

PERSONAL PROFILE

Name : Dr. Smriti Batoye
Father's Name : Sube Singh
Mother's Name : Saroj Rani
Date of Birth : 24/07/1989
Permanent Address : House No. 954/G, Sector- 9, Karnal,
Haryana
Email ID : smriti.batoye07@gmail.com
Mobile No. : +91-7508322602
Teaching and Research Experience : 8 years



EDUCATIONAL QUALIFICATION

Ph.D. (Zoology) (18/09/2012-26/12/2017)

Department of Zoology, Panjab University, Chandigarh

- Degree awarded (March 2018)
- **Title of Ph.D. thesis:** Impact of sublethal concentrations of fenvalerate and its amelioration through ascorbic acid on different organs of *Ctenopharyngodon idellus* (Cuvier and Valenciennes)

M.S c. Zoology (Hons.) (2010-2012)

Department of Zoology, Panjab University, Chandigarh

- Full-time course: Cytogenetics, Parasitology, Entomology, Aquaculture and Fish Sciences, Immunology, Statistics, Methodology, Developmental Biology, Molecular Biology, Biochemistry
- Secured 60% First division
- **Specialisation in M.Sc. (Hons.): Aquaculture and Fishery Sciences**
- **Title of the M.Sc. thesis:** Toxicological studies on the effect of heavy metal, lead on the scale and Liver of *Ctenopharyngodon idellus* (Cuvier and Valenciennes)

B.S c. Zoology (Hons.) (2007-2010)

Department of Zoology, Panjab University, Chandigarh

- Full-time course Zoology with Practical
- Other subsidiary subjects-English, Botany, Chemistry, Biochemistry
- Secured 57% marks

Senior Secondary 2007

R.S. Public School, Karnal, Haryana

- Subjects [Medical]: English, Physics, Biology, Chemistry, Fine Arts
- Secured 63.2% marks

Matriculation 2004

P.K.R. Jain Senior Secondary School, Ambala City, Haryana

- Subjects: English, Hindi, Social studies, Science, Mathematics
- Secured: 56.6% marks

AWARDS

Best poster award in “ 4th International Science Congress (ISC-2014)”, held on 8th - 9th

December 2014, organized by International Science Congress Association in Pacific University, Udaipur, Rajasthan, India

PUBLICATIONS

1. Jindal, R. and **Batoye, S.** 2015. SEM studies on erythrocyte alterations in *Ctenopharyngodon idellus* (Cuvier & Valenciennes) induced by fenvalerate. Research Journal of Recent Sciences, 3(2): 1-5. ISSN 2320 – 6535.
2. **Smriti Batoye**, Rajinder Jindal and Sakshi Verma 2019. Scanning electron microscopic investigation on the scales of grass carp, *Ctenopharyngodon idellus* (Cuvier and Valenciennes) exposed to lead nitrate. International Journal of Fisheries and Aquatic Studies, 93-98, 7(3), E-ISSN: 2347-5129 P-ISSN: 2394-0506.

3. Sakshi Verma, **Smriti Batoye** and Manoj Kumar, 2019. Published a paper in Book 'Development in Science and Technology', entitled "Role of fish biomarkers in aquatic environmental health assessment", UNIMAX Publications, ISBN No. 978-93-83730-71-1.
4. **Batoye, S., & Singh, K.** 2021. Effects of Environmental Pollution on Ecosystem and Practical Measures for Prevention. In Castanho, R. A., & Martín Gallardo, J. (Ed.), Management and Conservation of Mediterranean Environments (pp. 115-133). IGI Global. <http://doi:10.4018/978-1-7998-7391-4.ch008>.
5. Negi S., **Batoye S.**, Singh K., Waraich J.S. 2021. Environmental Pollution, Its Causes and Impact on Ecosystem. In: Kumar R., Kumar R., Kaur G. (eds) New Frontiers of Nanomaterials in Environmental Science. Springer, Singapore. https://scihub.se/https://doi.org/10.1007/978-981-15-9239-3_1.
6. **Batoye, S.**, Jindal, R. & Verma, S. 2021. Ameliorating effect of ascorbic acid on fenvalerate induced ultrastructural changes in scales, erythrocytes and gills of *Ctenopharyngodon idella* (Valenciennes, 1844). Environmental Science and Pollution Research, 28, pages36472–36492. <https://doi.org/10.1007/s11356-021-13257-2>.
7. Verma, S., **Batoye, S.** & Jindal, R. (2021). Protective efficacy of naringenin against cadmium induced redox imbalance in *Labeo rohita*: An integrated biomarker approach. Environmental Science and Pollution Research. Manuscript accepted.

TEACHING/ RESEARCH EXPERIENCE DETAILS

Organization	Designation	Duration		Salary (INR)/ month
		From	To	
Panjab University, Chandigarh	Junior research fellow	18/09/2012	13/12/2014	16000/-
Panjab University, Chandigarh	Senior research fellow	13/12/2014	01/02/2018	29,800/-
Govt. College for girls, Sec 42, Chandigarh	Guest Faculty	07/08/2018	15/09/2018	25,000/-
Maharaja Agrasen University, Baddi,	Assistant Professor	20/09/2018	Till Date	31,200/-

Solan, H.P.				
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Total: 8 years of research experience.

RESEARCH AREA OF INTEREST

- Toxicological studies including evaluation of effects of pesticides and heavy metals on freshwater fishes through the following:
 - Histopathological studies of gills, liver and kidney using light microscopy.
 - Oxidative stress biomarker assays.
 - Serum Biochemistry.
 - Haematological studies.
- Electron microscopy (scanning and transmission electron microscopy)
- Statistical analysis: Mean standard deviation (SD), standard error (SE), parametric and non-parametric tests and correlation.

