharmaceutical Students Federation*. Issue 15, July 2008, p 5 -6
  90. **Amitabha Bhattacharjee**, Malay Ranjan Sen, Shampa Anupurba, Pradyot Prakash, Gopal Nath. Detection of OXA – 2 Group Extended Spectrum  $\beta$  – Lactamase (ESBL) Producing Clinical Isolates of *Escherichia coli* from India. *Journal of Antimicrobial Chemotherapy* 2007; 60:703 – 704.
  91. Abhishek Gaur, **A. Bhattacharjee**, S Anupurba, P Prakash, M R Sen, T M Mohapatra. Clinical significance and epidemiology of multidrug resistance *Acinetobacter* species isolated from nosocomial infection. *Ind J Prev Soc Med* 2007. 38:5 - 11.
  92. Shampa Anupurba, **Amitabha Bhattacharjee**, Atul Garg, Malay Ranjan Sen. Prevalence of gram negative organisms isolated from blood culture and their antimicrobial susceptibility pattern: A five year retrospective study from a tertiary referral hospital. *Ann Natl Acad Med Sci(India)*2006,42(3): 221 – 228.
  93. Shampa Anupurba, **Amitabha Bhattacharjee**, Atul Garg, Malay Ranjan Sen. Antimicrobial susceptibility of *Pseudomonas aeruginosa* isolated from wound infections. *Indian J Dermatol* 2006; 51: 286 – 8.

#### **Abstract published (2)**

- S Upadhyay, MR Sen, S Mishra and **A Bhattacharjee**. Molecular profiling of nosocomial isolates of *Klebsiella pneumoniae* expressing AmpC beta-lactamase in a tertiary referral hospital of northern India. (Abstract number: P1162). *Clinical Microbiology and Infection* 2012;18(S3):286. **(Impact factor 4.540) (Abstract published)**
- **A Bhattacharjee**, S Upadhyay and MR Sen. Molecular analysis of nosocomial isolates of *Escherichia coli* expressing multiple beta-lactamases in a tertiary referral hospital of northern India. (Abstract number: P1685). *Clinical Microbiology and Infection* 2012;18(S3):467. **(Impact factor 4.540) (Abstract published)**

#### **Book Chapters**

- Supriya Upadhyay, Shweta Mishra, Malay Ranjan Sen, **Amitabha Bhattacharjee**. Role of carbapenemases in antibiotic resistance of Gram negative organisms and their detection. *Recent Advances in Microbiology*. Eds SP Tiwari and R Sharma. Nova Science Publishers, USA. P 101-124.
- Tuhina Banerjee, Supriya Upadhyay, Malay Ranjan Sen, **Amitabha Bhattacharjee**. Laboratory methods for antimicrobial resistance determination in common Gram positive

organisms. *Recent Advances in Microbiology*. Eds SP Tiwari and R Sharma. Nova Science Publishers, USA. P63-80

