



ELIZA CHAKRABORTY, Ph.D. (CDRI, Lucknow) and PDF (USA)

**Meerut Institute of Engineering & Technology (M.I.E.T.) Dept. of
Biotechnology, DST-Fist Centre,
MEERUT, Pin: 250005
U.P., INDIA**

Joining Date: 3rd Dec'2014

Professor

Department of Biotechnology, Founder P.I. of Medical Translational Biotechnology Research Lab, Miet & founder **HOD of DST-FIST Center, Sponsored by Department of Science and Technology, Ministry of Science and Technology, Govt. of India.**

At Meerut Institute of Engineering and Technology (AICET Approved, Affiliated with Dr. A.P.J. Abdul Kalam Technical University, Lucknow), NH-58 Bagpat Crossing, Bypass road, Meerut 250005, U.P., INDIA
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: eliza.chakraborty@miet.ac.in**

Home Address:

18, Tilak Nagar, Ranikuthi,
Kolkata, West Bengal
India, 700040
Mobile: 917060857697
LandLine: 91-33-24218709

Email: eliza.chakraborty@gmail.com.

Date of Birth: 1st of March 1965.

EDUCATION:

Central Drug Research Institute,(CSIR)

National Lab, Lucknow, India Ph.D. Medical Microbiology 1991 University of Kanpur,
Kanpur, India M.Sc. Biology 1987 University of Calcutta, Agartala, India B.Sc. (Human
Physiology) 1984

PROFILE:

A Biomedical Scientist with extensive research experience in the field of infectious diseases and cancer, cancer stem cell with different animal models, assay development for high throughput screening, Drug Screening, Immunotherapy and molecular biological and newly developed area of Stemformatics approach. My thrust areas are Biomedical and Translational biotechnology based work like personalized drug/biomarker discovery, stemcell & regenerative medicine and organ regeneration.

FIELD OF EXPERTISE:

- ❖ Medical Translational Biotechnology, Medical Microbiology
- ❖ Personalized drug/biomarker discovery
- ❖ Early detection of cancer, Stem cell & tissue engineering
- ❖ Regenerative medicine and organ regeneration Biology

RESEARCH EXPERIENCES:

RESEARCH EXPERIENCES AS FACULTY

Built the two BSL-2 Labs from scratch at VSBT, Baramati and Miet, Meerut U.P. India. And One DST-Fist Centre, Sponsored by Department of Science & Technology (DST), Gov.of India.

- **Dec 2014 to Present:** Professor of Biotechnology, Founder **Principal Investigator** of Medical Translational Biotechnology Lab, Meerut Institute of Engineering and Technology (MIET), Meerut(U.P.)–250005, India And **Since 2019 also HOD of DST-FIST Center, Miet Sponsored By DST, Ministry of Science & Technology, Gov.of India.**
- **Sept 2013 to Nov 2014:** Scientist incharge and HOD, VSBT, Baramati, Affiliated with

University of Pune, Maharashtra, India

2013: Director R&D Gene Creation Pvt., Baramati, Pune.

• **May 2008 to Dec 2012:** Researcher (Scientist), Keck School of Medicine, University of California, Los Angeles, USA.

• **Oct 2005 to July 2007:** Visiting Research Assistant(Faculty), V.A. Hospital, David Geffen School of Medicine, University of California, Los Angeles (UCLA), “Role of CAR in Lungcancer” Sponsored by Veterans Affairs Federal Govt. USA.

Assistant Prof., Under University of Tripura, AGARTALA, 1997.

POSTDOCTORAL RESEARCH EXPERIENCES In USA and India.

• **Sept 2000 to Jan 2005:** Post-Doctoral Fellow, Keck School of Medicine, University of California, Los Angeles, USA.

• **Nov.1997 to Nov. 1999:** Post-Doctoral Fellow, J.C. Bose Institute (DST Sponsored National Institute), Kolkata, India.

• **Dec 1993 to Dec 1995:** Post Doc Fellow, National Institute of Cholera and Enteric Diseases (ICMR and WHO collaboration), Kolkata, India.

ACHIEVEMENTS:

Three publication in Gastroenterology (S C Impact Factor-20.877)

A. 2014, 2016 Established two International level of Biosafety 2 plus Lab for Medical Translational Biotechnology at VSBT, Baramati (Under University of Pune), MIET (affiliated Dr.A.P.J. Kalam Technical University, U.P. Lucknow), Meerut.

