# Yashmin Choudhury, Ph.D.

Associate Professor,

Department of Biotechnology

**Assam University** 

Silchar-788011

E-mail:- yashminchoudhury@gmail.com

Mother's Name: Smt. Prescila Lyngdoh

Father's name: (L) Anisuzzaman Choudhury

Spouse's name: Dr. Eros Vasil Kharshiing

Permanent Address: Goraline, Revenue Block, Plot No-13, Dong Lumshngain, Shillong-

793006

## Education

- ✓ North Eastern Hill University (Meghalaya, INDIA), Ph.D. (Biochemistry) 2010 on "Investigations into the alterations of tumor suppressor genes during carcinogenesis" supervised by Prof R. N. Sharan
- ✓ North Eastern Hill University (Meghalaya, INDIA), M.Sc. (Biochemistry) 2002 [1st] Rank, University Gold Medal]
- ✓ North Eastern Hill University (Meghalaya, INDIA), B.Sc. Honours (Biochemistry) 2000 [2<sup>nd</sup> Rank]
- ✓ Qualified National Eligibility Test conducted by Council of Scientific Research and University Grants Commission, India (CSIR-UGC NET) for Junior Research Fellowship and Lecturership in Life Sciences, 2002
- ✓ Graduate Aptitude Test in Engineering (GATE) in Life Sciences with percentile score of 86.89, 2003

### Teaching

✓ 3<sup>rd</sup> November 2021-present: Associate Professor, Department of Biotechnology, Assam University, Silchar



- ✓ 3<sup>rd</sup> November 2018-2<sup>nd</sup> November 2021; Assistant Professor (Stage III), Department of Biotechnology, Assam University, Silchar
- ✓ 3<sup>rd</sup> November 2013 2<sup>nd</sup> November 2018; Assistant Professor (Stage II), Department of Biotechnology, Assam University, Silchar
- ✓ 3<sup>rd</sup> November 2009 2<sup>nd</sup> November 2013; Assistant Professor (Stage I), Department of Biotechnology, Assam University, Silchar
- ✓ 1<sup>st</sup> May 2006 2<sup>nd</sup> November 2009; Lecturer, Department of Biotechnology (UG & PG), St. Anthony's College, Shillong
- ✓ July 2002 August 2003; Lecturer, Department of Biochemistry (UG), St. Edmund's College, Shillong

## Research

- ✓ 2012 2013 Overseas Associateship (funded by DBT, GoI) at The Beatson Institute for Cancer Research, Glasgow, UK. Studied the involvement of the AMPK signaling pathway in the pathogenesis and potential therapy of prostate cancer under the mentorship of Prof. H.Y Leung.
- ✓ 2016 ongoing; Mentor DBT Research Associates/National Post-Doctoral **Fellows** 
  - Dr. Paromita Chakraborty, SERB NPDF (2018-2020) "Genomic and evolutionary analysis of drug resistant *Mycobacterium tuberculosis* for applications to TB management in India"
  - Dr. Paromita Chakraborty, DBT RA (2016-2018) "Molecular assessment on distribution frequency and genetic diversity of Avian Rotaviruses (AvRV) in North-East India".
  - Dr. Mehboob Hogue, DBT RA (2016-2017) "Studies on the effects of oleic acid complex of milk proteins on skin and oral cancer in mouse model"

### √ 2009 – ongoing; Ph.D. Research supervisor, Department of Biotechnology, Assam University, Silchar

#### As supervisor (awarded 7; ongoing 4):

- Dr. Aditi Bhowmik, awarded Ph.D. degree on 18<sup>th</sup> May 2017. Title "Study of alterations in tumor suppressor genes in head and neck cancer patients of Southern Assam"
- 2. Dr. Sambuddha Das, awarded Ph.D. degree on 16<sup>th</sup> February 2018. Title "Study of alterations in response of DNA repair genes during head and neck carcinogenesis"
- 3. Dr. Angom Ranjana Devi, awarded Ph.D. degree on 13<sup>th</sup> march 2020. Title "Study of alterations in tumor suppressor, DNA repair and immune responses in mice exposed to tobacco"
- 4. Dr. Sayantan Nath, awarded Ph.D. degree on 25<sup>th</sup> September 2020. Title "Effects of modulation of the AMPK signaling and insulin receptor pathways in Diabetes Mellitus"
- 5. Dr. Jeny Laskar, awarded Ph.D. degree on 7<sup>th</sup> October 2021. Title "Study of the role of the AMPK signaling pathway in betel nut induced carcinogenesis in mice"
- 6. Dr. Moumita Nath, awarded Ph.D. degree on 25<sup>th</sup> July 2023. Title "A study on the role of selected anti-diabetic drugs in ameliorating betelnut induced carcinogenesis"
- 7. Dr. Kasturi Bhattacharjee, awarded Ph.D. degree on 8<sup>th</sup> October 2023. Title "Study on the effects of lipid synthesis inhibitors in betel nut induced carcinogenesis"
- 8. Ms Barnali Sinha, ongoing and enrolled in Ph.D programme in December 2021. Title " Evaluation of anti-cancer and metabolic effects of extracts of the eri silkworm (*Samia ricini*)"

- 9. Ms Sorbomita Chakraborty, ongoing and enrolled in Ph.D programme on December 2023. Title "Identification of genetic variants associated with addiction to betel quid in select populations of North-East India"
- 10.Mr Abdul Hussain Choudhury, ongoing and admitted to Ph.D programme in December 2024.
- 11. Ms Pushpanita Barman, ongoing and admitted to Ph.D programme in December 2024.

#### As co-supervisor (awarded 6):

- 1. Dr. Jagadish Hansa, awarded Ph.D. degree on 8<sup>th</sup> January 2014. Title "Prevalence of cancer associated genes in breast cancer patients in the hospital based study of Southern Assam"
- 2. Dr. Manish Kumar, awarded Ph.D degree on 27<sup>th</sup> July 2021. Title "Study on Somatic Variants by Deep Sequencing of Circulating Cell Free DNA From Liquid Biopsy in Head and Neck Cancer"
- 3. Dr. Raima Das, awarded Ph.D degree on 25<sup>th</sup> August 2022. Title "Study on germline variants in major cancer causing genes linked to head and neck carcinoma from Northeast Indian population"
- 4. Dr. Sorokhaibam Malvika, awarded Ph.D degree in February 2023. "Studies on genetic diversity of indigenous poultry from Northeast India using mitochondrial DNA sequences"
- 5. Dr. Shaheen Laskar, awarded Ph.D degree in September 2022. Title "Assessment of germline variants in different signaling pathway genes associated with nasopharyngeal carcinoma in Northeast Indian population.

- 6. Dr. Ningthoujam Neelima Devi, awarded Ph.D. degree on 4<sup>th</sup> February 2024. Title "Genetic diversity of endemic hilly cattle (Siri, Yak and Mithun) from Northeastern Himalayan region".
- ✓ 2009 ongoing, Supervisor for M.Sc. dissertation, Department of **Biotechnology, Assam University, Silchar:** 
  - 1. Shilpi Baidya (2010) In silico analysis of evolutionary relationship between nucleotide excision repair proteins of prokaryotes and eukaryotes.
  - 2. Bikash Ng. Singha (2010) In silico analysis of effect of mutation upon structure of BRCA1 and BRCA2 proteins
  - 3. Khuraijam Lemino Singh (2011) Comparison of antioxidant effect of Vitamin C, Vitamin E and curcumin on blood cells of smokers and nonsmokers upon exposure to extracts of chewing tobacco
  - 4. Angom Ranjana Devi (2011) Comparison of antioxidant effect of Vitamin C, Vitamin E and curcumin on blood plasma of smokers and non-smokers upon exposure to extracts of chewing tobacco
  - 5. Sambuddha Das (2011) Determination of susceptibility of whole blood of smokers and non-smokers to oxidative stress induced by exposure to extracts of chewing tobacco
  - 6. Sumi Das Purkayastha (2011) Determination of susceptibility of blood plasma of smokers and non-smokers to oxidative stress induced by exposure to extracts of chewing tobacco
  - 7. Shubhrajit Kar (2012) Elucidation of disease networks for different cancers through data mining
  - 8. Manjushree Bhattacharjee (2012) Expression of p53 and MDM2 protein in peripheral blood lymphocytes of head and neck cancer patients

