ABINASH DUTTA , Ph.D.
Post-Doctoral Fellow,
Laboratory of Genomic Instability and Diseases,
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EDUCATIONAL QUALIFICATIONS:

Degree	BOARD/UNIVERSITY
B.Sc. (Biotechnology Hons.)	North Orissa University, Odisha
PG (Biotechnology)	North Orissa University, Odisha
Ph.D. (Biotechnology)	Utkal University, Odisha

FIELD OF INTEREST:

- Redox Biology
- Developmental Biology
- Proteomics
- Epigenetics

RESEARCH EXPERIENCE:

- Post Doctoral Fellow sponsored by DBT, Govt. of India at Institute of Life Sciences, Bhubaneswar, Odisha.
- Senior Research Fellow sponsored by SERB, Govt. of India at Institute of Life Sciences, Bhubaneswar, Odisha.
- Biju Patanaik Research Fellow sponsored by DST , Govt. of Odisha at P.G. Department of Biotechnology, Utkal University, Bhubaneswar, Odisha.
- Research assistant sponsored by DST-PURSE, Govt. of India at P.G. Department of Biotechnology, Utkal University, Bhubaneswar, Odisha.
- Project fellow sponsored by DST, Govt. Of India at P.G. Department of Biotechnology, Utkal University, Bhubaneswar, Odisha.

RESEARCH PUBLICATIONS:

- **Dutta, A.**, Dandapat, J. and Mohanty, N. (2019) First report on transferrin in the silkworm, *Antheraea mylitta*, with a putative role in antioxidant defense: Insights

from proteomic analysis and immune detection. **Comparative Biochemistry and Physiology Part B**. 233: 23-34.
(https://pubmed.ncbi.nlm.nih.gov/30946902/)

- Bunker, S., **Dutta, A.**, Pradhan, J., Dandapat, J. and Chainy, G.B.N. (2019) Curcumin restores hepatic epigenetic changes in propylthiouracil (PTU) Induced hypothyroid male rats: A study on DNMTs, MBDs, GADD45a, C/EBP-β and PCNA. **Food and Chemical Txicology.** 123: 169-180.
(https://pubmed.ncbi.nlm.nih.gov/30367912/)
- **Dutta, A.**, Dandapat, J. and Mohanty, N. (2018) Foliar supplementation of ascorbic acid and glycine boost the growth performance and antioxidant protection in the larvae of tropical tasar silkworm, *Antheraea mylitta*. **Journal of Entomology and Zoology Studies**. 6(6):136-142.
(https://www.entomoljournal.com/archives/2018/vol6issue6/PartC/6-5-303-629.pdf)
- Sahu, A., **Dutta, A.**, Ray, D.K., Pradhan, J. and Dandapat, J. (2018) Host plant-derived allelochemicals and metal components are associated with oxidative predominance and antioxidant plasticity in the larval tissues of silkworm, *Antheraea mylitta*: Further evidence of joint effects hypothesis. **Comparative Biochemistry and Physiology Part B**. 223:39-49.
(https://pubmed.ncbi.nlm.nih.gov/29966773/)
- Sahoo, A., **Dutta, A.**, Samanta, L. and Dandapat, J. (2018) Low H_2O_2 and enhanced oxidative resistance in the diapause-destined pupa of silkworm, *Antheraea mylitta* (Lepidoptera:Saturniidae) suggest their possible involvement in dormancy and lifespan extension. **BMC Zoology.** 3:1.
(https://bmczool.biomedcentral.com/articles/10.1186/s40850-018-0027-4)
- Sheikh,L., **Dutta,A**., Chandra,R. and Nayar,S.(2015) Effect of ferrofluids on microbes. ***International Journal of New Technologies in Science and Engineering***. 2(3), 109-117. ISSN 2349-0780.
(https://www.ijntse.com/upload/1443860971IJNTSE-Sep-A1%20(1).pdf)

PODUCT DEVELOPMENT AND COMMERCIALIZATION:

- **Anti-Transferrin Primary Antibody**

ACHEIVEMENTS & AWARDS:

- Awarded as **Best Oral Presentation Award** in 2nd International Conference on **Environmental, Agricultural, Chemical and Biological Sciences (ICEACBS 2021)** in support of United Nations SDGs and organized by Voice of Indian Concern for the Environment (VOICE) from January 24-26, 2021.
- Awarded as **BBA Young Investigator Award** in 17th Annual Meeting of the Society for Free Radical Research India (SFRR-INDIA-2020) & International Conference on **"Role and Management of Oxidative Stress in Human Disease"** organized by Society For Free Radical Research-India & Bhabha Atomic Research Centre, Mumbai from February 12-15, 2020.

