

Curriculum vitae

Personal details:

Name : Umesh Chandra Dash, Ph.D
(Completed pre-submission)

Date of birth : July 18th, 1990

Nationality : Indian

Gender : Male

Present position : Research Scholar

Address : Plot-No-258, Raghunath Niwas,
AT/PO-Sundarpada, PS- Airfield,
Bhubaneswar-75 10 02, Odisha.

Mobile : +91-95 83 29 76 87, 79 78 95 08 45.

Email : umeshchandrash90@gmail.com



Techniques/Research skills:

- Immunology**
- Cell maintenance, Cell viability, ELISA Screening, Hybridoma technology, Histopathological analysis, Mass Culture and Animal Handling (Induced source i.p./s.c./o.g.).
- Molecular Biology & Protein Techniques**
- Plasmid DNA isolation, PAGE, PCR (Polymerase Chain Reaction), Western Blotting, ELISA and Protein isolation.
- Phytochemistry and Chromatography**
- Extraction, isolation and characterization of medicinal plants.
 - Paper Chromatography, Thin layer chromatography and Column chromatography.
- Computer software**
- MS Word, excel and PowerPoint.
 - Preliminary knowledge in nucleotide, amino acid sequence analysis using bioinformatics tools like NCBI Data Base, EMBL Data Base and other tools for genome analysis. Graph pad statistical analysis (One way ANOVA).
 - Data retrieval from websites like Sci-Finder, Pub med, Science direct, Springer, RSC, Nature and ACS etc.
- Instruments Handled**
- GC-MS/MS, HPTLC, FT-IR, UV-Visible spectroscopy, HPLC, Microplate reader, Soxhlet apparatus, TLC analyzer, PCR, UV-vis Spectrophotometers, Calorimeters, Incubators, Centrifuges, Ultra centrifuges, Electronic balance, Autoclave, Colony counters, Laminar Air Flow, GC-5000(γ -irradiator), Lyophilizer, Haemocytometer, pH-Meter and Microscope.
- Language skills**
- Excellent command over written and spoken English and Hindi. Odia as mother tongue.

Professional and Educational details:

- 2016 - 2021**
- Ph.D in Biotechnology (Completed Pre-submission), Utkal University, Bhubaneswar, Odisha, India, Medicinal and Aromatic Plant Division, Regional Plant Resource Centre, Nayapalli, Bhubaneswar, Odisha, India
Thesis title: Pharmacological profiling of *Geophila repens* and *Piper trioicum* and evaluation of their therapeutic potential against Alzheimer's disease.
Thesis advisor: Dr. Atish Kumar Sahoo, Regional Plant Resource Centre; And Co-advisor: Prof. Jagneshwar Dandapat, Utkal University.
- 2010-2012**
- Master in Science, Biotechnology, Trident Academy of Creative Technology College, Utkal University, Bhubaneswar, Odisha, India.
Percentage: 67.5 %
- 2007-2010**
- Bachelor in Science, Biotechnology, Trident Academy of Creative Technology College, Utkal University, Bhubaneswar.
Percentage: 65.13% (Honors)

Fellowships and awards:

- 2017-2020**
- **Biju Pattnaik Research Fellowship Scheme**, Department of Science and Technology, Government of Odisha, India
- 2014-2017**
- **Research Scholar, Regional Plant Resource Centre**, Bhubaneswar.
Area of work: Therapeutic potential of medicinal plants towards antidiabetic and neuroprotective activities in drug induced experimental animal model (Rat, mice etc.)
- 2013-2014**
- **BCIL Trainee, IMGEX India pvt. ltd.**, Bhubaneswar, Odisha.
Area of work: Development and characterization of Monoclonal Antibody from MUL 1 protein by using hybridoma technology.
- 2012-2013**
- **Project Assistant**, Radiation Biology Department, INMAS, DRDO, Delhi.
Area of work: Radio-protective activity of herbal extracts in experimental animal models.