- 9. Sujata Deka (2014) Single nucleotide polymorphism of 309 MDM2 (T>G) gene and its altered protein levels with respect to p53
- 10. Agniv Kr. Laskar (2014) Study of genetic polymorphism and altered expression of DNA repair gene due to tobacco and alcohol consumption
- 11. Juhi Hasan Laskar (2014) Study of oxidative stress parameters and phospho-AMPK levels in diabetes mellitus
- 12. Sukanya Purkayastha (2015) Study of association of polymorphism in the *XPD* and *BRCA2* gene with risk for hypertension, asthma and type 2 diabetes mellitus
- 13. Lekhika Pathak (2015) Study of association of polymorphism in the BRCA1 and p53 genes with risk for head and neck cancer
- 14. Taniya Ghosh (2016) Role of dipeptidyl peptidase 4 (DPP4) inhibitor vildagliptin in phospho-Akt protein signaling in mouse model of type 2 diabetes mellitus
- 15. Hirokjyoti Roy (2016) Study of the role of the Arg302Gln polymorphism of *RAD18* in the development of diabetes, asthma and hypertension in a population of Southern Assam
- 16. Nabanita Roy (2016) Amelioration of betel-nut induced carcinogenesis in mice by activation of AMP-activated kinase (AMPK) using metformin
- 17. Anima Sinha (2016) Genotypic analysis of *APE1*-gene in patients of Southern Assam suffering from asthma, hypertension and diabetes
- 18. Mayuri Senchowa (2016) Study of oxidative stress parameter and phospho-AMPK level in cancer
- 19. Biprojyoti Chakraborty (2017) Study of the prevalence of group A Avian Rotavirus (AvRV) infection in the poultry population of Cachar district of Southern Assam

- 20. Kasturi Bhattacharjee (2017) Study of the role of Acetyl Coenzyme A carboxylase (ACC) in a murine model of betel nut induced carcinogenesis treated with metformin
- 21. Moumita Nath (2017) Study of the response of 5'AMP-Activated Kinase (AMPKa) and Acetyl-CoA Carboxylase (ACC) in a murine model of type 2 diabetes mellitus treated with anti-diabetic drugs
- 22. Toma Paul (2017) Assessment of genetic diversity of goat breeds in the native tract of East and Northeast India based on mitochondrial DNA
- 23. Dipu Mani Barman (2018) Evaluation of the effect of chronic exposure to nicotine using a murine model of nicotine use
- 24. Hillol Das (2018) Study of the response of the PI3K-Akt/Mtor pathway in a murine model of betel-nut induced carcinogenesis treated with metformin
- 25. Papiya Roy (2019) Immunohistochemical and histological evaluation of the effects of metformin, berberine and pioglitazone on the tissues of a murine model of betel-nut use
- 26. Mousum Doley (2019) *In vitro* assessment of the effect of salted and/or fermented fish consumed in North-East India on biological molecules
- 27. Rakhi Barman (2019) Effect of the dipeptidyl peptidase-4 inhibitor on mice treated with aqueous extract of betel-nut (AEBN)
- 28. Sushmita Konch (2020) Genome editing in the therapy of neurological disorders
- 29. Anwesha Paul Choudhury (2020) Link between obesity and cancer-a systematic review
  - 30. Shiba Das (2020) Drug Repurposing in Oncology
- 31. Dibakar Roy (2021) Circular RNA as a biomarker for head and neck cancer: A systematic review and meta-analysis
  - 32. Simla Gogoi (2021) TIGAR and its relation to cancer
- 33. Akash Gupta (2022) RNA based cancer therapeutics-perspectives from clinical trials

- 34. Jasmina Khatun (2022) Study of AMPK signaling and anti-cancer effects of orlistat in adipose tissue of mice exposed to aqueous extract of betel-nut (AEBN)
- 35. Labli Nath (2022) Study of the Akt/mTOR pathway in the tissues of mice exposed to Aqueous Extract of Betel Nut (AEBN) and treated with Cisplatin
- 36. Puja Das (2022) Study of the ameliorative effects of the dipeptidyl peptidase 4 inhibitor, vildagliptin, on the stomach of mice exposed to aqueous extract of betel nut (AEBN)
- 37. Abdul Basith Barbhuiya (2023) Design and creation of histological imaging and analysis database for betel-nut induced carcinogenesis in mouse model.
- 38. Jayasree Paul (2023) Antioxidant effects of protein extract of the nymph and adult forms of the edible insect *Velarifictorus micado*
- 39. Tasmin Aktar Laskar (2023) Antioxidant effects of the protein extract of the edible insect *Coptotermes gestroi*: A project work
- 40. Ankita Dey (2023) Study on the effect of food colours in ice gola syrup on chromosomal and cellular structure of onion (*Allium cepa*) root tip cells
- 41. Sah-Newaj Mustafa Choudhury (2023) Genotoxicity induced by fertilizers used in Cachar district on meristematic cells (root tip) of *Allium cepa*
- 42. Nikita Dey (2024) Assessing the chromosomal aberration inducing properties of commercially available hair dye preparations using onion root tip assay
- 43. Juwell Ahmad Laskar (2024) Study on the effect of *Samia ricini* pupae powder on liver function and oxidative stress in high fat diet fed Swiss albino mice
- 44. Abhishek Shil (2024) Study of the effect of *Samia ricini* pupae powder on the expression of lipid metabolizing enzymes in high fat diet induced obesity in Swiss albino mice

## Research grants

#### ✓ Ongoing projects:

• 2024-2027 Council of Scienctific and Industrial Research (CSIR), GoI (20 lakhs) as Principal Investigator. Project title "Elucidating the genomic signatures of tobacco and betel quid chewers of North-East India"

#### ✓ Completed projects:

- 2011-2015 Department of Biotechnology (DBT), GoI (43.76 lakhs) as Principal Investigator. Project title " Development of Cancer Biomarker based on copy number of circulating DNA and level of p53, BRCA1 and BRCA2 proteins in peripheral blood lymphocytes of cancer patients"
- 2016-2018 ITRA,GoI (35.62 lakhs) as Co-PI and PI-In-Charge. Project Title ImageIDGP: Image based identification of Individuals, Breeds and Diseases of Pigs and Goats
- 2009-2019 Department of Biotechnology, GoI (94.84 lakhs) as Co-PI and PI-In-Charge. Project Title "Development/Upgrading Infrastructure in Medical Colleges in Northeastern States of India"
- 2017-2020 Department of Biotechnology (DBT) GoI, Unit of Excellence (115.272 lakhs) as Principal Investigator. Project title "Investigations into the potential of cativating the AMP-activated kinase (AMPK) for the amelioration of betel-nut induced carcinogenesis.
- 2020-2022 Indian Council of Medical Research (ICMR), GoI (20 lakhs) as co-PI. Project title "Studies on Metagenomics biomarkers of Gut microbial communities of Tribal Population from Arunachal Pradesh.

## Awards/Fellowships/Recognition

- ✓ Recognition for "Women In Immunology" by the Indian Immunology Society on the occasion of "International day for Women and Girls in Science", 11th February 2025
- ✓ INSA-Teachers Award, Indian National Science Academy, 2021
- ✓ Inspired Teacher, Assam University, Silchar, 2015-2016

- ✓ DBT Overseas Associate, Department of Biotechnology, Government of India, 2012-2013.
- ✓ ISCA Best Poster Presentation Award of the Indian Science Congress Association, Kolkata, in the section of New Biology during the 96th Indian Science Congress, 2009.
- ✓ Young Scientist Award at the International Conference on Radiation Biology and Translational research in Radiation Oncology, Jaipur, 2008.
- ✓ CSIR-UGC Senior Research Fellowship (SRF) in Life Sciences & eligibility for lecturership, 2005
- ✓ CSIR-UGC Junior Research Fellowship (JRF) in Life Sciences & eligibility for lecturership, 2002
- ✓ Graduate Aptitude Test in Engineering (GATE) in Life Sciences,2003
- ✓ University Gold Medal, NEHU, Shillong, for securing 1st rank in M.Sc Biochemistry Examination, 2002
- ✓ Award of Excellence by St. Edmund's College, Shillong, for securing 2nd rank in University Examination (Biochemistry Honours), 2000
- ✓ Awarded by Meghalaya Board of School Education, Tura, for securing 4<sup>th</sup> position in the SSLC examination, 1995

## Publications (peer reviewed journals)

- Yashmin Choudhury\*, Moumita Nath and Jeny Laskar (2025). A review on repurposing anti-diabetic drugs for the amelioration of betel-nut induced carcinogenesis. Indian Journal of Biochemistry & Biophysics, 62:222-236. Doi: 10.56042/ijbb.v62i3.12391
- Kasturi Bhattacharjee, Moumita Nath and Yashmin Choudhury\* (2024).
   Berberine mitigates betel-nut induced hepatocarcinogenesis, enhances chemosensitivity to cisplatin and reduces cisplatin- induced nephrotoxicity in mice exposed to an aqueous extract of betel nut. Pharmacognosy Journal, 16(5):1021-1028. Doi: 10.5530/pj.2024.16.165