- Awarded as **Second Best Poster Presentation** in **Utkal University Research Scholars' Conclave** organized by Utkal University, Bhubaneswar, Odisha on 26th November, 2019.
- Awarded as **Best Paper Presentation** (Poster) in National seminar cum workshop on **Proteomics in Public Health** organized by P.G. Department of Biotechnology, Utkal University, Bhubaneswar, Odisha from 15th to 16th March, 2019.
- Awarded as **Best Poster Presentation** in Research Scholars' Poster Presentation: VISHLESHAN organized by Utkal University, Bhubaneswar, Odisha on 5th January, 2019.
- Awarded as **Best Paper Presentation** (oral) in National Seminar on **Recent Trends in Microbiology and Biotechnology (RTMB-2018)** organized by Department of Biotechnology, MITS School of Biotechnology and Society of Biotechnology and Bioinformatics, Bhubaneswar, Odisha from 16th to 17th March, 2018.
- Awarded as **Best Poster Presentation** in **Utkal University Research Scholar's Conclave** organized by **Utkal University, Bhubaneswar, Odisha** on 30th April, 2016.
- Awarded as **Best Paper Presentation** (oral) in National symposium on **Recent Advances in Beneficial Insects** organized by **Indian Institute of Natural Resins and Gums (IINRG) and Society For Advancement of Natural Resins and Gums (SANRAG), Ranchi** from November 27th -29th, 2013.

ORAL/POSTER PRESENTATION IN SEMINAR/SYMPOSIA:

- Oral presentation on **Biomimetic synthesis of calcium silicate from natural sources (Rice husk ash and Mollusc shell)** at Indian Ceramic Society, Jamshedpur.
- Oral presentation on **Foliar supplementation of ascorbic acid and Glycine modulate antioxidant defence components in the larvae of tasar silkworm, *Antheraea mylitta*** in National symposium on **Recent Advances in Beneficial Insects** organized by **Indian Institute of Natural Resins and Gums (IINRG) and Society For Advancement of Natural Resins and Gums (SANRAG), Ranchi** from November 27-29, 2013.
- Poster presentation on **Immune response and antioxidant defense status in the larvae of tasar silk worm, *Antheraea mylitta* D. challenged with *Escherichia coli* and pure LPS** in International symposium on **Genetic Analysis: Translational and Developmental & Annual Meeting of Society for Biotechnologists (India)** organized by **Department of Zoology, The University of Burdawn** from November 21-23, 2014.
- Poster presentation on **Redox Regulatory Mechanism in Silkworm, *Antheraea mylitta* : Modulatory Effect of Exogenous Components** in **Utkal University Research Scholar's Conclave** organized by Utkal University, Bhubaneswar, Odisha on 30th April, 2016.
- Poster presentation on **Redox modulation during early larval development of silkworm, *Antheraea mylitta* fed on different host plants** in National seminar on **Emerging Trends in Biotechnology and Crop Improvements (ETBCI-2017)**

organized by Rama Devi Women's University, Bhubaneswar, Odisha from 21st to 22nd November, 2017.

- ❖ Oral presentation on **Oxidative stress in tasar silkworm, *Antheraea mylittaI*: beneficial role of antioxidants for the improvement of larval health and silk production** in National Seminar on **Recent Trends in Microbiology and Biotechnology (RTMB-2018)** organized by Department of Biotechnology, MITS School of Biotechnology and Society of Biotechnology and Bioinformatics, Bhubaneswar, Odisha from 16th to 17th March, 2018.
- ❖ Oral presentation on **Conservation of tasar silkworm Antheraea mylitta for sustained production of tasar silk: Exogenous antioxidant supplementation a promising approach** in National Conference on **Biodiversity Conservation for sustainable development and Environment Management (BCSDEM-2018)** organized by Department of Life Science and Department of Chemistry, School of Applied Sciences, Centurian University of Technology and Management, Bhubaneswar, Odisha from 1st to 2nd April, 2018.
- ❖ Poster presentation on **Loss of catalase activity in the hemolymph of *Antheraea mylitta*: A chance or Choice** in Research Scholars' Poster Presentation: VISHLESHAN organized by Utkal University, Bhubaneswar, Odisha on 5th January, 2019.
- ❖ Oral presentation on **Effect of foliar supplementation of ascorbic acid and glycine for the improvement of silk production from tasar silkworm *Antheraea mylita*** in National workshop on Emerging Trends in Life Sciences for Sustainable Development organized by Department of Life Sciences, Rama Devi Women's University, Bhubaneswar, Odisha from 8th to 9th February, 2019.
- ❖ Poster Presentation on **Implications of the 75 KDa protein in the hemolymph of silkworm *Antheraea mylitta* in the apparent absence of catalase activity** in National seminar cum workshop on **Proteomics in Public Health** organized by P.G. Department of Biotechnology, Utkal University, Bhubaneswar, Odisha from 15th to 16th March, 2019.

