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Date of Birth	18 th May, 1957
Sex	Male

Academic Qualification

Sl. No.	Degree	Year	Institute/ University
1.	B.Sc. (Zoology Honours)	1983	Bhadrak College, Utkal University, Bhubaneswar, India.
2.	M.Sc. (Zoology, Cytogenetic)	1985	Utkal University, Bhubaneswar, India.
3.	Ph.D. (Marine Science)	1991	Central Marine Fisheries Research Institute (ICAR), Cochin University of Science and Technology, Cochin, India

Awards/ Recognition	<p>1987-1990 Indian Council of Agricultural Research (ICAR), Senior Research Fellowship.</p> <p>1991-1995 Indo-German Cultural Exchange fellowship in Biotechnology.</p> <p>2006 Overseas Associateship, Dept. of Biotechnology, Govt. of India.</p>
Professional Experience	<p>1991 - 1995 Postdoctoral Fellow, Res. Inst. for the Biology of Farm Animals, Rostock, Germany.</p> <p>1996 - 1999 CSIR Pool Scientist, National Institute of Immunology, New Delhi. India.</p> <p>1999 - 2007 Senior Scientist, Fish Genetics and Biotechnology Division.</p> <p>2008 – Cont. Principal Scientist, Fish Genetics and Biotechnology Division.</p>
Area of Specialization/ Current Research Interest	<p>Molecular genetics and Biotechnology</p> <p>The main focus of the work has been in the general area of genetics and biotechnology. The specific area of research is development and implementation of DNA marker Technology in aquaculture. The goal is to develop methods and use the technology for identifying trait associated genes and ultimately, Marker Assisted Selection (MAS) in prioritized freshwater fish and shellfish species.</p>
Research Projects	<p>Projects operated</p> <ol style="list-style-type: none"> 1. Stock characterization of Indian major carps: Comparative analysis of genetic markers. 2. Population genetic studies on gangetic prawn <i>M. gangeticum</i>. 3. Brood stock characterization and Development of base population using genetic and biotechnological tools. 4. Development of DNA markers in <i>M. rosenbergii</i> and Jayanti families. 5. Development of DNA markers in Indian major carp, <i>L. rohita</i> for population genetic characterization and identification of trait associated genes.

	<ol style="list-style-type: none"> 6. In-service training program in molecular biology for fisheries scientists. 7. Construction and analysis of Expressed Sequence Tag libraries for rohu.
<p>Current projects</p>	<ol style="list-style-type: none"> 1. Network Project on Fish Genetic Stocks. 2. First Generation Linkage Map in <i>Labeo rohita</i> (rohu): A Potential Genomic Resource for identification of trait associated genes. 3. Improved disease resistance of rohu carp and tiger shrimp farmed in India: Developing and implementing advanced molecular methods, and streamlining access to and use of genetic resources. 4. Development of Parentage analysis system and genomics resource in rohu and <i>M. rosenbergi</i>.
<p>Publications</p>	<ol style="list-style-type: none"> 1. B. P. Sahu, A. Patel, L. Sahoo, P. Das, P. K. Meher and P. Jayasankar (2012) Rapid and cost effective development of SSR markers using next generation sequencing in Indian major carp, <i>Labeo rohita</i>. <i>Indian J Fish.</i> (In Press). 2. Dillip Bej, L. Sahoo, Sofia P. Das, Subrat Swain, P. Jayasankar, P.C. Das, P. Routray, S.K. Swain, J.K. Jena and P. Das (2012) Complete mitochondrial genome sequence of <i>Labeo rohita</i> (Cypriniformes, Cyprinidae). <i>Mitochondrial DNA</i> (In Press) 3. S. Swain • S. P. Das • D. Bej • A. Patel P. Jayasankar • P. C. Das • P.Das (2012) Isolation and characterization of sixteen microsatellite loci for fringe-lipped carp, <i>Labeo fimbriatus</i>. <i>Cons. Genet. Resour.</i> DOI 10.1007/s12686-012-9672-z. 4. Nicholas Robinson & Pramoda K. Sahoo & Matthew Baranski & Kanta Das Mahapatra & Jatindra N. Saha & Sweta Das & Yashowant Mishra & Paramananda Das & Hirak K. Barman & Ambekar E. Eknath.(2012). Expressed Sequences and Polymorphisms in Rohu Carp (<i>Labeo rohita</i>, Hamilton) Revealed by mRNA-seq. <i>Mar Biotechnol.</i> DOI 10.1007/s10126-012-9433-8. 5. Patel, P. Das, P. K. Meher, A. Barat and N. Sarangi.(2011) Test of Mendelian segregation and linkage relationships among 69 microsatellite loci in rohu (<i>Labeo rohita</i>). <i>Ind. J. Anim. Sci.</i> 81 (8): 128–132. 6. P. Jayasankar • A. Patel • M. Khan •P. Das • S. Panda. (2011) Mitochondrial DNA diversity and PCR-based sex determination of Irrawaddy dolphin (<i>Orcaella brevirostris</i>) from Chilika Lagoon, India. <i>Mol Biol Rep</i> 38(3):1661-8.