- 3. Barnali Sinha and **Yashmin Choudhury\*** (2024). Revisiting edible insects as sources of therapeutics and drug delivery systems in cancer therapy. Frontiers In Pharmacology. Volume 15 2024 | https://doi.org/10.3389/fphar.2024.1345281. IF-5.6.
- 4. Sambuddha Das, Aditi Bhowmik, Abhinandan Bhattacharjee, Biswadeep Choudhury, Momota Naiding, Bishal Dhar, Agniv Kr Laskar, Jayeeta Pandit, Sankar K. Ghosh and Yashmin Choudhury\* (2023). Low level of BRCA2 in peripheral blood lymphocytes is associated with an increased risk for head and neck squamous cell carcinoma (HNSCC) in a population of North-East India: a case-control study. Ecancermedicalscience 17:1503. IF-1.8
- Yahyea Baktiar Laskar, Kasturi Bhattacharjee, Moumita Nath, Yashmin Choudhury, Pranab Behari Mazumder and Anupam Das Talukdar (2023). Protective Effects of Pelargonidin against DMBA-Induced Mammary Tumorigenesis in BALB/c Mice through Reduced Oxidative Stress and Lipid Anomalies. Nutrition and Cancer, DOI:10.1080/01635581.2023.2219027. IF-2.816
- Parijat Hazarika, Indranil Chattopadhyay, Mika Umpo, Yashmin Choudhury, Indu Sharma (2023). Studies on antimicrobial stress with reference to biofilm formation of faecal microbial communities from Apatani tribe of Arunachal Pradesh. Indian Journal of Medical Microbiology, DOI: 10.1016/J.IJMMB.2022.09.011. 43:1-7 IF-1.347
- Moumita Nath, Kasturi Bhattacharjee, Yashmin Choudhury (2023). The anti-diabetic drug pioglitazone ameliorates betel-nut induced carcinogenesis in mice by restoring normal lipid metabolism, reducing oxidative stress and inducing apoptosis. Journal of Cancer Research and Therapeutics. 19(7):p 1967-1974, Oct–Dec 2023. DOI: 10.4103/jcrt.jcrt\_844\_22. IF-1.331
- 8. Parijat Hazarika, Indranil Chattopadhyay, Mika Umpo, **Yashmin Choudhury**, Indu Sharma (2022). Elucidating the gut microbiome of the tribal community of Arunachal Pradesh: Perspectives on their lifestyle or food habits. Scientific Reports 12:18296. IF-4.996

- Moumita Nath, Dibakar Roy, Yashmin Choudhury\* (2022). Circular RNAs are Potential Prognostic Markers of Head and Neck Squamous Cell Carcinoma: Findings of a Meta-Analysis Study. Frontiers In Oncology. 12:782439. doi: 10.3389/fonc.2022.782439 IF-5.738
- 10. Ningthoujam Neelima Devi, Bishal Dhar, Prasanta Kumar Bera, **Yashmin Choudhury**, Sankar Kumar Ghosh (2022). Revisit of the taxonomic status of Bos genus with special reference to north eastern hilly region of India. Animal Gene. 27:200143.
- 11. Shaheen Laskar, Raima Das, Sharbadeb Kundu, Amrita Saha, Nilashish Nandi, **Yashmin Choudhury**, Sankar K. Ghosh (2022). Whole exome sequencing identifies the potential role of genes involved in p53 pathway in Nasopharyngeal Carcinoma from Northeast India. Gene, 812: 146099. IF-3.913
- 12. Sharbadeb Kundu, Bishal Dhar, Raima Das, Shaheen Laskar, Seram Anil Singh, Weteso Kapfo, Rajesh Paul, Vijayalakshmi Ramshankar, Yashmin Choudhury, Sankar Kumar Ghosh (2022). The impact of pre-historic human dispersals on the presence of tobacco-related oral cancer in Northeast India. Gene, 813:149068. IF-3.913
- 13. Raima Das, Sharbadeb Kundu, Shaheen Laskar, **Yashmin Choudhury**, Sankar K. Ghosh (2022). In silico assessment of DNA damage response gene variants associated with head and neck cancer. Journal of Biomolecular Structure and Dynamics, DOI: 10.1080/07391102.2022.2027817 . 1-18.IF-5.235
- 14. Kasturi Bhattacharjee, Moumita Nath, **Yashmin Choudhury\*** (2021). Berberine is as effective as the anti-obesity drug Orlistat in ameliorating betel-nut induced dyslipidemia and oxidative stress in mice. Phytomedicine Plus. 3 (1): 100098. https://doi.org/10.1016/j.phyplu.2021.100098 IF-NONE
- 15. Jina Rajkumari, **Yashmin Choudhury**, Kasturi Bhattacharjee, Piyush Pandey (2021). Rhizodegradation of pyrene by a non-pathogenic Klebsiella pneumoniae isolate applied with Tagetes erecta L. and changes in rhizobacterial community. Frontiers in Microbiology. https://doi.org/10.3389/fmicb.2021.593023. 12:593023. IF-6.064

- 16. Parijat Hazarika, Indranil Chattopadhyay, Mika Umpo, Yashmin Choudhury, Indu Sharma (2021). Phylogeny, biofilm production and antimicrobial properties of fecal microbial communities of Adi tribes of Arunachal Pradesh, India. Applied Biochemistry Biotechnology. 193(6):1675-1687. and https://doi.org/10.1007/s12010-021-03535. IF-3.094
- 17. Supriyo Chakraborty, Durbba Nath, Parvin A. Barbhuiya, Yashmin Choudhury, Arif Uddin (2021). Silencing lung cancer genes using miRNAs identified by 7 merseed matching. Computational Biology and Chemistry, 92 (2021)107483. IF-3.40
- 18. Sumita Dutta Gupta, Bishal Dhar, Sharbadeb Kundu, Nabarun Das, Arun Paul Choudhury, Monica Deb, Abhijit Das, Nayanika Das, Biswadeep Choudhury, Alex C. Varghese, Kushal Kumar Kar, Yashmin Choudhury, Sankar Kumar Ghosh (2021). Association between gene expression levels of GDF9 and BMP15 and clinicopathological factors in the prognosis of female infertility in northeast Indian populations. Meta Gene. 30: 100964. IF-NONE
- 19. Moumita Nath, Kasturi Bhattacharjee, Yashmin Choudhury\*. Vildagliptin, a dipeptidyl peptidase-4 inhibitor, reduces betel-nut induced carcinogenesis in female mice. Life Sciences. 2021 266(6):118870 IF-6.78
- 20. Moumita Nath, Sayantan Nath, **Yashmin Choudhury\***. The impact of thiazolidinediones on the risk for prostate cancer in patients with type 2 diabetes mellitus: A review and meta-analysis. 2021 Meta Gene 27:100840 IF-NONE
- 21. Chakraborty S, Nath D, Paul S, Choudhury Y, Ahn Y, Cho YS, Uddin A. A Crosstalk on Codon Usage in Genes Associated with Leukemia. Biochemical Genetics. 2021 59(1):235-255 IF-2.22
- 22. Angom Ranjana Devi, Mahuya Sengupta, Dipu Mani Barman, **Yashmin** Choudhury\*. Oral Nicotine Induces Oxidative Stress and Inflammation but Does Not Subvert Tumor Suppressor and DNA Repair Responses in Mice. 2021 Indian Journal of Clinical Biochemistry DOI: 10.1007/s12291-020-00903-8. 36(3):296-303

- 23. Moumita Nath, Kasturi Bhattacharjee, **Yashmin Choudhury\***. Pleiotropic effects of anti-diabetic drugs: A comprehensive review. European Journal of Pharmacology. 2020 884:173349 IF-5.195
- 24. Kasturi Bhattacharjee, Moumita Nath, **Yashmin Choudhury\***. Fatty acid synthesis and cancer: Aberrant expression of the ACACA and ACACB genes increases the risk for cancer. 2020 Meta Gene 26:100798 IF-NONE
- 25. Chakraborty S, Barbhuiya PA, Paul S, Uddin A, **Choudhury Y**, Ahn Y, Cho YS. Codon usage trend in genes associated with obesity. Biotechnology Letters. 2020 42(10):1865-1875 IF-2.716
- 26. Shaheen Laskar, Sharbadeb Kundu, Raima Das, **Yashmin Choudhury**\*, Sankar K. Ghosh\*. Clinically significant variants associated with nasopharyngeal carcinoma: Findings of a meta-analysis study. Meta Gene. 2020 24:100688. IF-NONE
- 27. Chakraborty S, Paul S, Nath D, **Choudhury Y**, Ahn Y, Cho YS, Uddin A. Synonymous codon usage and context analysis of genes associated with pancreatic cancer. Mutation Research/ Fundamental and Molecular Mechanisms of Mutagenesis. 2020 821:111719 IF-2.15
- 28. Sorokhaibam Malvika, Prabal Rajan Ghosh, Bishal Dhar, N Neelima Devi, Rajesh Paul, Amit Halder, Ananya Mazumder, **Yashmin Choudhury**, Sankar Kumar Ghosh (2019) Genetic status of indigenous poultry (red jungle fowl) from India, Gene 705, 77-81 IF-3.913
- 29. Sambuddha Das, **Yashmin Choudhury**, S. Thangminlal Vaiphei, R.N. Sharan (2019) A Systematic Review and Meta-analysis on the Health and Safety Implications of Electronic Nicotine Delivery Systems. Indian Journal of Clinical Practice. 29: 1016-1026. IF-NONE
- 30. Jeny Laskar, Mahuya Sengupta, **Yashmin Choudhury\*** (2019) Treatment with the anti-diabetic drug metformin ameliorates betel-nut induced carcinogenesis in a murine model. Pharmacological Reports. 71(6):1115-1124 IF-4.4