- Oral Presentation on **Transferrin, a 75.7 kDa glycoprotein, identified from the hemolymph of silkworm, *Antheraea mylitta*, plays a pivotal role in antioxidant protection in the apparent absence of catalase and glutathione peroxidase activities** 17th Annual Meeting of the Society for Free Radical Research India (SFRR-INDIA-2020) & International Conference on **"Role and Management of Oxidative Stress in Human Disease"** organized by Society For Free Radical Research-India & Bhabha Atomic Research Centre, Mumbai from February 12-15, 2020.
- Oral Presentation on **DNA Methylation and Transferrin: The missing link to understand the apparent absence of catalase in tasar silkworm, *Antheraea mylitta*.** 2nd International Conference on **Environmental, Agricultural, Chemical and Biological Sciences (ICEACBS 2021)** in support of United Nations SDGs and organized by Voice of Indian Concern for the Environment (VOICE) from January 24-26, 2021.

ABSTRACTS PUBLISHED IN PROCEEDINGS:

- **A. Dutta**, S. Sahu, J. Dandapat and N. Mohanty (2013). "Foliar supplementation of ascorbic acid and Glycine modulate antioxidant defence components in the larvae of tasar silkworm, *Antheraea mylitta*." National Symposium on recent advances in beneficial insects. November 27th -29th, 2013. Organized by Indian Institute of Natural Resins and Gums (IINRG) and Society For Advancement of Natural Resins and Gums (SANRAG), Ranchi.
- S. Sahu, **A. Dutta**, J. Dandapat, N. Mohanty (2014). "Effect of micronutrients on growth response and antioxidant defense system of silkworm *Antheraea mylitta."* National Conference on Current trends in Life sciences research and challenges ahead. February 28th – March 02nd,2014. Organized by School of Life sciences, Sambalpur University, Sambalpur.
- S. Sahu, **A. Dutta**, J. Dandapat, N. Mohanty (2014). " Selenium modulates antioxidant defense response in the mid gut tissues of Vth instar larvae of *Antheraea mylitta.*" National seminar on Current trends of animal science research in India. March 21st – 22nd,2014. Organized by Department of Zoology, North Orissa University.
- A. Sahoo, S. Sahu, **A. Dutta**, J. Dandapat, L. Samanta (2014) "Tissue and sex specific redox status and antioxidant defenses during pupal diapause of *Antheraea mylitta*." National symposium on Emerging trends in Biotechnology: Present scenario and future dimensions. March 29th-30th,2014. Organized by P.G. Department of Biotechnology, Utkal University, Bhubaneswar, Odisha.
- **A. Dutta**, S. Sahu, I. Das, A. Datey, J. Dandapat (2014)"Immune response and antioxidant defense status in the larvae of tasar silk worm, *Antheraea mylitta* D. challenged with *Escherichia coli*". International Symposium on Genetic Analysis: Translational and Developmental & Annual Meeting of Society for Biotechnologists (India). November 21st-23rd,2014. Organized by Department of Zoology, The University of Burdawn.
- **A. Dutta,** H. Sai, Nimisha, J. Dandapat (2017) "Redox modulation during early larval development of silkworm, *Antheraea mylitta* fed on different host plants. National seminar on Emerging Trends in Biotechnology and Crop Improvements (ETBCI-2017)". November 21st-22rd,2017. Organized by Rama Devi Women's University, Bhubaneswar, Odisha
- **A. Dutta**, J. Dandapat (2018) "Oxidative stress in tasar silkworm, *Antheraea mylittaI*: beneficial role of antioxidants for the improvement of larval health and silk production. National Seminar on Recent Trends in Microbiology and Biotechnology (RTMB-2018) 16th to 17th March, 2018 organized by Department of Biotechnology, MITS School of Biotechnology and Society of Biotechnology and Bioinformatics, Bhubaneswar, Odisha.
- **A. Dutta**, J. Dandapat (2018) "Conservation of tasar silkworm Antheraea mylitta for sustained production of tasar silk: Exogenous antioxidant supplementation a promising approach". National Conference on Biodiversity Conservation for sustainable development and Environment Management (BCSDEM-2018) from 1st to

2nd April, 2018.organized by Department of Life Science and Department of Chemistry, School of Applied Sciences, Centurian University of Technology and Management, Bhubaneswar, Odisha.

