

Curriculum Vitae



Name: Dr. (Mrs) Luna Samanta

Designation: Reader and Head
Subject: Zoology

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Professional Experience:

(Starting with the most recent)

- Reader, Ravenshaw University, Cuttack, 22nd May 2010 onwards.
- Lecturer in Zoology, P.G. Department of Zoology and Collaborative faculty (Additional charge), Department of Biotechnology, Utkal University, Bhubaneswar, 7th July, 2005 - 22nd May, 2010.
- Asst-Professor in Biotechnology, Orissa University of Agriculture and Technology, Bhubaneswar, 4th October 2004 - 30th April, 2005.
- Research Associateship (Post-doctoral) Council of Scientific and Industrial Research, India at P.G. Department of Zoology, Utkal University, Bhubaneswar-751004, (1st May, 2001- 31st March, 2004).

Education:

(Starting with Bachelors up-to the highest qualification)

- Graduation (Zoology Honours), Utkal University, 1989, First Class (Honours) with Distinction.
- M.Sc. (Zoology, Cytogenetics special paper), Utkal University, 1991, First Class.
- M.Phil. (Zoology, Biochemistry Intensive paper) dissertation entitled, "Linden-induced lipid peroxidation in chick liver", Utkal University, 1993.
- Ph.D. (Zoology) dissertation entitled, "Effect of hexachlorocyclohexane on rat testicular enzymes of active oxygen metabolism as a function of age", Utkal University, 1999.

Area (s) of specialization: (Five Lines)

Current research interests include the role of molecular markers (oxidative stress, DNA integrity, and apoptosis) in altered thyroid states and patho-physiology of male reproduction and the effect of antioxidant supplementation in alleviating these conditions. Keeping in view the rich biodiversity of Odisha, I am also interested in screening, isolation and purification of bioactive compound from natural sources.

Publications:

1. Books: (Five maximum with ISBN Number, Publication House, Year, Place)
2. **Research Papers in Peer Reviewed Journals:** (Ten most significant and recent publications with ISSN Numbers)
 - i. Tripathy A, **Samanta L**, Das S, Parida SK, Marai N, Hazra RK, Mallavdani UV, Kar SK and Mahapatra N (2010) The mosquitocidal activity of methanolic extracts of *Lantana camara* root and *Anacardium occidentale* leaf: Role of Glutathione-s-transferase in insecticide resistance. *J Med. Entomol.* (In Press). doi: 10.1603/ME09122. **Impact Factor 1.921**
 - ii. Chattopadhyay S, Choudhury S, Roy A, Chainy GBN and **Samanta Luna** (2010) T₃ fails to restore mitochondrial thiol redox status altered by experimental hypothyroidism in rat testis. *Gen. Comp. Endocrinol.* 169:39-47. doi.org/10.1016/j.ygcen.2010.07.014. **Impact Factor 2.732**
 - iii. Chattopadhyaya S, Sahoo DK, Roy A, **Samanta Luna** and Chainy GBN (2010) Thiol redox status critically influences mitochondrial response in thyroid hormone-induced hepatic oxidative injury: A temporal analysis. *Cell Biochem. Func.* 28: 126-134. DOI: 10.1002/cbf.1631. **Impact Factor: 1.515**
 - iv. **Samanta Luna** and Chainy GBN (2002) Response of testicular antioxidant enzymes to hexachlorocyclohexane is species specific. *Asian J Androl* 4: 191-194. **Impact Factor: 1.688**
 - v. Sahoo A, **Samanta Luna** and Chainy GBN (2000) Mediation of oxidative stress in HCH-induced neurotoxicity in rat. *Arch. Environ. Contam. Toxicol.* 39:7-12. **Impact Factor 1.743.**
 - vi. **Samanta Luna**, Roy A and Chainy GBN (1999) Changes in rat testicular antioxidant defence profile as a function of age and its impairment by hexachlorocyclohexane during critical stages of maturation. *Andrologia* 31: 83-90. DOI: 10.1111/j.1439-0272.1999.tb02850.x. **Impact Factor: 1.152.**
 - vii. **Samanta Luna**, Sahoo A and Chainy GBN (1999) Age-related changes in rat testicular oxidative stress parameters by hexachlorocyclohexane. *Arch. Toxicol.* 73: 96-107. **Impact Factor: 3.312**
 - viii. Sahoo A, **Samanta Luna**, Das K, Patra S and Chainy GBN (1998) Hexachlorocyclohexane-induced behavioral and neurochemical changes in rat. *J. Appl. Toxicol.* 19: 13-18. DOI: 10.1002/(SICI) 1099-1263 (199901/02)19:1 <13::AID-JAT531>3.0.CO;2-E. **Impact Factor: 2.073.**
 - ix. Chainy GBN, Samantaray S and **Samanta Luna** (1997) Testosterone-induced changes in testicular antioxidant system. *Andrologia.* 29: 343-349. DOI: 10.1111/j.1439-0272.1997.tb00328.x. **Impact Factor: 1.152.**
 - x. **Samanta Luna** and Chainy GBN (1997) Comparison of hexachlorocyclohexane-induced oxidative stress in the testis of immature and adult rats. *Comp. Biochem. Physiol.* 118C: 319-327. DOI:10.1016/S0742-8413(97)00132-1. **Impact Factor 2.582.**
3. **Research Papers in Non-peer Reviewed Journals:** (Five maximum, with ISSN Numbers)