B. Our newly established Medical Translational Biotechnology Lab introduced Stemformatics platform 1st time in India (Indian Science Congress, Jan 2016) on behalf of MIET, Meerut.

Started student mentorship program by senior students 2017

C 1. LIST OF PATENTS FILED:

Patent CBR No.5872, April 16th.2021 (online) and published.

Patent CBR No.16964, Sept.2020 (Published)

Patent CBR No.16965, Sept.2020 (Published)

Patent CBR No.16967, Sept. 2020 (Published and 1st examination report submitted)

Patent CBR No.1009, Jan.2018 (Published) and Granted.

Patent CBR No.20639, Sept.2017 (Status: published and 1st examination report submitted and 1st hearing also completed)

C2. Peer Reviewer of Human Cell J. Japan, Springer, SCI impact factor-2.1 Since 2018

C3. Guest Editor for "Journal" Frontiers in Cell and Developmental Biology" 2020

D. Four more patent on Biomatrix expecting from recent B.Tech's students project (2022).

E. Ph.D. Examiner for Science since 2016 for University of Jadavpur, University of Kolkata, Kolkata, and Kanpur University, India.

F. National Advisor for Indian Academy of Biomedical Sciences (IABS) and Executive Board member of Central Zone.

G. Two FD Pattended at IIT Bombay, June, 2019

H. Organized International Seminar at Miet Feb 2020 and 2018.

I. Organized Online International lecture series on behalf of DST-Fist Center Dec. 2020- Feb. 2021

J. Editorial Board Member of *Frontiers in Cell & Developmental Biology*, July, 2020.

PUBLICATIONS:

Nikhil Baban Ghate, Vicky Yamamoto **and Eliza Chakraborty** (Corresponding Author)**

Editorial: Advancement in Cancer Stem Cell Biology and Precision Medicine, Frontiers in Cell Developmental Biology, Published **25th March. 2022.**

DOI: 10.3389/fcell.2022.890129

Shikha Choudhury **and Eliza Chakraborty** (Corresponding Author)**

Hydrogel based tissue engineering and its future applications in personalized disease modeling and regenerative therapy (accepted), Beni-Suef University Journal of Basic and Applied Sciences (**Springer Nature**) accepted Nov. 2021, Published **4th Jan. 2022.**

DOI: 10.1186/s43088-021-00172-1JBAS-D-21-00278R2

Eliza Chakraborty And Kaustubh Deshpande " Sarcosine as a stage dependent Metabolomic marker to detect prostate cancer by using HPTLC". IOSR Journal of Pharmacy and Biological Sciences (IOSR-JPBS), e-ISSN:2278-3008, p-ISSN:2319-7676. Volume9, Issue 6 Ver.II (Nov Dec. 2014), PP.49-52.

(UGC Approved Journal)

<https://topinternationaljournals.wordpress.com/2017/07/01/ugc-approved-journal-list/> . As Per UGC SIno5012 and Journal No49063. Impt: 3.83

Cell Biolabs' Sarcosine Assay Kit is a simple fluorometric assay that measures the amount of sarcosine present in foods...STA-671:S-Adenosyl homocysteine (SAH) ELISA Kit. 8.....
Chakraborty Eand Deshpande K.(2014) J.Pharm Biol.Sci

Eliza Chakraborty And Neelam Shaik” Novel way to isolate adipose derive mesenchymal stemcells and its future clinical applications in obesity” IOSR Journal of Biotechnology and Biochemistry (IOSR-JBB), Volume 1, Issue 1 (Nov. – Dec. 2014), PP 03-10 (UGC Approved Journal, SLNo:As Per UGC List 4033, Journal Number As per UGC list 44202
<https://topinternationaljournals.wordpress.com/2017/07/01/ugc-approved-journal-list/Impact-3.98>

Joon W Kim, Eliza Chakraborty, Sheng-He Huang, YingWang,Michelle M Pietzak “Deletion of S-fimbriae operon Abrogates Intestinal Damage Induced By E. Coli K1”, Journal of Pediatric Gastroenterology and Nutrition Vol-37(3) September, 2003.
(<http://journals.lww.com/jpgn/Fulltext/2003/09000ImpactFactor-2.79>)

