

PATENT

Subrata Kumar Dey, **Tanmoy Mondal**, Gourkanti Chandra, Sandip Pal (2019). **A Synergistic Herbal Composition from Fermented Black Tea Having Radioprotection and Process of Preparing the Same.** (Indian Patent No. 365840).

BOOK CHAPTER

1. Biswas TK, Chakrabarti S, Auddy B, **Tanmoy Mondal**, Pandit S, Seal T (2021.) **Pterocarpus santalinus: A Wonder Gift of Nature.** In: Mandal S.C., Chakraborty R., Sen S. (eds) Evidence Based Validation of Traditional Medicines. Springer, Singapore. https://doi.org/10.1007/978-981-15-8127-4_44

PEER REVIEWED INTERNATIONAL JOURNAL

Year 2025

1. **Tanmoy Mondal**, J Johnson, TK Sur, CA. Loffredo, ST Cotin, J Sahota, BE Korba, G Nunlee-Blnad, S Ghosh. 2025. **Metabolic Dysfunction and Alzheimer's Disease Risks in African Americans.** Alzheimer's & Dementia. e086476. 20(S2). <https://doi.org/10.1002/alz.086476>
2. T Sur, **Tanmoy Mondal**, J Johnson, ST Cotin, A Neupane, G Nunlee-Bland, CA Loffredo, Z Noreen, B Korba, V Chandra, SS Jana, B Kwabi-Addo, S Sarkar, S Ghosh. **Developing Non-Invasive Molecular Markers for Early Risk Assessment of Alzheimer's Disease.** Biomarkers in Neuropsychiatry. 12, 2025, 100120.
3. Z Noreen, **Tanmoy Mondal**, J Johnson, J Sahota, CA Loffredo, G Nunlee-Bland, B Korba, A Bhatti, V Chandra, S Ghosh. **Exploring Shared Molecular Pathways and gene signatures in Type 2 Diabetes Mellitus and Alzheimer's Disease: from a Pakistani Cohort.** ALR-24-2024. Journal of Alzheimer's Disease Reports. (Accepted).
4. **Tanmoy Mondal**, Brent Korba, Christopher A. Loffredo, Coleman I Smith, Ruth Quartey, Gemeyel Moses, et. al. (2025) **Transcriptomic Profiling MicroRNA and Non-Coding RNA Expression from Whole Blood in African Americans with MASLD.** (IJMS under Review)
5. Ditipriya Mallick, Indranil Ghosh, **Tanmoy Mondal**, Sourav Mondal, Rupa Mukhopadhyay, Jomon Joseph, Somiranjan Ghosh, Siddhartha S Jana. (2025). **Non-muscle myosin II regulates cellular elasticity in response to fluid shear stress.** PNAS. (Under Review).
6. Amara Saleem, Andrew Volz, **Tanmoy Mondal**, Christopher A. Loffredo, Tomas Trnovec, Lubica Palkovicova Murinova, Kamil Conka, Beata Drobna, Somiranjan Ghosh. (2025) **Exploring the associations between prenatal PCB exposures and gene expression: observations from a cohort of newborn Slovak infants.** Environmental International. (Under Review).

Year 2024

7. S Haider, **Tanmoy Mondal**, CA Loffredo, B Korba, I Nawaz, M Azam, T Sur, S Ghosh. **Epidemiological Investigation on the Clinical Status of the Developmental Dyslexia and ADHD comorbidity among school-age children in Pakistan.** *Open Journal of Epidemiology*. 1890796.

8. **Tanmoy Mondal**, Noreen Z, Loffredo CA, Johnson J, Bhatti A, Nunlee-Bland G, Quartey R, Howell CD, Moses G, Nnanabu T, Cotin ST, Clark M, Chandra V, Jana SS, Kwabi-Addo B, Korba BE, Shahzad S, Bhatti MF, Ghosh S. **Transcriptomic Analysis of Alzheimer's Disease Pathways in a Pakistani Population.** *J Alzheimers Dis Rep.* 2024 Mar 19;8(1):479-493.
9. S Haider, **Tanmoy Mondal**, I Nawaz, M Azam, S Ghosh. **Genetic Variants Linked to Dyslexia Co-Morbid ADHD: A Case Study of a Pakistani Outpatient.** (2024). *Journal of Population Therapeutics and Clinical Pharmacology*, 31(9), 2698-2711. <https://doi.org/10.53555/rd5d9s46>