4. Chapters in Edited Books: (Five maximum with ISBN Numbers, Publication House, Year, Place)

- **Samanta Luna** and Chainy GBN (2009) Biology of aging. In: Behavioural Concepts in ageing (Sahoo FM ed) Concepts Publishing Company Pvt. Ltd, New Delhi, pp 1-14. ISBN No. 81-8069-592-1
- **Samanta Luna** and Chainy GBN (2004) Hexachlorocyclohexane-induced oxidative stress: A mechanism for HCH mediated testicular toxicity. In: Current issues in environmental and fish biology (Bhattacharya S and Maitra SK eds.), Daya Publishing House, Delhi, pp 64-90. ISBN No. 81-7035-317-3

5. Reviews in Peer Reviewed Journals: (Five recent reviews)

- Pradhan J, Adhikary SP and **Samanta Luna** (2009) Commercial prospective of seaweeds with special reference to antioxidants and sulphated polysaccharides: potential of India. *Indian Hydrobiology*. 12: 176-189.
- **Samanta Luna** and Chainy GBN (2002) Effect of age on testicular antioxidant defence system. *Indian J. Gerontol*. 16: 69-78.

Conference Presentations: International (Maximum-10); National (Maximum-10)

Conferences/ Workshops/ Training Programs Organized: (Five major & recent ones)

- Delivered an invited talk on “Response of testicular antioxidant enzymes to hexachlorocyclohexane is species specific” at the 2010 Annual Meeting of Pathological Society of China, Chagsha, Hunan, China, 17-18th September, 2010.
- **Awarded best paper** for the topic entitles “DNA fragmentation and recurrent pregnancy loss” at National Focused Conference on The First Trimester organized by the Society for Advancement of Reproductive Medicine in Orissa (SARMO), Bhubaneswar, 4-5th December, 2010.

Research Projects, Evaluation Research, Consultancies: (Five major & recent ones)

- “Screening, Isolation and characterization of commercially important antioxidant compounds and marketable agar from seaweeds of Chilika lake”, Science and Technology Department, Govt. of Orissa, Rs 6.35 lakhs, Three years (1st April, 2007 – 31st march, 2010).
- “Studies on burrowing animals (rats) in and around tailing ponds of Jadugada uranium mines”. BRNS, Department of Atomic Energy, Government of India, Bhaba Atomic Research Centre (BARC), Trombay, Mumbai (Sanctioned).
- Honourary Consultant, Human Embryology, Kar Clinic IVF Centre, Kar Clinic & Hospital Pvt. Ltd., Bhubaneswar

Ph.D guided:**Submitted: 2 Working: 6**

1. “**Screening, Isolation and characterization of commercially important antioxidant compounds from seaweeds of Chilika lake**” by Ms. Jyotsnarani Pradha, submitted to Utkal University, Bhubaneswar.
2. “**Antioxidant status in tasar silkworm, *Antheraea mylita***” by Ms. Alpana Sahoo, submitted to North Orissa University, Baripada.

M.Phil: Dissertation guided (9): Awarded: 5, Submitted: 2 Working: 2

1. A comparative account on the effect of turmeric and its active principle curcumin (a diferuloyl methane) on T₃ induced renal hyperplasia in rats. (J Panigrahi, 2006), Utkal University.
2. Spectrophotometric, spectrofluorimetric and electrophoretic analyses of the effect of lead acetate on pBSIISK plasmid DNA. (S Sahu, 2007), Utkal University.
3. Effect of *Gracilaria verrucosa* ethanolic extract on UVB-induced oxidative stress in cultured chicken embryonic fibroblasts. (P Rautray, 2008), Utkal University..
4. Effect of aqueous extract of *Chaetomorpha linum* (Chlorophyceae) from Chilika lagoon on CCl₄ –induced liver damage. (Alka Padhi, 2009), Utkal University.
5. Fertility and Ageing: Awareness and perceptions of female students of Ravenshaw University, Cuttack, Odisha. (Deepika Muduli, 2010), Ravenshaw University.

Advisory & Editorial Boards:

- Journal of Diabetes and Endocrinology (Reviewer)
- International Journal of Medicine and Medical Sciences (Reviewer)

Honours

- **ISCA Young Scientist Award** in the 90th Indian Science Congress, January 3-7, 2003 by Indian Science Congress Association in the section Animal, Veterinary & Fisheries Sciences.
- **K.K. Nair Prize for outstanding Research Publications** for the year 1999, University of Kerala.
- **Young Scientist Award** for the year 1997 by Orissa Vigyan Academy, Department of Science and Technology, Government of Orissa.

Fellowships:

- National Rural Talent Search Scholarship (1981-84)
- National Scholarship H.S.C. Level (1984-1986)
- National Merit Scholarship to study M.Sc. (1989-91)
- Junior Research Fellowship (1992-95), University Grants Commission, India.

- Senior Research Fellowship (1996-1998), Council of Scientific and Industrial Research, India.
- Senior Research Fellowship (Extended) (1999-2000), Council of Scientific and Industrial Research, India.
- Research Associateship (2000-2004), Council of Scientific and Industrial Research, India.

Membership in Professional Bodies:

1. Association of Gerontology India
2. Indian Science Congress Association
3. Indian Society for Assisted Reproduction
4. Society for Advancement of Reproductive Medicine in Orissa

Personal Information:

(Optional)