- 31. Manish Kumar, Mridul Kumar Sarma, Yashmin Choudhury, Sankar Kumar Ghosh, Rosy Mondal (2019) Somatic Mutations in Circulating Cell-Free D-Loop Region of Mitochondrial DNA: A Study from North-East India. Journal of Biological Engineering Research and Review 6 (1), 08-13 IF-NONE
- 32. Sayantan Nath, Sambuddha Das, Aditi Bhowmik, Sankar K. Ghosh, **Yashmin** Choudhury\* (2018) The GSTM1 and GSTT1 Null Genotypes Increase the Risk for Type 2 Diabetes Mellitus and the Subsequent Development of Diabetic Complications: A Meta-analysis. Current Diabetes Reviews 15 (1), 31-43 IF-NONE
- 33.Jeny Laskar, Kasturi Bhattacharjee, Mahuya Sengupta, Yashmin **Choudhury**\*(2018). Anti-Diabetic Drugs: Cure or Risk Factors for Cancer? Pathology & Oncology Research, 24(4):745-755. IF-2.874
- 34. Manish Kumar, **Yashmin Choudhury**, Sankar K. Ghosh, Rosy Mondal. Application and optimization of minimally invasive cell-free DNA techniques in oncogenomics (2018) Tumor Biology, 40 (2). IF-3.65
- 35. Sambuddha Das, Sukanya Purkayastha, Hirakiyoti Roy, Anima Sinha, **Yashmin Choudhury**\*(2018). Polymorphisms in DNA repair genes increase the risk for type 2 diabetes mellitus and hypertension. Biomolecular concepts 9 (1), 80-93.
- 36. Raima Das, Sharbadeb Kundu, Shaheen Laskar, Yashmin Choudhury\*, Sankar K. Ghosh (2018) Assessment of DNA repair susceptibility genes identified by whole exome sequencing in head and neck cancer. DNA repair, 66, 50-63. IF-4.354
- 37. Angom Ranjana Devi, Mahuya Sengupta, **Yashmin Choudhury\*** (2017). Aqueous extract of smokeless tobacco (gutkha) deregulates tumor suppressor and DNA repair response in a murine model of smokeless tobacco use. Journal of Environmental Pathology, Toxicology and Oncology. 36(3):245-267. IF-3.567
- 38. Sayantan Nath, Sankar Kumar Ghosh, **Yashmin Choudhury\***. A murine model of type 2 diabetes mellitus developed using a combination of high fat diet and multiple low doses of streptozotocin treatment mimics the metabolic characteristics

- of type 2 diabetes mellitus in humans. Journal of Pharmacological and Toxicological Methods 84 (2017) 20–30. IF-2.285
- 39. Aditi Bhowmik, Sambuddha Das, Abhinandan Bhattacharjee, Biswadeep Choudhury, Momota Naiding, Sankar Kumar Ghosh, **Yashmin Choudhury\*** (2016). BRCA1 and MDM2 as independent blood-based biomarkers of head and neck cancer. Tumor Biology. DOI 10.1007/s13277-016-5359-5 IF-3.65
- 40. Sambuddha Das, Sayantan Nath, Aditi Bhowmik, Sankar Kumar Ghosh, **Yashmin Choudhury\*** (2016). Association between OGG1Ser326 polymorphism and risk of upper aero-digestive tract and gastrointestinal cancers: A meta-analysis. SpringerPlus, 35(1), 1-11, 2016. IF-NONE
- 41. Aditi Bhowmik, Sambuddha Das, Abhinandan Bhattacharjee, Biswadeep Choudhury, Momota Naiding, Sujata Deka, Sankar Kumar Ghosh, **Yashmin Choudhury\*** (2015). MDM2 and TP53 Polymorphisms as Predictive Markers for Head and Neck Cancer in Northeast Indian Population: Effect of Gene- Gene and Gene-Environment Interactions. Asian Pacific Journal of Cancer Prevention. 16(14):5767-72. IF-2.514
- 42. Sambuddha Das, Aditi Bhowmik, Abhinandan Bhattacharjee, Biswadeep Choudhury, Momota Naiding, Agniv Kr Laskar, Sankar Kumar Ghosh, **Yashmin Choudhury\*** (2015). XPD, APE1, and MUTYH polymorphisms increase head and neck cancer risk: effect of gene-gene and gene-environment interactions. Tumor Biology, 36, 10, 7569- 7579. If-3.65
- 43. **Yashmin Choudhury**, Ian P. Salt and Hing Y Leung (2015) AMP-activated kinasefriend or foe in the era of targeted therapy? Cell Cycle. 14(12):1761-2. IF-5.173
- 44. Aditi Bhowmik, Sayantan Nath, Sambuddha Das, Sankar Kumar Ghosh, **Yashmin Choudhury\*** (2015). ATM rs189037 (G→A) polymorphism and risk of lung cancer and head and neck cancer: A meta-analysis. Meta-Gene, 6, 42-48 IF-NONE

- 45. Hing Y Leung, **Yashmin Choudhury**, Zichu Yang, Ian P Salt (2014) In vitro analysis of AMPK in human prostate cancer, BAUS Abstracts. British Journal of Surgery, 101: 56-58. Doi: 10.1002/bjs.9510. IF-9.6
- 46. Yashmin Choudhury, Zichu Yang, Imran Ahmad, Colin Nixon, Ian P. Salt and Hing Y Leung (2014). AMP-activated protein kinase (AMPK) as a potential therapeutic target independent of PI3K/Akt signalling in prostate cancer Oncoscience, 6, 446-456. IF-NONE
- 47. Rajeshwar N Sharan, Ravi Mehrotra, **Yashmin Choudhury**, and Kamlesh Asotra (2012) Association of betel nut with carcinogenesis: Revisit with a clinical perspective. PLoS One. 2012; 7(8):e42759. doi: 10.1371/journal.pone.0042759. **RECOMMENDED BY FACULTY OF 1000**. IF-3.752
- 48. **Yashmin Choudhury** and Rajeshwar N. Sharan (2011) Altered BRCA1 and BRCA2 responses and mutation of BRCA1 gene in mice exposed chronically and transgenerationally to aqueous extract of betel nut (AEBN), Environmental Toxicology and Pharmacology, 31: 57-69. IF-5.785
- 49. **Yashmin Choudhury** and Rajeshwar N. Sharan (2010) Ultrastructural alterations in liver of mice exposed chronically and transgenerationally to aqueous extract of betel nut: Implications in betel-nut induced carcinogenesis. Microscopy Research and Technique, 73, 530-539. IF-2.893.
- 50. **Yashmin Choudhury** and Rajeshwar N. Sharan (2009) Altered p53 response and enhanced transgeneration transmission of carcinogenic risk upon exposure of mice to betel nut, Environmental Toxicology and Pharmacology, 27, 127-138. IF-5.785
- 51. **Yashmin Choudhury** and Rajeshwar N. Sharan (2008) Genomic instability increases risk of cancer in mice exposed transgenerationally to aqueous extract of betel nut, Indian Journal of Radiation Research, 5(3-4), 8. IF-None