Year 2023

10. **Tanmoy Mondal**, Smith CI, Loffredo CA, Quartey R, Moses G, Howell CD, Korba B, Kwabi-Addo B, Nunlee-Bland G, R. Rucker L, et al. **Transcriptomics of MASLD Pathobiology in African American Patients in the Washington DC Area†.** *International Journal of Molecular Sciences.* 2023; 24(23):16654.
11. Noreen Z, **Tanmoy Mondal**, Loffredo CA, Nunlee-Blnad G, et al. **Similarities in Pathobiology of Alzheimer's Disease and Type 2 Diabetes Mellitus: A Proof of Concept by a Case Study.** *Alzheimers Dement.* 2023; **19**(Suppl.1): e062039.
12. Cagle, E., Lake, B., Banerjee, A., Cuffee, J., Banerjee, N., Gilmartin, D., Liverman, M., Brown, S., Armstrong, E., Bhattacharya, S., Ghosh, S., **Tanmoy Mondal.** and Banerjee, H. (2023) **Analysis of Differential Gene Expression and Core Canonical Pathways Involved in the Epithelial to Mesenchymal Transition of Triple Negative Breast Cancer Cells by Ingenuity Pathway Analysis.** *Computational Molecular Bioscience*, 13, 21-34.

Year 2022

13. **Tanmoy Mondal**, Loffredo CA, Simhadri J, Nunlee-Bland G, et al. **Insights on the pathogenesis of type 2 diabetes as revealed by signature genomic classifiers in an African American population in the Washington, DC area.** *Diabetes Metab Res Rev.* 2022 Nov 4:e3589.
14. Simhadri, J., Loffredo, C., **Tanmoy Mondal**, Noreen, Z., Nnanabu, T., et al. (2022) **Correlates and Covariates of Type 2 Diabetes in an African American Population in the Washington DC Area.** *Open Journal of Epidemiology*, 12, 431-448. doi: 10.4236/ojepi.2022.124035.
15. Arif, M.; **Tanmoy Mondal**; Majeed, A.; Loffredo, C.A.; et al. **Peroxisome Proliferator-Activated Receptor- α (PPAR α) Expression in a Clinical Population of Pakistani Patients with Type 2 Diabetes and Dyslipidemia.** *Int. J. Mol. Sci.* 2022, 23, 10847.
16. **Tanmoy Mondal**, Loffredo CA, Trnovec T, Palkovicova Murinova L, et al. **Gene expression signatures in PCB-exposed Slovak children in relation to their environmental exposures and socio-physical characteristics.** *Environ Sci Pollut Res Int.* 2022 Aug;29(40):60531-60541.

Year 2021

17. **Tanmoy Mondal**, Nautiyal A, Ghosh S, Loffredo CA, Saha C, Mitra D, Dey SK. (2021) **An evaluation of DNA double strand break formation and excreted guanine species post whole-body PET/CT procedure.** *J Radiat Res*; 62(4): 590–599. doi: 10.1093/jrr/rrab025.

18. Nautiyal A, **Tanmoy Mondal**, Goel A, Dey SK, Mitra D. (2021) **Biological Effects Associated with Internal and External Contamination of Diagnostic Nuclear Medicine Sources: An *In vitro* Study.** *Indian J Nucl Med*; 36(3): 288–292.
19. Nautiyal A, **Tanmoy Mondal**, Manu, Kaushik A, Goel A, Dey SK, Mitra D (2021). **Significant reduction of radiation dose and DNA damage in Whole-Body PET/CT study without compromising diagnostic image quality.** *Journal of Radiation Research and Applied Sciences*. 14(1):358-368.
20. Nautiyal A, **Tanmoy Mondal**, Mitra D, Goel A, Dey SK, Kaushik A (2021). **A simple and novel approach to estimate organ cumulative activities and internal absorbed doses using external measurement for ¹⁸F-FDG positron emission tomography.** *Radiat Prot Dosimetry*. 196(3-4):141-152.

Year 2020

21. Seal T, Chaudhuri K, Pillai B, Chakrabarti S, Auddy B, **Tanmoy Mondal** (2020). **Wild edible plants of Meghalaya State in India: Nutritional, minerals, anti-nutritional, vitamin content and toxicity studies.** *Phcog Mag*. 16:S142-51.
22. Seal T, Chaudhuri K, Pillai B, Chakrabarti S, **Tanmoy Mondal**, Auddy B (2020). **Evaluation of antioxidant activities of various solvent extracts of Litsea cubeba fruits, toxicity studies and its DNA damage protective effects.** *Heliyon*. 6 e03637.