Chakraborty E, Kim J Huang S, WangY, Pietzak M. “Doess-fimbrial adhesion play a role in E.Coli K1 bacterial pathogenesis?” **Gastroenterology 124 (4) Supplement 1:** A-483, #T1096,2003. ([http://www.gastrojournal.org/article/S0016-5085\(03\)82446-0/and](http://www.gastrojournal.org/article/S0016-5085(03)82446-0/and) **Impact factor 20.87**

(cited.<http://www.hindawi.com/journals/ijmb/2009/647862.html>)

Chakraborty E. Pietzak, M,“Induction of Intestinal Epithelial Cells Apoptosis By E.Coli K1 Strain RS218”, Gastroenterology, April 2004, Volume 126, No-4 Suppl:2,.

Impactfactor-20.87

Eliza Chakraborty and Michelle Maria Pietzak. “Escherichia coli K1 RS218 Induces Apoptosis in Human and Rat Intestinal Epithelial Cells. Manuscript submitted in Infection and Immunity (ASM Publication)

Min Qin, Ling Zhang, Eliza Chakraborty, Sherven Sharma and Raj. K. Batra,” An adhesion function requirement mediate solid tumor formation” (Under revision)

Shukla, S.C., Chakraborty, E., Tewari, G., and Das, S. R., (1990) “Anti-amoebiasis activity of Mritunjaya Ras in experimental intestinal and hepatic amoebiasis”, Arogya (J. Hltd. Sci.) XVI:58-62

Chakraborty,E.and Das,S.R.(1989) “Invitro and invivo effects of some natural products against experimental amoebiasis caused by Entamoeba histolytica”, Int.J.Agri.Biol.Res.5(1&2):29-36.

(citedat:<http://www.newcrops.uq.edu.au/listing/alliumsativum.htm>http://www.newcrops.uq.edu.au/listing/species_pages_A/Azadirachta_indica_1989.htm)

BOOKS:

Eliza Chakraborty, et.al, Book title: Blueprint of Covid-19 Pandemic, Nov, 2020, Academic Publishing, Germany , ISBN No: 978-6203-02798-3

Shivi Sharma and Eliza Chakraborty, Book title: “Stemformatics: Fascinating Navigator for Stem Cell Therapy” May2017, Academic Publishing, Germany. ISBN number: 978-3330087903.

Abhishek Saxena, Akanksha Keshri, Amrita Srivastava. Editor: Eliza Chakraborty. Book Title:“Future Translational Applications of iPS Reprogramming Factors” September 2016, Academic Publishing, Germany. ISBN number: 978-3-659-95416-0

Eliza Chakraborty, Book title:“*E.Coli* Induce Colon Cancer & E.coli K1 Cause Apoptosis in Gut Cells” July 2013, Academic Publishing,Germany.

Eliza Chakraborty, Book title: “Medicinal Plants, Herbal Medicines And Amoebiasis“ (A-Pathology of Amoebiasis & B-Chemotherapy of Amoebiasis), July, 2012, LAMBERT Academic Publishing, Germany

RESEARCH ACHIEVEMENTS PUBLISHED IN NEWS MEDIA:

1. Jann Satta: 23rdNov.2021
2. 18thApril 2018 Dainik Jagran Newspaper., Amar Ujala, E18 T.V
3. Feb 2017-AmarUjala.

RESEARCH COLLABORATIONS:

NATIONAL COLLABORATIONS:

1. Prof.N.Mandal Ph.D.(CSIR) And Pdf (MIT With Nobel laureate group).At present at J.C. Bose Institute (DST), Kolkata.
2. Dr. Murmu, Chitranjan National Cancer Institute (DST), Kolkata.
3. Dr.N.C. Mishra, IIT Roorkee.

INTERNATIONAL COLLABORATIONS:

1. Department of Otolaryngology-Head and Neck Surgery
Keck School of Medicine of University of Southern California,
Los Angeles, CA90033.
2. From Australia in the field of Bioinformatics

expecting Collaboration in the Field of Stemformatics.