## Paper presented in conference (19)

- **Amitabha Bhattacharjee**, Shiela Chetri, Debadatta Dhar Chanda. Interplay of *bla*<sub>NDM-1</sub> and *acrA* enhance transcriptional expression in carbapenem resistant *Escherichia coli* against concentration gradient carbapenem stress: A study from India. ICC-GCCMID 2019 at Dubai, UAE 6<sup>th</sup> to 9<sup>th</sup> November 2019.
- **Amitabha Bhattacharjee**, Shiela Chetri, Bhaskar Jyoti Das, Debadatta Dhar Chanda. Global transcriptional regulator Rob interferes with carbapenem susceptibility in *Escherichia coli*: A study from India. ECCMID 2018 held on 20-24 April 2018 at Madrid, Spain.
- **Amitabha Bhattacharjee**, Birson Ingti, Anand Prakash Maurya, Debadatta Dhar Chanda, Atanu Chakravorty. Inc11 plasmid localized *bla*<sub>CMY-42</sub> spread in multidrug resistant *Escherichia coli* isolated from a tertiary referral hospital of India. MICROCON 2017 held on 24-26 November 2017, RIMS, Ranchi.
- **Amitabha Bhattacharjee**, Deepjyoti Paul, Debadatta Dhar Chanda, Atanu Chakravorty. Copy number alteration of IncX3 plasmid encoding *bla*<sub>NDM-7</sub> under concentration gradient carbapenem stress. MICROCON 2016 held on 25-27 November 2016, PGIEMR, Chandigarh.
- **Amitabha Bhattacharjee**, Anand Prakash Maurya, Debadatta Dhar, Expression of multiple ESBL genes within *Escherichia coli* under oxyimino cephalosporin stress. MICROCON 2015 held on 25-29 November 2015, JIPMER, Pondicherry.
- **Amitabha Bhattacharjee**, Debarati Choudhury, Deepjyoti Paul, Debadatta Dhar. Interplay of *bla*<sub>NDM-1</sub> and MexAB-OprM transcriptional expression in *Pseudomonas aeruginosa* with single dose carbapenem exposure. ISAAR 2015 held on 14-15<sup>th</sup> May 2015 in Incheon, Korea
- Anand Prakash Maurya, Debadatta Dhar (Chanda), Atanu Chakravarty<sup>2</sup>, **Amitabha Bhattacharjee**. Genetic Environment of SHV-148 Extended Spectrum Beta-Lactamase in a Tertiary Referral Hospital of Northeast India. MICROCON 2013. XXXVII National Conference of Indian Association of Medical Microbiologists held on 20-24 November 2013 in Hyderabad, India
- **Amitabha Bhattacharjee**, Adam P Roberts. The first demonstration of the tetracycline resistance gene *tet(W)* on an integron cassette from the human oral cavity. 9<sup>th</sup> International Symposium on Antimicrobial Agent and resistance. Kuala Lumpur, Malaysia. 13 to 15 March 2013.
- Anand Prakash Maurya, Debadatta Dhar, Atanu Chakravorty, Anupam Das Talukdar, **Amitabha Bhattacharjee**. Extended Spectrum Beta-Lactamase producing *Escherichia coli* isolated from clinical specimens from a tertiary referral hospital in northeast India. MICROCON 2012. XXXVI National Conference of Indian Association of Medical Microbiologists held on 22-25 November 2012 in New Delhi, India
- **Amitabha Bhattacharjee**, Malay Ranjan Sen, Shweta Mishra, Supriya Upadhyay. Diagnostic Evaluation of Single plate - multiple beta lactamase detection method for utility in routine microbiological laboratories. 13th Asia Pacific Congress of Clinical Microbiology and Infection to be held on 25-28 October 2012 in Beijing, China.
- **A Bhattacharjee**, S Upadhyay and MR Sen. Molecular analysis of nosocomial isolates of *Escherichia coli* expressing multiple beta-lactamases in a tertiary referral hospital of northern India. (Abstract number: P1685). *Clinical Microbiology and Infection* 2012;18(S3):467. 22<sup>nd</sup> European Congress of Clinical Microbiology and Infectious Diseases. Held on 31<sup>st</sup> March to 3<sup>rd</sup> April in London UK

- **Amitabha Bhattacharjee**, Supriya Upadhyay, Malay Ranjan Sen. Evaluation of different phenotypic methods to detect AmpC beta-lactamases among clinical isolates of *Pseudomonas aeruginosa*. MICROCON 2010, XXXIV Annual conference of Indian Association of Medical Microbiologists. 24-28 November 2010, Kolkata. P 243.
- **A. Bhattacharjee**, M. R. Sen, P. Prakash, S. Anupurba. In vitro study of different  $\beta$  – lactamase inhibitors against ESBL producing enterobacterial isolates. 4<sup>th</sup> Annual conference of UP chapter of Indian association of Medical Microbiologists held in CSM Medical University, Lucknow on 16<sup>th</sup> February 2008. p. 64.
- **A Bhattacharjee**, P Prakash, M. R. Sen. Detection and characterization of integron in ESBL producing *Klebsiella pneumoniae* in a university hospital, North India. 2<sup>nd</sup> national conference of Infectious Diseases Society of India, held in Hyderabad on 24 – 27<sup>th</sup> January 2008.
- **A. Bhattacharjee** , M. R. Sen, P. Prakash. Detection and characterization of Extended Spectrum Beta – Lactamases in *Escherichia coli* by multiplex PCR in a tertiary referral hospital in North India. 48<sup>th</sup> National conference of Association of Microbiologists of India, held in IIT Madras, Chennai on 18 – 21<sup>st</sup> December 2007. p 399.
- **A. Bhattacharjee**, M. R. Sen, P. Prakash. Clonal dissemination of CTX - M group 1 ESBL in *Escherichia coli* in a university hospital in north India. Microcon 2007. National Conference of Indian Association of Medical Microbiologists, held in KMC, Mangalore on 16 – 18 November 2007.p 62
- **A Bhattacharjee**, M. R. Sen. Comparison of CLSI methods and double disc synergy test to detect ESBL in *Citrobacter* spp. in a tertiary care hospital. U.P. Microcon 2007. 3<sup>rd</sup> U.P. Chapter conference of Indian Association of Medical Microbiologists, Aligarh. P. BP 13.
- **A Bhattacharjee**, M.R. Sen. Prevalence of ESBL producing bacteria in neonatal septicemia and their antibiotic susceptibility pattern. HISICON 2007, IX National conference of Hospital Infection society of India, Chandigarh. p. OC-03.
- **Amitabha Bhattacharjee**, Malay Ranjan Sen. AmpC beta-lactamase producing *Pseudomonas aeruginosa* in a tertiary care hospital in Northern India. UP Pathmicon 2006.XV conference of Indian Association of Pathologists and Microbiologists, Varanasi. p 96.