## Book chapters and other publications

- 1. R.N. Sharan and **Yashmin Choudhury** (2010)Betel nut and susceptibility to cancer. In: Environmental Factors, genes and the development of human cancers. Part 3, 401-428. Edited by Roy D and Dorak MT. Published by Springer Science + Business Media, USA. ISBN: 978-1-4419-6752-7.
- 2. Sankar Kumar Ghosh, **Yashmin Choudhury**, Rosy Mondal, Ruhina S Laskar and Prabal R Ghosh. Individual DNA Barcoding: Promises and Challenges (2012). A text book on DNA Barcoding. By Sankar Kumar Ghosh. Books Space, Kolkata, India ISBN: 978-81-922989-4-8 137-148.
- 3. Jeny Laskar, Sayantan Nath, Sankar Kr Ghosh, Mahuya Sengupta, **Yashmin Choudhury\*** (2015) **Targeting Metabolic Pathways for Disease** Therapy. In: Trends in Experimental Biology. Ed. Kma. Excel India publishers, New Delhi, India. L.pp 1-37. ISBN:978-93-84869-60-1
- 4. **Yashmin Choudhury**, Hirakiyoti Roy, Sambuddha Das (2016) Awareness of electronic cigarettes among the youth of the North-Eastern Region of India. North East Bioline, 2: 46-48.
- 5. Javed Hussain Choudhury, Raima Das, Shaheen Laskar, Sharbadeb Kundu, Manish Kumar, Partha Pratim Das, Yashmin Choudhury, Rosy Mondal, p16 Sankar Kumar Ghosh (2018).**Detection Promoter** of Hypermethylation by Methylation-Specific PCR. In: The Retinoblastoma Protein. Ed. Pedro Santiago-Cardona. Humana Press, New York, NY, pp 111-122.ISBN-13: 978-1493975648 ISBN-10: 9781493975648
- 6. Javed Hussain Choudhury, Sharbadeb Kundu, Fazlur Rahaman Talukdar, Ruhina S. Laskar, Raima Das, Shaheen Laskar, Bishal Dhar, Manish Kumar, Sharad Ghosh, Rosy Mondal, **Yashmin Choudhury**, Sankar Kumar Ghosh (2019). Epigenetic profiling in head and neck cancer. In: Computational Epigenetics and Diseases, Ed. Loo Keat Wei. Academic Press, Elsevier. Volume 9, 201-217. eBook **ISBN:** 9780128145142 Hardcover pp **ISBN:** 9780128145135

- 7. Sharbadeb Kundu, Raima Das, Shaheen Laskar, **Yashmin Choudhury**, Sankar K. Ghosh (2020). **Principles of bi-sulfite conversion of DNA and methylation-specific PCR (MSP) in biological research**. Epigenetic Methods, Volume 18. Ed. Trygve Tollefsbol. Academic Press, Elsevier. DOI: 10.1016/B978-0-12-819414-0.00002-1. ISBN: 9780128194140
- 8. Sharbadeb Kundu, Raima Das, Shaheen Laskar, **Yashmin Choudhury**, Sankar K. Ghosh (2022). **Cancer genomics and diagnostics: Northeast Indian scenario.** In: Cancer Diagnostics and Therapeutics, pp509-529. Ed. S.K.Basu, Chinmay Kumar Panda, Subrata Goswami. SpringerNature, Singapore, DOI: 10.1007/978-981-16-4752-9\_24. Print ISBN: 978-981-15-4751-2. Online ISBN: 978-981-15-4752-2.
- 9. Parijat Hazarika, Indranil Chattopadhyay, Sougata Ghosh, Mika Umpo, Yashmin Choudhury and Indu Sharma (2023). **Metagenomics approaches for microbiome analysis**. In: Functional Metagenomics Microbial Diversity, Interaction and Application in Bioremediation, pp191-203. Ed. Maulin P. Shah. Academic Press, Elsevier. ISBN: 978-0-323-98372-3.
- 10. Yashmin Choudhury (2024). **Introduction to genomics**. In: MZO-005 Genomics and Proteomics. Published by IGNOU, India. ISBN: 9781956224740.
- 11. Yashmin Choudhury (2024). **Genome diversity and molecular dynamics of DNA repeats in eukaryotes**. In: MZO-005 Genomics and Proteomics. Published by IGNOU, India. ISBN: 9781956224740.
- 12. Yashmin Choudhury (2024). **Genes**. In: MZO-005 Genomics and Proteomics. Published by IGNOU, India. ISBN: 9781956224740.

# Seminar/conference proceedings (Abstracts)

- 1. Barnali Sinha and Yashmin Choudhury\*. Comparative assessment of the pupae powder and pupae protein extract of eri silkworm, Samia ricini, in alleviating obesity in high-fat diet fed Swisd albino mice. In: Proceedings of the 35<sup>th</sup> Annual Conference of The Physiological Society of India and National Seminar on Emerging Health Issues and Challenges: Perspective from Northeast India, organized by Department of Physiology, Tripura University, from 15<sup>th</sup>-17<sup>th</sup> November, 2024.
- 2. Sorbomita Chakraborty, Indu Sharma and Yashmin Choudhury\*. Patterns of betel quid usage and dependence in Southern Assam. In: Proceedings of the 35<sup>th</sup> Annual Conference of The Physiological Society of India and National Seminar on Emerging Health Issues and Challenges: Perspective from Northeast India, organized by Department of Physiology, Tripura University, from 15<sup>th</sup>-17<sup>th</sup> November, 2024.
- 3. Barnali Sinha, Abhishek Shil, Juwell Ahmed Laskar and Yashmin Choudhury \*. Investigating the impact of Samia ricini pupae powder on AMPK pathway activation and obesity management in high fat diet induced Swiss albino obese mice. In: Proceedings of National Seminar on Recent Trends in Chemical Research(RTCS-2024) held on 20<sup>th</sup> August 2024, at the Department of Chemistry, Assam University, Silchar. (BEST POSTER AWARD TO BARNALI SINHA)
- 4. Barnali Sinha and **Yashmin Choudhury\***. Antioxidant potential of pupae extract of the eri silkworm, Samia ricini. In: Proceedings of International Conference on Advances in Biotechnology (ICAB): Current Discoveries & Future Perspectives, held from 17<sup>th</sup>-18<sup>th</sup> October, 2023, at Amity Institute of Biotechnology, Amity University, Mumbai, India.
- 5. Kasturi Bhattacharjee and Yashmin Choudhury\*. Evaluation of the efficacy of berberine and orlistat in ameliorating aqueous extract of betel nut (AEBN) induced carcinogenesis in a murine model. In: Proceedings of the 9<sup>th</sup> International Nextgen Genomics, Biology, Bioinformatics and Technologies Conference, held from Sep 30<sup>th</sup> to Oct 2<sup>nd</sup> 2019 at Mumbai, India. (NGBT GYAN SCHOLARSHIP AWARD TO KASTURI BHATTACHARJEE).
- 6. Moumita Nath and **Yashmin Choudhury\*.** Pioglitazone emends carcinogenesis in a murine model of betel-nut use by re-activating AMPK-mediated signalling. In: Proceedings of "International Symposium on Tumor Microenvironment and Cancer Prevention & Therapeutics", organized by the School of Life Sciences, Jawaharlal Nehru University, New Delhi on 7<sup>th</sup> and 8<sup>th</sup> February, 2019, pp 85.
- 7. Moumita Nath and Yashmin Choudhury\*. The dipeptidyl peptidase-4 inhibitor vildagliptin redresses the altered Akt-mTOR pathway in a murine model of betel-nut

- induced carcinogenesis. In: Proceedings of the National Seminar on "Current Trends in Biotechnological Research" organized by the Department of Biotechnology, Assam University, Silchar, on 19<sup>th</sup> and 20<sup>th</sup> March 2019.pp 45.
- 8. Kasturi Bhattacharjee and Yashmin Choudhury\*. Berberine reverts dyslipidemia, oxidative stress and dysregulated lipid metabolism induced by an aqueous extract of betel-nut (AEBN) in a murine model of betel-nut induced carcinogenesis. In: Proceedings of the National Seminar on "Current Trends in Biotechnological Research" organized by the Department of Biotechnology, Assam University, Silchar, on 19<sup>th</sup> and 20<sup>th</sup> March 2019.pp 44.**AWARDED 1<sup>ST</sup> PRIZE FOR POSTER PRESENTATION**
- 9. Manish Kumar, Yashmin Choudhury, Sankar Kumar Ghosh, Rosy Mondal: Clinical utilization of circulating cell-free DNA in identification of early somatic mutations in head and neck squamous cell carcinoma: A pilot study from Northeast India. In: Proceedings of the 44th Annual Conference of Indian Society of Human Genetics-2019: Genomics for Health and Precision Medicine, 30th January to 1st February 2019 Organized by National Institute of Biomedical Genomics and University of Kalyani, Kalyani, West Bengal.
- 10. Kasturi Bhattacharjee, Jeny Laskar, Nabanita Roy, Mahuya Sengupta and Yashmin Choudhury\*. Metformin ameliorates aqueous extract of betel nut (AEBN) - induced carcinogenesis in an ACC-dependent manner. In: Proceedings of the National Conference on Recent Advances in Applied Biological Sciences (RAABS). May 04-05, 2018, North Eastern Hill University, Shillong, India. pp-03.
- 11. Raima Das, Sharbadeb Kundu, Shaheen Laskar, Yashmin Choudhury and Sankar Kr. Ghosh. Evaluating the role of DNA repair genes associated with head and neck cancer from whole exome sequencing. In: Proceedings of 44th Annual Conference of the Indian Society of Human Genetics (ISHG-2019) on Genomics for Health and Precision Medicine, At: University of Kalyani, Nadia, India, January 2019
- 12. Kanak Chakraborty, Sharbadeb Kundu, Raima Das, Shaheen Laskar, Sudip Kr Ghosh, Yashmin Choudhury, Sankar Kr Ghosh. Role of HDACs as an important prognostic marker in Nasopharyngeal Carcinoma. In: Proceedings of 44th Annual Conference of the Indian Society of Human Genetics (ISHG-2019) on Genomics for Health and Precision Medicine, At: University of Kalyani, Nadia, India, January 2019
- 13. Sudip Kr Ghosh, Sharbadeb Kundu, Raima Das, Shaheen Laskar, Kanak Chakraborty, **Yashmin Choudhury**, Sankar Kr Ghosh Genetic assessment of Human Leucocyte Antigen (HLA) as a prognostic marker in nasopharyngeal carcinoma. In:

Proceedings of 44th Annual Conference of the Indian Society of Human Genetics (ISHG-2019) on Genomics for Health and Precision Medicine, At: University of Kalyani, Nadia, India, January 2019

- 14. Moumita Nath, Sayantan Nath and **Yashmin Choudhury\***. The dipeptidyl peptidase-4 inhibitor vildagliptin may activate AMPKa in a murine model of type 2 diabetes mellitus. In: Proceedings of the National Conference on Recent Advances in Applied Biological Sciences (RAABS). May 04-05, 2018, North Eastern Hill University, Shillong, India. OP-02
- 15. Angom Ranjana Devi, Mahuya Sengupta, Mayuri Senchowa and **Yashmin Choudhury\***.APE1 is downregulated in a murine model of smokeless tobacco exposure. In:Proceedings of 105 th Indian Science Congress. March 16-20,2018, Manipur University, Imphal, India, pp-54.ISSN: 0373-0786
- 16. Jeny Laskar, Kasturi Bhattacharjee, Nabanita Roy, Mahuya Sengupta and **Yashmin Choudhury\***. Metformin ameliorates oxidative stress and cellular damage induced by aqueous extract of betel nut (AEBN). In: Proceedings of the 1<sup>st</sup> international conference on Biotechnology and Biological Sciences, Biospectrum. August 25-26, 2017, University of Engineering and Management , Kolkata, India. pp-124.
- 17. Zichu Yang, **Yashmin Choudhury**, Imran Ahmad, Hing Y leung and Ian Salt. AMP activated protein kinase inhibits EGF-stimulated ERK5 in prostate cancer cells. In: New Mechanisms and Physiology-The 9th International Symposium on AMP-activated Protein Kinase, At Xiamen, China, 2016.
- 18. Sayantan Nath, Juhi Hasan Laskar, Sankar K. Ghosh and **Yashmin Choudhury\***.Gender and tissue specific activation of AMPK in a mouse model of type I diabetes mellitus.In. Journal of Diabetes and Metabolism [ISSN: 2155-6156], 6:11. November 23-25, 2015.
- 19. Angom Ranjana Devi and **Yashmin Choudhury\*.** Comparative ability of vitamin C, E, and curcumin to protect cellular proteins and circulating nucleic acids of smokers and non-smokers from adduct formation upon exposure to extracts of chewing tobacco in vitro. In: Proceedings of the Two -day National Seminar on Challenges and Perspectives of Climate Change and Its Impact on Local Bioresources (Flora and Fauna). October 30-31 ,2015, Institute Biotech Hub, Modern College, Porompat, Manipur, India. Oral presentation-10.

- 20. Angom Ranjana Devi, Mahuya Sengupta and **Yashmin Choudhury\***. Altered response of the p53-mdm2 axis with downregulated brca2 protein in mice exposed to aqueous extract of smokeless tobacco (AEST).In: Proceedings of the International Conference on Biotechnological Advances in Environmental Health and Biodiversity Conservation & 39<sup>th</sup> Annual Meeting of Environmental Mutagen Society of India. May 21-23, 2015, Manipur University, India. pp-81.
- 21. Jeny Laskar, Mahuya Sengupta and **Yashmin Choudhury\***. Treatment of mice with aqueous extract of betel nut (AEBN) alters lipid profile and activates AMP-activated kinase (AMPK). In: Proceedings of Global Cancer Summit, November 18-19, 2015, Bengalaru, India. CR-60.
- 22. Sambuddha Das, Biswadeep Choudhury, Abhinanadan Bhattachrjee, Momota Naiding, Sankar Kumar Ghosh and **Yashmin Choudhury\***.BRCA2 and XPD proteins are altered in peripheral blood lymphocytes of head and neck cancer patients from North East India. In: Proceedings of Global Cancer Summit, November 18-19, 2015, Bengalaru, India.
- 23. Aditi Bhowmik, Lekhika Pathak, Sambuddha Das, Biswadeep Choudhury, Abhinanadan Bhattachrjee, Momota Naiding, Sankar Kumar Ghosh and **Yashmin Choudhury\***. Role of BRCA1 in the pathogenesis of head and neck squamous cell carcinoma in North Eastern Indian Population In: Proceedings of Global Cancer Summit, November 18-19, 2015, Bengalaru, India.
- 24. Aditi Bhowmik, Lekhika Pathak, Sambuddha Das, Biswadeep Choudhury, Abhinanadan Bhattachrjee, Momota Naiding, Sankar Kumar Ghosh and **Yashmin Choudhury\***. Role of BRCA1 in the pathogenesis of head and neck squamous cell carcinoma in North Eastern Indian Population In: Proceedings of Global Cancer Summit, November 18-19, 2015, Bengalaru, India.
- 25. Zichu Yang, **Yashmin Choudhury**, Imran Ahmed, Ian Salt, Hing Y Leung (2014) Analysis of AMP-activated protein kinase (AMPK) mediated signaling in prostate cancer. DOI: 10.13140/2.1.3107.1041 Conference: 22nd Meeting of the EAU Section of Urological Research (ESUR), At Glasgow, UK.

- 26. Aditi Bhowmik, Biswadeep Choudhury, Abhinanadan Bhattachrjee, Momota Naiding, Sankar Kumar Ghosh and **Yashmin Choudhury** (2014) Single nucleotide polymorphism of the MDM2 gene is a predictive factor for head and neck squamous cell carcinoma in a population from North Eastern India. 5th International Conference on Stem Cells and Cancer (ICSCC-2014):Proliferation, Differentiation and Apoptosis", 8-10 November 2014, New Delhi, India. (**BEST POSTER AWARD TO ADITI BHOWMIK**)
- 27. Aditi Bhowmik, Biswadeep Choudhury, Abhinanadan Bhattachrjee, Momota Naiding, Sankar Kumar Ghosh and **Yashmin Choudhury\*** (2014) Correlation between levels of p53, BRCA1 and MDM2 proteins in peripheral blood lymphocytes and tumor biopsies of head and neck cancer patients. In: Proceedings of International Conference of Biotechnology and Bioinformatics, Pune, India. (**BEST POSTER AWARD,2**<sup>nd</sup> **Prize TO ADITI BHOWMIK**)
- 28. Sambuddha Das, Biswadeep Choudhury, Abhinanadan Bhattachrjee, Momota Naiding, Sankar Kumar Ghosh and **Yashmin Choudhury\*** (2014) XPDAsp312 polymorphism and head neck cancer susceptibility: a case control study. In: Proceedings of International Conference of Biotechnology and Bioinformatics, Pune, India.
- 29. Sayantan Nath, Sankar Kumar Ghosh, **Yashmin Choudhury\***(2014) . Evaluation of alterations in oxidative stress parameters and phospho-AMPK level in high fat diet- low Streptozotocin induced type2 diabetic Swiss albino mice. In: Proceedings of the National Seminar on "Advances in Biotechnological Research: Current Trends and Future Prospects, Assam University, Silchar, India, 2014. Page No: 63. (Poster No-03).
- 30. Aditi Bhowmik, Abhinanadan Bhattachrjee, Momota Naiding, Biswadeep Choudhury, Sankar Kumar Ghosh and **Yashmin Choudhury**\* (2013) Levels of p53 and MDM2 proteins in peripheral blood lymphocytes of cancer patients as biomarkers of cancer.In: Proceedings of 100<sup>th</sup> Indian Science Congress, New Biology Section.
- 31. Sambuddha Das, Khuraijam Lemino Singh and **Yashmin Choudhury**\* (2013) Use of Peripheral Blood Cells for evaluating susceptibility to oxidative stress and response to antioxidants. In: Proceedings of 100<sup>th</sup> Indian Science Congress, New Biology Section.