TRAININGS/COURSE: ON BIOSAFETY, LABORATORY ANIMAL HANDLING AND OTHERS:

- Animal Care Committees Training Conducted by ICMR & CSIR at CDRI, NICED and Bose Institute, Kolkata, India (1988 to 1999)
- Animal model Used: Mouse, Rat, Rabbit and Hamster
- Risk Management and Laboratory Safety Course(3month)fromUniversityofSouthernCalifornia (USC),Los Angeles,USA. • AnimalCareAndUseinResearchAndEducationCourseandPasstheExaminationfromAALAS,USA
- Laboratory AnimalUseTrainingfromCW SteersBiologicalResourcesCentersHarborUCLA,USA.
- AnimalmodelUsed:Mouse(transgenicandKnockout)andRat .C.
- ThreedaysFiresafetyCourse(LosAngelesFireDept.)(USC,LosAngeles),VACyberSecurity CoursefromVALearningUniversity.

RESEARCHGUIDANCEEXPERIENCES:

Post-doctoralFellow:

1. Dr.Aastha Agarwal,ICMR(IndianCouncilofMedicalResearch)–R.A. fellowship(2018-2020).

Postgraduatelevel:

1. Ms.Shivi Sharma,M.Tech.(Biotechnology),MIET(Affiliatedwith Dr.A.P.J.,KalamTechnicalUniversity,Meerut(2015-16)
2. Ms.NeelamRasidShaikh,M.Sc.(Biotechnology),VSBT,Baramati-(AffiliatedtoPuneUniversity)(2013-14).
3. Ms.YogitaShivajiSargade, M.Sc.(Biotechnology),VSBT,Baramati-(AffiliatedtoPuneUniversity)(2013-14).

Graduatelevel:

1. Ms.Rimjhim,B.Tech(Biotechnology),MIET,Meerut(2014-18)
2. Ms.VrandaSharma, B.Tech(Biotechnology), MIET,Meerut(2014-18)
3. Ms.SakshiRaghuvanshi, B.Tech(Biotechnology),MIET, Meerut(2014-18) 4. Ms. DivyaTyagi,B.Tech(Biotechnology),MIET,Meerut(2014-18)

5. Mr.UtkarshTyagi, B.Tech(Biotechnology), MIET, Meerut(2014-18) 6.
- Mr. JeswinJohn,B.Tech(Biotechnology),MIET,Meerut(2013-17)
7. Ms. ShikhaChaudhary, B.Tech(Biotechnology),MIET,Meerut(2013-17) 8.
- Ms. PoornimaSharma, B.Tech(Biotechnology),MIET,Meerut(2013-17) 9.
- Ms.RoshikaKaushik, B.Tech(Biotechnology),MIET,Meerut(2013-17) 10. Mr.
- DeepakKr.Singh, B.Tech(Biotechnology),MIET,Meerut(2013-17) 11.
- Mr.HarshalKumar, B.Tech(Biotechnology),MIET, Meerut(2013-17) 12.
- Mr.KunalMishra, B.Tech(Biotechnology),MIET,Meerut(2012-16)
13. Mr.SuyashSharma, B.Tech(Biotechnology), MIET,Meerut(2012-16) 14.
- Ms.NamrataTyagi,B.Tech(Biotechnology),MIET,Meerut(2012-16)
15. Mr.AbhishekSaxena,B.Tech(Biotechnology), MIET,Meerut(2012-16) 16.
- Ms. AkanshaKeshri, B.Tech(Biotechnology), MIET,Meerut(2012-16) 17. Ms.
- AmritaSrivastava,B.Tech(Biotechnology),MIET,Meerut(2012-16)
18. Mr.KumarGautam,B.Tech(Biotechnology),MIET,Meerut(2011-15) 19.
- Mr. ManjeetKr Singh, B.Tech(Biotechnology),MIET,Meerut(2011-15)

TEACHINGEXPERIENCES:5years

SubjectsTaughtatUGlevel:AnimalBiotechnology, Biosafety, BioethicsandIPR

SubjectsTaughtatPGlevel:AnimalBiotechnology,ImmunologyandVaccineTechnology,StemCell
Technology

EXPERIENCESASEXAMINER/EXPERT/REVIEWER:

1. Ph.D.ThesisExaminerofUniversityofCalcutta,Kolkata,WB(India).
2. Ph.D.ThesisExaminerofJadhavpurUniversity,Kolkata, WB(India).
3. Ph.D.ThesisExaminerofChhatrapatiShahuJiMaharaj University,Kanpur,U.P.(India) 4.
- PeerReviewerofHuman CellJ.Japan SC Impactfactor-4
5. Guest Editor For Frontiers Cell Developmental Biology

LIFEMEMBERSHIP OFLEARNEDSOCIETIES:

American SocietyforMicrobiology(ASM)

Indian Science Congress Association (ISCA)

Indian Academy of Biomedical Sciences (IABS).