Papers Published/communicated/to be communicated:

- **Dash, U. C.**, Swain, S. K., Kanhar, S., Banjare, P., Roy, P. P., Dandapat, J., & Sahoo, A. K. (2022). The modulatory role of prime identified compounds in *Geophila repens* in mitigating scopolamine-induced neurotoxicity in experimental rats of Alzheimer's disease via attenuation of cholinesterase, β -secretase, MAPt levels and inhibition of oxidative stress imparts inflammation. **Journal of ethnopharmacology**, 282, 114637.
- **Dash, U. C.**, Kanhar, S., Dixit, A., Dandapat, J., & Sahoo, A. K. (2019). Isolation, identification, and quantification of Pentylcurcumene from *Geophila repens*: A new class of cholinesterase inhibitor for Alzheimer's disease. **Bioorganic chemistry**, 88, 102947.
- **Dash, U. C.**, & Sahoo, A. K. (2017). In vitro antioxidant assessment and a rapid HPTLC bioautographic method for the detection of anticholinesterase inhibitory activity of *Geophila repens*. **Journal of integrative medicine**, 15(3), 231–241.
- **Dash, U. C.**, Dandapat, J., & Sahoo, A. K. Pharmacological profiling and therapeutic validation of *Piper trioicum* towards Alzheimer's disease- Insight to *in vitro* and *in vivo* approach of an edible plant (**Manuscript under preparation**)
- Sahoo, A. K., Dandapat, J., **Dash, U. C.**, & Kanhar, S. (2018). Features and outcomes of drugs for combination therapy as multi-targets strategy to combat Alzheimer's disease. **Journal of ethnopharmacology**, 215, 42–73.
- Rout, D., **Dash, U. C.**, Kanhar, S., Swain, S. K., & Sahoo, A. K. (2021). Homalium zeylanicum attenuates streptozotocin-induced hyperglycemia and cellular stress in experimental rats via attenuation of oxidative stress imparts inflammation. **Journal of ethnopharmacology**, 283, 114649. Advance online publication.
- Swain, S. K., **Dash, U. C.**, Kanhar, S., & Sahoo, A. K. (2020). Ameliorative effects of *Hydrolea zeylanica* in streptozotocin-induced oxidative stress and metabolic changes in diabetic rats. **Journal of ethnopharmacology**, 247, 112257.
- Rout, D., **Dash, U.C.**, Kanhar, S., Swain, S. K., & Sahoo, A. K. (2020). The modulatory role of prime identified compounds in the bioactive fraction of *Homalium zeylanicum* in high-fat diet fed-streptozotocin-induced type 2 diabetic rats. **Journal of ethnopharmacology**, 260, 113099.
- Sahoo, A. K., **Dash, U. C.**, Kanhar, S., & Mahapatra, A. K. (2017). In vitro biological assessment of *Homalium zeylanicum* and isolation of lucidenic acid A triterpenoid. **Toxicology reports**, 4, 274–281.

References:

Prof. (Dr) Jagneshwar Dandapat

Head of the Department, Department of Biotechnology,
Utkal University, Bhubaneswar.

E- Mail ID: jdandapat.nou@gmail.com

Dr. Atish Kumar Sahoo

Senior Scientist,
Regional Plant Resource Centre, Bhubaneswar.

E- Mail ID: atish_kumar1976@yahoo.co.in

Dr. Sudeep Ranjan Nayak

Scientist-D, Radiation Biology Department,
Institute of Nuclear Medicine and Allied Sciences (INMAS), DRDO, Delhi

E- Mail ID: sudeepranjannayak@gmail.com

Dr. Prasanta Kumar Maiti

R&D HEAD, IMGEX India Pvt. Ltd.,
Bhubaneswar, Odisha.

E- Mail ID: pmaiti@imgenexindia.com

Declaration:

I do hereby declare that the particulars of information and facts stated here in above are true, correct and complete to the best of my knowledge and belief. If, I have given an opportunity, I would do my best for the growth of your concern.

Yours sincerely
Umesh Chandra Dash