- 32. **Yashmin Choudhury** and R.N.Sharan. (2009) Intrinsic involvement of the p53, Brca1 and Brca2 tumor suppressor genes in betel nut induced carcinogenesis in mice. In: Proceedings of the 96<sup>th</sup> Indian Science Congress, New Biology Section. **BEST POSTER AWARD, NEW BIOLOGY SECTION.**
- 33. Yashmin Choudhury and R.N.Sharan (2008) Genomic instability increases risk of cancer in mice exposed transgenerationally to aqueous extract of betel nut. In: Indian Journal of Radiation Research, 5, p 81. YOUNG SCIENTIST AWARD
- 34. Yashmin Choudhury and Sharan, R.N. (2008) Tumor suppressor genes p53, BRCA1 and BRCA2 as biomarkers of human cancer. In: Proceedings of National Seminar on Advances in Medical and Microbial Biochemistry.
- 35. R.N. Sharan and Yashmin Choudhury (2008) Insight into interrelationships of p53, BRCA1 and BRCA2 proteins in peripheral blood lymphocytes of patients in advanced stages of cancers vis-à-vis betel nut induced carcinogenesis. In: Proceedings of 5<sup>th</sup> World Assembly on Tobacco Counters Health, page 81, 2007.
- 36. Yashmin Choudhury and R.N.Sharan (2007) Chronic exposure of mice to aqueous extract of betel nut enhanced genomic instability by disrupting organelle functions and inhibiting expressions of BRCA1 and BRCA2 proteins in mouse liver. In: Proceedings of National Seminar on Adaptation Biochemistry, held at Department of Biochemistry.
- 37. **Yashmin Choudhury** and R.N. Sharan (2006) Effect of long term and transgenerational exposure to chronic low dose of aqueous extract of betel nut on the tumor suppressor p53 in mice. In: Proceedings of Seminar on Trends in Biochemical Research.
- 38. Yashmin Choudhury and R.N.Sharan (2005) Long term and transgenerational effect of betel nut exposure to mice and advanced human cancers on p53 protein: A preliminary comparative study. In: Proceedings of Seminar on Advances in Biochemical Education and Research, page 100, 2005.
- 39. **Yashmin Choudhury** and R.N.Sharan (2005) Upregulated p53 plateaus with precancerous nodulation in liver of mice chronically exposed to low-dose aqueous extract of betel nut (AEBN) in drinking water. In: Proceedings of at Fourth JSH

Single Topic Conference on Hepatocellular Carcinoma: International Consensus and Controversies, No. 101: page 113, 2005.

#### \*corresponding author

#### **#joint corresponding authors**

### **Invited Lectures**

- Targeting dysregulated lipid metabolism in a murine model of betel-nut induced carcinogenesis using a drug repurposing approach. Invited lecture delivered at the 35<sup>th</sup> Annual Conference of The Physiological Society of India and National Seminar on Emerging Health Issues and Challenges: Perspective from Northeast India, organized by Department of Physiology, Tripura University, from 15<sup>th</sup>-17<sup>th</sup> November, 2024.
- Targeting metabolic pathways for cancer therapy. Invited lecture during the Interdisciplinary Refresher Course in Life Sciences, organized by UGC-MMTTC Assam University, Silchar, from 16<sup>th</sup> to 29<sup>th</sup> August 2024.
- The Hallmarks of Cancer: Next Generation to New Dimensions. Invited lecture during the Interdisciplinary Refresher Course in Life Sciences, organized by UGC-MMTTC Assam University, Silchar, from 16<sup>th</sup> to 29<sup>th</sup> August 2024.
- Cancer Biology and Therapeutics. Invited lecture delivered at the Department of Chemistry, Assam University, Silchar, on 3<sup>rd</sup> June 2024.
- Anti-diabetic drugs mitigate betel-nut induced carcinogenesis in a murine model. 92<sup>nd</sup> Annual Meeting of the Society of Biological Chemists, India, held at BITS-Pilani, K.K. Birla Campus, Goa, 18<sup>th</sup>-20<sup>th</sup> December 2023.
- Biology in the 21<sup>st</sup> Century: Challenges and Opportunities. Invited lecture
  as part of the lecture series "Thinking, Doing, Talking Science" organized by Central

Instrument and Research Facility, St. Edmund's College, Shillong on 12<sup>th</sup> October 2023.

- Head and Neck Cancer in North East India: Genetics and Therapeutic Approach. Invited Lecture in the Two Day National Conference on "Cancer Biology and Therapeutics (CBT-2022)" organized on 30<sup>th</sup> and 31<sup>st</sup> May 2022 by the Department of Zoology, Patharkandi College in collaboration with Department of Zoology, PDUAM, Eraligool.
- Cancer Genetics and Therapeutics. Invited lecture organized by The Departments of Biochemistry and Biotechnology, St. Anthony's College, Shillong, on 29<sup>th</sup> April 2022.
- **Real Time Polymerase Chain Reaction (qPCR)**. Invited lecture at 3-day Hands-On Workshop on Molecular Biology Techniques for College Faculty organized by the Department of Botany, St. Edmund's College, Shillong, on 26<sup>th</sup> March 2022.
- **The Polymerase Chain Reaction**. Invited lecture at 3-day Hands-On Workshop on Molecular Biology Techniques for College Faculty organized by the Department of Botany, St. Edmund's College, Shillong, on 26<sup>th</sup> March 2022.
- Primer Design. Invited lecture at 3-day Hands-On Workshop on Molecular Biology Techniques for College Faculty organized by the Department of Botany, St. Edmund's College, Shillong, on 25<sup>th</sup> March 2022.
- DNA/RNA Isolation and Visualization. Invited lecture at 3-day Hands-On Workshop on Molecular Biology Techniques for College Faculty organized by the Department of Botany, St. Edmund's College, Shillong, on 25<sup>th</sup> March 2022.
- Methodologies for Scientific Research. Invited lecture at Seminar on Research Methodology organized by The Department of Chemistry, University of Science and Technology, Meghalaya on 8<sup>th</sup> March 2022.
- Vaccinology and Vaccines in the 21<sup>st</sup> century invited lecture organized by the Department of Biochemistry in collaboration with IQAC, Lady Keane College, Shillong on 28<sup>th</sup> January 2022.

- Insights into breast cancer: A molecular perspective in Webinar entitled "Breast Cancer: A Medical and a Molecular Perspective" organized by Department of Biotechnology in collaboration with IQAC, St. Edmund's College, Shillong, on the 10th of December, 2021.
- Repurposing anti-diabetic drugs for the amelioration of betel nut-induced cancer in a murine model of betel nut use at Global Cancer Summit, International Collaborative Conference organized virtually from Biogenesis Health Cluster, Bengaluru, India on 24<sup>th</sup> April 2021.
- Activating the AMP-Activated Protein Kinase (AMPK) for Cancer Therapy at National seminar on Advancement of Biology in The 21st Century, organized by Department of Zoology , Visva-Bharati in association with The Zoological society, Kolkata on 28<sup>th</sup> February, 2020.
- Current Perspectives on the Genetic Susceptibility to Carcinogenesis, its **Diagnosis & Therapy**, at Late Shyamal Kanti Paul Memorial Lecture, organized by Department of Zoology in association with Institutional Level Biotech Hub, Cachar College, Silchar on 30<sup>th</sup> September, 2019.
- **Recent Trends in Cancer Therapeutics**, at National Conference on Contemporary Researches in Computer Aided Drug Designing, organized by Bioinformatics Centre (DBT-BIF), Assam University, Silchar On 10<sup>th</sup>-11<sup>th</sup> March, 2018, on 11<sup>th</sup> March, 2018.
- **Deciphering Biological Diversity in the Post-Genomics Era** under DBT-STAR College Scheme, GOI, organized by Department of Botany, St. Edmund's College, Shillong,
- Genome Organization of Bioresources, at National Workshop on "DNA BARCODING AND GENOMIC DIVERSITY OF BIORESOURCES organized by Department of Biotechnology, Assam University, Silchar from January 27th to January 31<sup>st</sup> 2012
- Use of Omics technology in the study of cancer under DBT-Star College programme, Department of Biochemistry, St.Edmund's College, Shillong, June 2011.

- **DNA Structure and Introduction to PCR Technology** at Workshop on TB Genomics, Drug Development and Recent Molecular Diagnosis, organized by Department of Biotechnology, Assam University, Silchar in collaboration with Silchar Medical College and Hospital, Silchar, March 2011.
- **Genomes and their organization**, at Workshop on Basic Tools in Molecular Biology and Genomics, organized by Department of Biotechnology, Assam University, Silchar in April 2010.
- **The RNA World**, at Workshop on Basic Tools in Molecular Biology and Genomics, organized by Department of Biotechnology, Assam University, Silchar in April 2010.