National advisor and Executive Board member of Central Zone of IABS.

AWARDS AND HONOURS:

***LIST OF NATIONAL AND INTERNATIONAL SCHOLARSHIP/
FELLOWSHIPS RECEIVED:***

USA:

1. Two times Post-Doctoral fellowship awarded by National Institute of Health (NIH), USA. 2.

Three times Research Associateship received from NIH, USA.

3. Major Meeting Attended By Eliza Chakraborty. 103rd General Meeting, American Society for Microbiology, May 18-22, 2003, Washington D.C, Followed by Dinner with President of United States, George W. Bush.

INDIA:

1. Merit Cum Means Scholarship Sponsored by Government of Tripura for M.Sc. study. 2.

Merit Scholarship was awarded by Government U.P. for M.Sc. final year, but not accepted by myself. 3.

National fellowship sponsored by ICMR for Ph.D. Study (India).

4. National fellowship sponsored by ICMR for Research Associateship, NICED Kolkata, India

5. National Post-Doctoral Fellowship sponsored by Department of Biotechnology, Govt. of India, J.C. Bose Institute, Kolkata.

Avishkar Award for Adipose Derived Stem Cell Project Achieved at Pune on 17th Oct, 2014.

INVITED LECTURES (2011-21):

1. "Recent Trends On Cancer Therapy" delivered by Eliza Chakraborty Ph.D, organised by Divine Foundation, All India Interactive Higher Education & Career Seminar on 16th Feb 2011, "Gyan Manch Auditorium" Kolkata-700017, India.

2. "Stem Cells Are In Modern Therapy World" delivered by Eliza Chakraborty Head and Scientist In Charge, Stem Cell and Regenerative Medicine, VSVT, Baramati, Pune, organized by Andhra Pradesh Technically University, (Medical College) Nandyal, Hyderabad 22nd April 2014.

3. "Stem Cells Are In Modern Therapy World" delivered by Eliza Chakraborty Ph.D, Head and Scientist In Charge, Stem Cell and Regenerative Medicine, VSVT, Baramati, Pune, organized by MIET, Meerut (UP Technical University) 31st October 2014.

4. 2016. Invited to deliver a lecture on Tissue Specific Stem Cells & Stemformatics: Fascinating Reservoir For Future Regenerative Medicines in the Section of Medical Sciences (including Physiology), 103rd Indian Science Congress hosted by University of Mysore, Mysore from 3-7 January 2016.

5. Invited to deliver a lecture on Stemformatics & Adult Stem cell. Its Future applications in Regenerative Medicines in the Section of Stem Cell, IABS 5th Annual Meeting of Indian Academy of Biomedical Sciences, New Delhi, 26-28th Feb. 2016

6. Invited to deliver a lecture On "Stem Cell & Stemformatics In Future Translational Therapy" Organized by Beacon & Indian Academy of Biomedical Science (IABS) at Department of BioChemistry, Govt. Medical College & Hospital, Jammu (J&K) -180001, India, November 29-30, 2016.

7. Invited to deliver a lecture on "Stem Cell, Tissue Engineering & Stemformatics: Fate of Future Translational Therapies"...under "Metaheuristic Optimization in Multidisciplinary Research" TEQIP-III Organized By Department Of Electrical Engineering, Andhra University, Visakhapatnam, AP, India 27th Oct, 2018

8. Invited to deliver a lecture on "Stem Cells and Tissue....." IABSCON 2020 Advances in Biomedical Research from Basics to Translation "9th annual International Conference of Indian Academy of Biomedical Sciences, 27th to 29th Feb, 2020, D. Y. Patil Medical College, at Sayaji Hotel, Kolhapur Maharashtra.

9. Invited to deliver a lecture on "Pandemic Aftermath for Betterment of Human Life"

In An International Conference on Pandemic and Its Aftermath, 8th-10th Nov, 2020 organized By Department of Chemistry, Christ Church College, Kanpur.