Year 2019

23. **Tanmoy Mondal**, Nautiyal A, Agrawal M, Mitra D, Goel A, Dey SK. (2019) **¹⁸F-FDG induced DNA damage, chromosomal aberration, and toxicity in V79 lung fibroblast cells.** *Mutat Res Gen Tox En* 847 503105.
24. Nautiyal A, **Tanmoy Mondal**, Mukherjee A, Mitra D, Kaushik A, Goel HC, Goel A, Dey SK. (2019) **Quantification of DNA damage in patients undergoing non-contrast & contrast enhanced whole body PET/CT investigations using comet assay and micronucleus assay.** *Int J Radiat Biol*; 95(6):710-719.

Year 2018

25. **Tanmoy Mondal**, Nautiya A, Patwari A, Amenti, Mitra D, Goel A, Dey SK. (2018) **DNA double strand breaks, repair and apoptosis following 511 keV γ -rays exposure using 18 Fluorine positron emitter: An *in-vitro* study.** *Biomed. Phys. Eng. Express* 4 065023.

Year 2017

26. **Tanmoy Mondal**, Pal S, Dey SK. (2017) **Quercetin Mediated Inhibition of Hydrogen Peroxide-induced Genomic DNA Damage and Toxicity.** *Journal of Biologically Active Products from Nature*. 7:3, 200-213.
27. Chigurupati H, Auddy B, Biyani M, Chakrabarti S, Pandit S, Biswas TK, **Tanmoy Mondal**, Sidney J. Stohs. (2017) **Antioxidant and DNA protective effects of NTX, a proprietary glycyrrhizin/D-mannitol product, in association with alcohol consumption: A randomized, placebo-controlled, double-blind, crossover study.** *Journal of Functional Foods* 34 28-35.

Year 2015

28. **Tanmoy Mondal**, Pal S, Dey SK. (2015) **Fermented black tea ameliorates gamma radiation induced cellular and DNA damage in human blood lymphocytes.** *International Journal of Biotechnology Research*. 3(4), 055-064.

ABSTRACTS AND PRESENTATION

- **Tanmoy Mondal**; CA Loffredo; R Quartey; G Moses; C Howell; BE Korba; G Nunlee-Bland; Z Noreen; JJ Simhadri; S Ghosh. **HCV Infection and Diabetes Comorbidity Risks in African Americans.** RCMI Coordinating Center Conference 2025. Bethesda MD, US.
- Jasneet Sahota, Tanmoy Mondal, Mahlet Lemma, S Ghosh. **A Conceptual Framework for Understanding the Link Between Type II Diabetes Mellitus and Alzheimer's Disease in African Americans.** ADA Meetings 2025. Chicago, US
- Tanmoy Mondal, CA. Loffredo, R Quartey, G Moses, C Howell, B Korba, G Nunlee-Bland, S Ghosh. **Gene Expression and Pathway Analysis in African Americans with T2DM and HCV Co-Morbidity.** ADA Meetings 2025. Chicago, US
- **Tanmoy Mondal**, Jheannelle Johnson, Tapas K. Sur, Christopher A. Loffredo, Sharleine Cotin, Jasneet Sahota, Charles D. Howell, Brent Korba, Gail Nunlee-Bland, Somiranjana Ghosh. **Metabolic Dysfunction and Alzheimer's Disease Risks in African Americans.** AAIC 2024, Philadelphia, USA
- **Tanmoy Mondal**, Smith CI, Loffredo CA, Quartey R, et al. **Key gene validation in hepatic fibrosis and hepatocellular carcinoma in African Americans with NAFLD.** The Liver Meeting - AASLD 2023, Boston, MA, USA, October 2023, DOI: 10.1097/HEP.0000000000000580
- **Tanmoy Mondal**, Christopher A. Loffredo, Coleman I Smith, Ruth Quartey. et al. **Key Biological Pathways of Non-Alcoholic Fatty Liver Disease in African Americans.** CUHRI Inaugural Conference April 3 - 4, 2023 Morgan State University, Baltimore, MD
- **Tanmoy Mondal**, CD Howell, B Korba, G Nunlee-Bland, et al. **TGF- β 1 Signaling Pathways in Progression Non-Alcoholic Fatty Liver Disease in African Americans.** RCMI Consortium National Conference 2023. Bethesda MD, US.
- **Tanmoy Mondal**, CI Smith, C A Loffredo, B Korba, CD Howell, G Nunlee-Bland, J Johnson, J Sahota, G Moses, S Ghosh. **TGF- β 1 & E2F1 Signaling Pathways in MASLD African Americans.** XULA Health Disparities Conference 2024. New Orleans, Louisiana.
- **Tanmoy Mondal**, Loffredo CA, Smith CI, Quartey R, S Ghosh et al. **NAFLD Pathobiology in African American Patients in The Washington Dc Area.** AASLD The Liver Meeting, Washington, DC, USA. 2022
- **Tanmoy Mondal**, Nautiyal A, Kaushik A, Mitra D, Goel A, Dey SK. **Repeated irradiation of Fluorine-18 enhances biological and biochemical changes in cells: an *in-vitro* prospect study.** SNMICON 2018. Indian Journal of Nuclear Medicine. Volume 33. Abstract Supplement Issue. December 2018. ESCI indexed.
- **Tanmoy Mondal**, Nautiyal A, Kaushik A, Mitra D, Goel HC, Goel A, Dey SK. (2018). **Comparative study of DNA damage in V79 cell line after prolong Fluorine-18 exposure with comet assay and γ H2AX assay.** ICRB 2018. NUJHS vol. 8, Special Issue, October 2018, ISSN 2249-7110.