7. Alok Patel, **Paramananda Das**, Ashoktaru Barat, Prem Kumar Meher and Pallipuram Jayasankar (2010). Utility of cross-species amplification of 34 rohu microsatellite loci in *Labeo bata*, and their transferability in six other species of cyprinidae family. *Aqua. Research*. Aquaculture Research, 41, 590-593.
8. Alok Patel, **Paramananda Das**, Ashoktaru Barat and Nirranjan Sarangi (2009): Estimation of genome size in Indian major carps *Labeo rohita* (Hamilton), *Catla catla* (Hamilton), *Cirrhinus mrigala* (Hamilton), and *Labeo calbasu* (Hamilton) by Feulgen microdensitometry method. *Indian Journal of Fisheries*, 56(1): 65-67.
9. Shripathi Bhat, Alok Patel, **Paramananda Das**, Prem K. Meher, Bidu R. Pillai & P. Jayasankar (2009): Isolation and characterization of microsatellite loci in giant freshwater prawn, *Macrobrachium rosenbergii*. *Conservation Genetics*, 10:1473-1475.
10. A. Patel, **P. Das**, S.K. Swain, P.K. Meher, P. Jayasankar and N. Sarangi (2008): Development of 21 new microsatellite markers in *Labeo rohita* (rohu). *Animal Genetics*, 40 (2):253-54.
11. **P. Das**, A. Barat, P. K. Meher, P. P. Ray and D. Mazumdar: (2005) Isolation and characterization of polymorphic microsatellites in *Labeo rohita* and cross species amplification in related species. *Mol. Ecol. Notes*, 231 -233.
12. **P. Das** (2005) Biochemical and Molecular genetics. *Text Book of Fish Genetics and Biotechnology*. pp 38-54. P.V.G.K. Reddy et al. (Eds.). ICAR, New Delhi.
13. **P. Das**, H. Prasad, P. K. Meher, A. Barat and R. K. Jana: (2005) Evaluation of genetic relationship among six *Labeo* species using randomly amplified polymorphic DNA (RAPD). *Aqua. Res*, 36: 564-569.
14. **P. Das**, S. Jain, G. Tiwari and L.C. Garg: (2000) Molecular characterization of bubaline kappa-casein cDNA *Journal of Animal Science*. Vol. 78; 1389.
15. **P. Das**, G. Tiwari, S. Jain and L.C. Garg: (2000) Isolation and analysis of cDNA encoding beta-casein in river buffalo. *Journal of Animal Science*. Vol. 78; 1390.
16. **Das, P** and G. John (1999): Induction of sister chromatid exchanges in vivo in *Etroplus suratensis* (Bloch) following exposure to organophosphorus pesticides. *Toxicology Letters*. Vol. 104; 111-116.
17. **Paramananda Das**, Gunjan Tiwari, Prithy Rupa and Lalit C. Garg (1999): Molecular Cloning and Sequence Analysis of Bubaline

lactoferrin promoter. *DNA Sequence*. Vol. 10 (2) 97-99.

18. **Paramananda Das**, S. Jain, S. Nayak, K.B.C. Appa Rao and L.C. Garg (1999): Molecular Cloning and Sequence Analysis of the c-DNA Encoding Beta-Lactoglobulin in *Bubalus bubalis*. *DNA Sequence*. Vol. 10 (2) 105-108.
19. Sulekha Verma, Anuja Ghorpade, Gunjan Tiwari, **P. Das** and L. C. Garg (1999): c-DNA Cloning and Sequence Analysis of Bubaline Growth Hormone. *DNA Sequence*. Vol. 10 (2) 101-103.
20. **P. Das** (1998): Potential of Fish Genomics. *Fishing Chimes*. Vol. 18 (3) 36-37.
21. Brockmann, U. Renne, K. Koplflow and **P. Das** (1998) : Genetic markers for the detection of quantitative trait loci with special consideration of bodyweight and fat. *Acta Theriologica, Suppl.* Vol. 5: 53-62.
22. **Das, P.** and G. John. (1997) : In vivo Induction of sister chromatid exchanges (SCE) in a tropical fish, *Etroplus suratensis* (Bloch). : *Acta Biologica Hungarica*. Vol. 48 (2), 167-172.
23. **Das, P.**, L. Meyer., H. M. Seyfert., G. Brockmann and M. Schwerin.: (1996) Structure of growth hormone-encoding gene and its promoter in mice. *Gene*, 169 (2) 209-213.
24. **Das, P.** and G. John.(1996) : Demonstration of sister chromatid differentiation (SCD) and sister chromatid exchanges (SCE) in *Etroplus suratensis* (Bloch). *Indian Journal of Experimental Biology*. Vol. 34, 1229- 1232.
25. **Paramananda Das**, Gudrun Brockmann, Lutz Meyer, Ula Renne, Getraud Freyer and Manfred Schwerin.: (1996) The effect of a restricted region of chromosome 11 on body weight in mice under special consideration of the growth hormone gene locus. *Arch. Tierzucht (Archives of Animal Breeding)*, 39 (2) 185-194.
26. Brockmann, G. Fryer, **P. Das** and U. Renne (1996): QTL-Mapping for the Trait "Body weight" using "tail"-Analysis in Mouse (in German). In. eds. H. Simianer et al., *Biometrical Aspects of Genome Analysis*, Ginkgo Park Mediengesellschaft, Germany (1996), 43-50.
27. Brockman, G., D. Timtchenko, **P. Das**. U. Renne, G. Freyer, S. Kuhla, F. Teuscher, J. Wolf, C. Kuehn and M. Schwerin (1996): Detection of QTL for body weight and body fat content in mice using genetic markers. *J. Anim. Breed. Genet.* 113, 373-379.
28. **Das, P.**, Brockmann, G., Freyer, G. and Schwerin, M.: (1994) The effect of growth hormone gene locus on the growth of long-term

selected mouse lines (in German). *Proc. DGfZ/GfT Tagung, Halle, Germany. p. C.22.*



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