10. Invited lecture on Advances in Stem Cell Therapy and Applications, 22nd Nov. 2021 organized by IIT, Roorkee and Govt. Medical College, Saharanpur, Venue: Govt. Medical College, Saharanpur, U.P. (Offline)

Poster Presented by B. Tech and M. Tech Students in International level:

1. "Artificial Intelligence in Healthcare" poster presented by

Udit Narayan Sharma^{1*}, Jitendra Singh^{2*}, Kalpak Ray^{3*}, Eliza Chakraborty^{4} 1,4 -**

***Medical Translational Biotechnology Lab, Department of Biotechnology, MIET, (Meerut), U.P, India**

2-IIT Guwahati, 3-

Behala College University of Kolkata, Corresponding author: **Eliza.Chakraborty@gmail.com, IABSSatellite International Conference on Interface of Biotechnology & Modern Medicine", 24th Feb, 2020, Miet, Meerut. (All Speakers from abroad and participants were Physically present at Miet.)

2. "Studies On Naturally Originated Biomatrix And Its Future Clinical Application On Three

Dimensional Culture Of Mammalian Cells” poster presented by

Authors: Jasmine Gupta*, Dhanur Agarwal* and Eliza Chakraborty**

***Presenting Author and **Corresponding author**

IABSSatellite International Conference on Interface of Biotechnology & Modern Medicine”, 24th Feb, 2020, Miet, Meerut. (All Speakers from abroad and participants were Physically present at Miet.)

3. S. Chiarta and A. Paniculata as Anthelmintic **Durgesh Yadav*** And Eliza Chakraborty, International Seminar on Food Safety and Nutrition, 23rd Sept, 2017, Miet, Meerut. *Poster presenting Author

4. “Legumens Family derived Food Supplements” **Akshya Charan*** and Eliza Chakraborty, International Seminar on Food Safety and Nutrition, 23rd Sept, 2017, Miet, Meerut. *Poster presenting Author.

ATTENDED AND POSTER PRESENTATION IN MEETING/ SYMPOSIUM/CONFERENCES/SEMINARS:

1. Michelle Maria Pietzak, MD., Eliza Chakraborty, Ph.D “E. Coli K1RS218 Induces Intestinal Epithelial Cell Apoptosis” Poster Presented 8th Sept 2004 Abstract # 153 (<http://theaps.org/publications/tphys/2004html/AugTPhys/TrResabstracts.pdf>)
2. Pietzak M, Chakraborty E, Wang Y, S. Huang S. “Deletion of S-fimbriae Operon Abrogates E. Coli K1 Induced Apoptosis in Intestinal Epithelial Cells” Submitted for poster presentation to the 2nd World Congress of Pediatric Gastroenterology, Hepatology and Nutrition, July 2004 Paris, France.
3. Michelle M. Pietzak and Eliza Chakraborty. “Apoptosis in Human Intestinal Epithelial cells Induced by Gliadin Protein and E. Coli K1” Poster presentation by Michelle M. Pietzak at the Children’s Hospital Los Angeles Research Institute, June 7, 2004, Los Angeles, California.
4. Eliza Chakraborty and Michelle M. Pietzak. “Fas-Mediated Apoptosis of Intestinal Epithelial cells by E. Coli K1” Poster presentation by E Chakraborty at the Children’s Hospital Los Angeles Research Institute, June 7, 2004, Los Angeles, California.
6. Chakraborty E., Pietzak, M. “E. Coli K1 Potentiates Gliadin-Induced Apoptosis in Human Intestinal Epithelial Cells (IEC)”, Poster presented to the 11th International Symposium on Coeliac Diseases, Belfast, Northern Ireland, April 28-30, 2004, Epithelial Cells (IEC).
8. Chakraborty E, Huang S, Pietzak M. “Escherichia coli K1 gene *ibeA* is important for intestinal epithelial cell invasion and villous damage” Poster presentation by E. Chakraborty at the Children’s Hospital Research Institute Los Angeles, June 9, 2003, Los Angeles, California.
9. **E. Chakraborty, J.W. Kim, S. Huang, K.S. Kim, M.M. Pietzak. “Escherichia coli Gene *ibeA* is required for the invasion of Caco-2 Intestinal Epithelial cells”, Abstract**

accepted and Poster presentation By Eliza Chakraborty at 103rd General Meeting, American Society for Microbiology, May 18-22, 2003, Washington D.C.

11. Chakraborty, E., Bhattacharya, S., Das, D., Chatterjee, K. and Das, P. (1995) "Host Entamoeba Interaction Role of Proteins as an immunomodulator", poster presented for the Indo French symposium on Immunology, New Delhi.