- **Tanmoy Mondal**, Nautiyal A, Mitra D, Dey SK. **Influence of non-ionic Computed Tomography (CT) contrast agent in DNA double strand breaks (DSBs) formation using Fluorine-18 (¹⁸F) gamma ray exposure on V79 cancer cell line.** (February 2018) Conference: 2nd Annual Conference of Nuclear Medicine Physicists Association of India. At: Mumbai.
- **Tanmoy Mondal**, Nautiyal A, Saha C and Dey SK **Study of DNA Damage and Cellular Toxicity at Diagnostic Level of Radiation by ¹⁸F-FDG** 4th Regional Science & Technology Congress, 2019 Medical Science 282.
- **Tanmoy Mondal**, Nautiyal A, Patwari A, Amenti, Dey SK, Mitra D. (February 2017). **Study of genotoxicity factors associated with ¹⁸F mediated diagnosis, an *in-vitro* approach.** Conference: 1st Annual Conference of Nuclear Medicine Physicists Association of India (NMPAICON 2017). Kolkata.
- **Tanmoy Mondal**, Dey SK (2016). **Green tea kombucha, a good source of natural antioxidant and a probable radioprotector.** Conference: 1st International Conference on Nano Technology and Biotechnology (Nano Bio Con 2016), Kolkata.
- Saimoen Anderson, Miranda Newheart, **Tanmoy Mondal**, Tapas Kumar Sur, Somiranjana Ghosh. **Decoding Latent Autoimmune Disease (LADA) in African American Adults: A Comprehensive Study on the Role of PFKFB3 Gene and Pathway's T2DM Patient.** 18th Annual Undergraduate Research Conference 2024. Virginia State University.
- Miracle Gabriels, **Tanmoy Mondal**, Somiranjana Ghosh. **Role of E2F1 Signaling Pathways in Progression of MASLD in African Americans: An Ethnicity Based Comparative Study.** 18th Annual Undergraduate Research Conference 2024. Virginia State University.
- Armani Clay, **Tanmoy Mondal**, Tapas Sur, Somiranjana Ghosh. **The Immerging Concept of Type 3 Diabetes: Why African Americans Matters.** 18th Annual Undergraduate Research Conference 2024. Virginia State University.
- Tapas Kumar Sur; **T Mondal**; Z Noreen; J Johnson; CA Loffredo; B Korba; ST Cotin; G Nunlee-Bland; S Sarkar; S Ghosh. **EARLY MARKERS IN ASSESSING THE RISK OF ALZHEIMER'S DISEASE.** RCMI Coordinating Center Conference 2024. Bethesda MD, US.
- Jasneet Sahota, Miracle S Gabriels, **Tanmoy Mondal**, Coleman I. Smith, Christopher A. Loffredo, Brent Korba, Charles D. Howell, Gail Nunlee-Bland, Leanna R. Rucker, Gemeyel Moses, Somiranjana Ghosh. **Ethnicity Based Similarities and Differences of Global Transcriptomic Profiles among MASLD Patients by Ingenuity Pathway Analysis (IPA).** 18th Annual Undergraduate Research Conference 2024. Virginia State University.
- S. HAIDER; T. Mondal; CA Loffredo; B Korba; M. Azam; S. Ghosh. **Transcriptomes of Pakistani Children with Dyslexia And ADHD.** RCMI Coordinating Center Conference 2024. Bethesda MD, US.
- Jasneet Sahota; Miracle S Gabriels; **Tanmoy Mondal**, Coleman I. Smith, Christopher A. Loffredo, Brent Korba, Charles D. Howell, Gail Nunlee-Bland, Leanna R. Rucker, Gemeyel Moses, Somiranjana Ghosh. **SIGNALING PATHWAY DIFFERENCES IN MASLD AFRICAN AMERICANS.** RCMI Coordinating Center Conference 2024. Bethesda MD, US.