# Membership of seminar/conference organising committees

- Joint Organizing Secretary, National Seminar on Ethical Regulations in Health & Other Researches Involving Human Participation organized by Institutional Ethics Committee, Assam University, Silchar, on 10<sup>th</sup> May 2024.
- Member, Organizing Committee, Good Clinical Practices (GCP) Workshop, GCP 2023 organized by Institutional Ethics Committee, Assam University, Silchar, in collaboration with Experimental Pharmacology Laboratory (EPL), Department of Pharmacology, PGIMER Chandigarh under the aegis of Indian Pharmacological Society (IPS) on 24<sup>th</sup> & 25<sup>th</sup> November, 2023.
- Coordinator, Hands-On Workshop on Molecular Biology Techniques, organized by The Department of Biotechnology, Assam university, Silchar from 23<sup>rd</sup>-27<sup>th</sup> Mav. 2023.
- Member, Organizing Committee, National Seminar on Advances in Biotechnology Research: Current Trends and Future Prospects, organized by Department of Biotechnology, Assam University, Silchar on 25<sup>th</sup>-26<sup>th</sup> March, 2014.
- Joint Secretary, National Seminar on Current Trends in Biotechnological Research, organized by Department of Biotechnology, Assam University, Silchar on 19<sup>th</sup>-20<sup>th</sup> March, 2019.

 Co-convenor, International Webinar on Approaches to COVID-19 prevention, therapeutic strategies and management, July 30<sup>th</sup> 2020, Organized by the Department of Biotechnology, Assam University, Silchar.

# Membership of professional societies

- Life Member, Society of Biological Chemists (SBC), India.
- Life Member, Indian Association for Cancer Research.
- Life Member, Asia Pacific Bioinformatics Interaction and Networking Society (APBIANS).

# Membership of committees (institutional and other organizations)

- Member, Institutional Ethics Committee, Silchar Medical & Hospital, Silchar (2023ongoing).
- Member, Academic Sub-Committee, Knowledge and Awareness Mapping Platform (KAMP), A Knowledge Alliance of CSIR-NIScPR and M/S NCPL (2022-ongoing).
- Member, Institutional Animal Ethics Committee, Assam University, Silchar (2023ongoing).
- Member, Board of Post-Graduate Studies, Department of Physics, Assam University, Silchar (2024-2027).
- Member, Board of Post-Graduate Studies, Department of Agricultural Engineering, Assam University, Silchar (2019-2022).
- Member of Departmental Purchase Committee, Department of Biotechnology, Assam University, Silchar (2017-ongoing).
- Departmental representative, IQAC, Assam University, Silchar (2021-ongoing).
- Member, NAAC assessment preparation committee, Hargobind Khorana School of Life Sciences, Assam University, Silchar (2021).

- Member, Research Advisory Committees constituted for students of the Department of Biotechnology, Department of Microbiology and Department of Life Sciences & Bioinformatics, Assam University, Silchar (2017-ongoing).
- Member, Safety Committee, Assam University, Silchar (2018).
- Member, Board of Post-Graduate Studies, Department of Agricultural Engineering, Assam University, Silchar (2019-2021).
- Member, Board of Post-Graduate Studies, Department of Biotechnology, Assam University, Silchar (2016-2018).
- Member, Board of Under-Graduate Studies, Department of Biotechnology, Assam University, Silchar (2016-2018).
- Member, School Board, Hargobind Khorana School of Life Sciences, Assam University, Silchar (2016-2018).
- Departmental representative, IQAC, Assam University, Silchar (2016-2019).
- Member, School Board, Hargobind Khorana School of Life Sciences, Assam University, Silchar, 2010-2013.

# Training Programmes/ Workshops attended

- National Workshop on Advanced Course in Clinical Pharmacology (ACCP) and Good Clinical Practice (GCP) held on 6<sup>th</sup> & 7<sup>th</sup> November 2023 at Silchar Medical College & Hospital (SMCH), Assam, under the aegis of the Indian Pharmacological Society, India.
- One Day Workshop on Basics of Perl Programming in Codon Usage Analysis organized by the Department of Biotechnology, Assam University, Silchar, on 13<sup>th</sup> September 2022.
- Online Workshop on NEP 2020 on the theme "Multiple Entry and Exit" conducted by UGC-HRDC NEHU, Shillong on 28<sup>th</sup> June 2022.

- Online Workshop on NEP 2020 on the theme "Good Academic Research" Practices/Academic Research Integrity" conducted by UGC-HRDC NEHU, Shillong on 20<sup>th</sup> June 2022.
- UGC-sponsored Short Term Course on Statistical Analysis Using various Softwares conducted by UGC-HRDC NEHU, Shillong from 21/09/2022 to 27/09/2022.
- UGC-sponsored Short Term Course on Research Methodology conducted by UGC-HRDC NEHU, Shillong from 8/02/2021 to 14/02/2021.
- UGC-sponsored Special Summer School in Basic Sciences & Technology (Equivalent to one Refresher Course) conducted by UGC-HRDC NEHU, Shillong from 8<sup>th</sup> July 2019 to 21<sup>st</sup> July 2019.
- Two Week Faculty Development Programme conducted by Department of Business Administration, Assam University, Silchar and sponsored by Entrepreneruship Development Institute of India, Ahmedabad and NSTEDB, DST, GoI, from 19th December 2016 to 31st December 2016.
- UGC-sponsored Special summer School (Equivalent to one Refresher Course) conducted by UGC-HRDC NEHU, Shillong from 6<sup>th</sup> July 2015 to 26<sup>th</sup> July 2015.
- UGC-sponsored 18<sup>th</sup> Orientation Programme conducted by Academic Staff College, North-Eastern Hill University, Shillong, from 23<sup>rd</sup> February 2012 to 21<sup>st</sup> March 2012.
- Hands-on training course on "Use of Flow-Cytometer, PCR and Real-Time PCR in Cancer Detection", organized by Department of Biotechnology, Assam University Silchar, and Cachar Cancer Hospital and Research Centre, Silchar from 5<sup>th</sup> to 9<sup>th</sup> February, 2012.
- Hands-on training course on "Basic Tools in Molecular Biology and Genomics", organized by Department of Biotechnology, Assam University Silchar, at Silchar from 7<sup>th</sup> to 16<sup>th</sup> December, 2010.

- National Workshop on "Modelling Biological Systems" organized by Physics and Applied Mathematics Unit, ISI, Kolkata and Physics Department, NEHU, Shillong, from 25<sup>th</sup> to 29<sup>th</sup> October, 2010, at North Eastern Hill University, Shillong.
- National Workshop on "Principles and Applications of GC-MS and Atomic Absorption Spectrometry", organized by Central Instrumentation Laboratory, Assam University, Silchar from 6<sup>th</sup> to 9<sup>th</sup> September, 2010.
- Workshop on "Technology need for transforming identified forest items basically non-wood herbal species into pharmaceutical one" organized by Indian Council of Small Industries (ICSI) on 4<sup>th</sup> June, 2009, at St. Anthonys College, Shillong.
- Workshop on "High performance Computing and its applications in Physical, Environmental and Life sciences & Bioinformatics" conducted by Centre for Development of Advanced Computing, Pune and Computer Centre, North-Eastern Hill University, from 3<sup>rd</sup> to 6<sup>th</sup> March, 2009.
- Training course on "Applications of Bioinformatics" conducted by the Bioinformatics Centre, North-Eastern Hill University, at North-Eastern Hill University, from 13<sup>th</sup> to 15<sup>th</sup> February, 2007.
- CME programme on "Cancer challenges in India with particular reference to North-East" organized by Department of Radiation Oncology, NEIGHRIHMS, Shillong, at Shillong on 13<sup>th</sup> and 14<sup>th</sup> July, 2006.
- Workshop on "Statistical data analysis using SPSS" organized by Computer and Statistical Service Centre, Indian Statistical Institute, Kolkata and St. Anthony's College, Shillong, at St. Anthony's College, Shillong, from 23<sup>rd</sup> to 27<sup>th</sup> March, 2004.
- Training course on "Basic techniques in Animal Cell and Tissue Culture", conducted by Department of Zoology, North-Eastern Hill University, and National Centre for Cell Science, Pune, at North-Eastern Hill University, from 15<sup>th</sup> to 20<sup>th</sup> September, 2003.

### References

#### 1. Prof. R.N.Sharan,

Visiting Associate, Inter-University Accelerator Center (IUAC), New Delhi; Advisor Emeritus (R&D), North East Cancer Hospital & Research Institute (NECHRI), Guwahati; and Director, Scientific & Biomedical Consultancy (SBC), Gurgaon

Formerly,

Professor of Biochemistry, Molecular Biology & Genetics, Department of Biochemistr; Dean, School of Life Sciences; & Director, Design Innovation Center at North-Eastern Hill University, Shillong 793022 (India)(Retired)

Contact information

Email: rnsharan@gmail.com; Mobile: 9436104164

#### 2. Prof. Sankar Kumar Ghosh,

Professor, Department of Biotechnology, Assam University, Silchar.

Formerly,

Vice Chancellor, Kalyani University, West Bengal

Contact information

Email: drsankarghosh@gmail.com; Mobile: 9435372338