12. Chakraborty, E. and Das, P. (1995) "Effects of pH and

Temperature on Amoebicidal plant Extract (*Acacia arabica*) tested in vitro against *Entamoeba histolytica*", Abstract accepted and Poster presented at International Symposium on Trends in Microbiology to commemorate the 100th anniversary of the death of Louis Pasteur, Dec. 5-8, 1995.

OTHER RELEVANT INFORMATION:

- First time Stem formatics introduced at Indian Science Congress, 3-7th, Jan, 2016, University of Mysore, India.
- Two stem cell laboratories of International Standard (VSBT, Baramati and Medical Translational Biotechnology lab in Department of Biotechnology, MIET) were established in India since 2013-2015.
- Approximately 1000 young aspirants from remote India who are pursuing Undergraduate and Master's degree in Biotechnology get highly benefited till now from two states, Maharashtra and U.P.

WET LAB SKILLS

Molecular Biology Isolation of Genomic DNA, PCR, RT-PCR, DNA

Library Screening, Phage propagation and cultivation (Lambda gt 11) DNA laddering, RFLP and Isolation of RNA. I have some working knowledge of analysis of Affymetrix Microarrays data, cloning and Real Time PCR. Working skill Biomarker Discovery with Illumina and Golden Gate analysis.

Immunology ELISA, **Western Blotting**, Development of Antibodies, Mixed

Lymphocyte Culture, Cytotoxicity Assay, Lymphocyte Proliferation Assay, Isolation of Spleen and Liver Lymphocytes, Vaccine Development and Working Knowledge of Monoclonal antibody raising.

Cell Biology **FACS, (analysis, sorting and cell cycle) Immunocytochemistry**

Microbiology Bacterial binding assays, Invasion assays, Transc Assay etc.

Biochemical Protein purification (affinity, ion exchange etc), Measuring of Nitric oxide By Using Griess reagent.

Physiological TEER

Tissue Culture Isolation and maintenance of marine peritoneal Macrophages.

Maintenance of established cell lines (HeLa, CHO, 3T3, Hepa1-6, EL4, CaCo2, Hep2, Raw cells, IEC-6, T84, HT29, Jurkat, H1703, and BEP2D. Lung Epithelial cells, **3D culture (Matrigel)**)

Parasites and Microorganisms Isolation and maintenance of Entamoeba histolytica, Giardia lamblia, Leshmania donovani, Vibrio cholera and Escherichia coli.

ANIMAL MODELS

- Rat and Hamster Model for Intestinal and Hepatic Amoebiasis
- Mouse Models for Giardiasis and Leshmaniasis, Knockout models for Hepatitis-C study. • Suckling Mouse model for experimental diarrhea Caused by Vibrio cholera
- Neonatal (Sprague Dawley) Rat experimental models for testing pathogenicity of *E. Coli ileal loop model of Rabbit*

APC model, CD1d Knockout and many Transgenic Models.

Eliza Chakraborty, Ph.D., Pdf (USA)

Prof.

of Biotechnology, Founder of Medical Translational Biotechnology Lab,

Miet, Founder HOD of DST-Fist, Miet ,

Miet (Affiliated Dr. A.P.J.

Kalam Technical University) Approved by AICTE.

**NH-58, Bagpath Crossing, Meerut, U.P.,
INDIA**

Erst while faculty member of University of California, Los Angeles (UCLA),

Los Angeles, USA.

Ex. Member of Keck School

**of Medicine, University of Southern California, Los Angeles
90089, USA.**

Cell Phone: 7060857697, [Email: eliza.chakraborty@gmail.com](mailto:eliza.chakraborty@gmail.com)

[Recent Publications Links](#)

List of Patents Filed:

Patent CBR No. 5872, April 16th.2021 (online) and Published

Patent CBR No. 16964, Sept.2020 (Status:Published)

Patent CBR No. 16965,Sept. 2020 (Status:Published)

Patent CBR No. 16967,Sept. 2020 (Status:Published)

Patent CBR No.1009, Jan.2018 (Status: Published and Granted on * 8th.April,2022), It is on Stem Cell.

Patent CBR No 20639, Sept,2017(Status:publishedand1stexamination report submitted and hearing also completed) about to get approved, It is alsostemcellrelated.