- **A. Dutta,** J. Dandapat (2019) Effect of foliar supplementation of ascorbic acid and glycine for the improvement of silk production from tasar silkworm *Antheraea mylita*. National workshop on Emerging Trends in Life Sciences for Sustainable Development. 8th to 9th February, 2019. Organized by Department of Life Sciences, Rama Devi Women's University, Bhubaneswar, Odisha.
- A. Sahu, **A. Dutta,** D.K. Ray, J. Pradhan and J. Dandapat (2019) Food plants associated phytoconstituents modulate tissue redox balance during larval development of silkworm, *Antheraea mylitta*. National workshop on Emerging Trends in Life Sciences for Sustainable Development. 8th to 9th February, 2019. Organized by Department of Life Sciences, Rama Devi Women's University, Bhubaneswar, Odisha.
- **A. Dutta,** J. Dandapat (2019) Implications of the 75 KDa protein in the hemolymph of silkworm *Antheraea mylitta* in the apparent absence of catalase activity. National seminar cum workshop on Proteomics in Public Health. 15th to 16th March, 2019. organized by P.G. Department of Biotechnology, Utkal University, Bhubaneswar, Odisha.
- **A. Dutta,** J. Dandapat (2020) Transferrin, a 75.7 kDa glycoprotein, identified from the hemolymph of silkworm, *Antheraea mylitta*, plays a pivotal role in antioxidant protection in the apparent absence of catalase and glutathione peroxidase activities. 17th Annual Meeting of the Society for Free Radical Research India (SFRR-INDIA-2020) & International Conference on **"Role and Management of Oxidative Stress in Human Disease"** organized by Society For Free Radical Research-India & Bhabha Atomic Research Centre, Mumbai from February 12-15, 2020.

TRAINING / WORKSHOP UNDERTAKEN:

- National Symposium and Workshop on **Advances in Proteomics at Institute of Life Sciences, Bhubaneswar, Odisha.**
- Workshop-cum-training programme on **Recent Development and Future Trends of Bioinformatics in Biomedical Research at Biomedical Informatics Centre, Regional Medical Research Centre, (ICMR), Bhubaneswar, Odisha.**
- 5 days Hands-on Workshop on **Molecular Biotechnology and Bioinformatics at International Center for Stem Cells, Cancer and Biotechnology (ICSCCB)**, Pune, India.
- Hands-on-training in **Advanced Microbiology and Molecular Biology** at **Biotechnotrick Laboratory**, Bhubaneswar (Odisha)**.**
- Training in **Food Microbiology** at **Madallion Institute of Biosciences**, Bhubaneswar (Odisha).

PROFESSIONAL MEMBERSHIP:

- Life member of **"Society for Biotechnologists (India)"**

PERSONAL PROFILE:

Name	:	ABINASH DUTTA
Father's Name	:	Samarendra Nath Dutta
Date of birth	:	17th May, 1989
Age	:	32
Religion	:	Hindu
Gender	:	Male
Marital Status	:	Married
Nationality	:	Indian
Languages Known	:	English, Hindi, Oriya
Permanent Address	:	At-Chhancha, Palabani, W.N.-25 P.O- Baripada Dist- Mayurbhanj-757001, Odisha, India

ACADEMIC REFEREE:

Prof. Jagneshwar Dandapat
Head and Supervisor,
P.G. Department of Biotechnology,
Utkal University,Vani Vihar,
Bhubaneswar-751004, Odisha, India
E-mail: **jdandapat.nou@gmail.com**

Prof. G.B.N. Chainy, Ph.D., F.N.A.Sc.
Former Head & UGC Emeritus Professor
P.G. Department of Biotechnology,
Utkal University, Vani Vihar,
Bhubaneswar- 751 004, Odisha, India.
Email: **chainyg@gmail.com**

DECLARATION:

I hereby declare that all the information furnished by me is true to the best of my knowledge and belief.

Place: Bhubaneswar **Abinash Dutta.**