TECHNICAL KNOWLEDGE

- Light microscopy, electron microscopy (SEM/ TEM).
- Knowledge of using instruments such as microtome, centrifuge, spectrophotometer, pH meter and compound and fluorescent microscope.

COMPUTER SKILLS

Competent knowledge of Microsoft Office (Word, Excel, Access, PowerPoint and Publisher), Adobe Photoshop, Internet and Basis utility of SPSS software for statistical analysis.

PARTICIPATION IN WORKSHOPS/ FACULTY DEVELOPMENT PROGRAM/ WEBINAR

1. 2 weeks-training program “XXXI National Training Program in Electron Microscopy for Scientific Investigators” to be held at AIIMS, New Delhi from 16th to 28th Nov, 2015, sponsored by Department of Science and Technology.

- 2 “Workshop on Statistical Product and Service Solutions (SPSS)”, held at Panjab University, Chandigarh from 10th-18th May, 2016.
- 3 7 days National Workshop on “Research Methodologies in Animal Sciences” Organised by Department of Zoology, Panjab University, Chandigarh from 21st-28th March, 2017.
- 4 “Intellectual Property Rights- Aspects for Business Start-ups” *Conducted by* Entrepreneurship Development and Industrial Coordination Department from 10th to 14th June, 2019 at Maharaja Agrasen University, Solan, Himachal Pradesh.
- 5 Faculty Development Program on “Use of ICT in Life Sciences” jointly organised by Electronics and ICT Academy, NIT Patna and School of Basic and Applied Sciences, Maharaja Agrasen University, Solan from 28th Nov – 7th December, 2019.
- 6 One-week Faculty Development Program on “ICT Tools for Teaching, Learning Process and Institutes” jointly organised by Electronics and ICT Academy, NIT Patna from 13th – 17th Jan, 2020 at Maharaja Agrasen University, Solan, Himachal Pradesh.
- 7 Attended International Webinar on “Controlling Mosquito to Protect Public Health: West-Nile, Zika, Chikungunya & Dengue Viruses” organized by the Department of Zoology, Pune District Education Association's Prof. Ramkrishna More Arts, Commerce & Science College, Pune on May 11, 2020.
- 8 Attended Webinar on “Research, Innovation and Entrepreneurship opportunities in Covid-19 Scenario” organized by Pandit Deendayal Petroleum University (PDPU) on May 15, 2020.
- 9 Attended International Webinar on “Socio-Economic Repercussions of Covid-19 Pandemic on Global Economy” organized by Department of Economics (PG & Research Centre), Poona College of Arts, Science & Commerce Camp, Pune- Maharashtra, India, May 15, 2020.
- 10 Attended International Webinar on “Locust Swarming in India Amidst Covid-19 Pandemic” organized by Department of Zoology, Panjab University, Chandigarh on June 20, 2020.
- 11 Attended 2 Day Certified Workshop on “Intellectual Property Rights” organized by Pandit Deendayal Petroleum University (PDPU) and IPPO (10-11 April, 2020).
- 12 Attended 4 Day “Online Workshop on Research Methodology” organized by Pandit Deendayal Petroleum University (PDPU) (4-7 May, 2020).

- 13 Attended Virtual Seminar on “Role of Biodiversity during Covid- 19” organized by Department of Zoology, P.G Government College for Girls Sec-42, Chandigarh on May 22, 2020.
- 14 Online Seminar sponsored by DST FIST on topic “Neural circuits for escape and exploratory behavior” organized by Post Graduate Department of Zoology, DAV College, Jalandhar on July 16, 2020.
- 15 Attended workshop on “Digital modules of Recombinant DNA Technology webinar series” conducted by Merck High-End Skill Development Centre, a CSIR-IMTech Initiative (Ministry of Science & Technology, Govt. of India), Merck Innovation Lab., Chandigarh in May-June, 2020.
- 16 Attended 3-days long DAVCB-CUPB-INYAS Lecture Workshop ‘#ZeroWaste’ organized by DAV College, Bathinda, Central University of Punjab, Bathinda and Indian National Young Academy of Sciences, New Delhi on June 16-18, 2020.
- 17 Attended International Webinar on “Role of Bio-informatics in Bio-Medical Sciences” organized by Department of Zoology, Dev Samaj College for Women, Firozpur on December 7, 2020.
- 18 Attended National Webinar on “Overview of Disease Vectors and Integrated Vector Management” organized by Department of Zoology, Dev Samaj College for Women, Firozpur on December 8, 2020.

PRESENTATIONS IN CONFERENCES

1. Presented poster entitled “Toxic effects of lead on scales of *Ctenopharyngodon idellus* (Cuvier & Valenciennes)” in 7th Chandigarh Science Congress, CHASCON-2013” held at Panjab University, Chandigarh from 1st -3rd March, 2013.
2. Presented poster entitled “SEM studies on erythrocyte alterations in *Ctenopharyngodon idellus* (Cuvier & Valenciennes) induced by fenvalerate” in “4 International Science Congress (ISC-2014)”, held on 8th – 9th December 2014, organized by International Science Congress Association in Pacific University, Udaipur, Rajasthan, India.
3. Presented poster entitled “Fenvalerate induced toxic effects on scale morphology of *Ctenopharyngodon idellus* (Cuvier & Valenciennes)” in “9th Chandigarh Science Congress, CHASCON-2015” held at Panjab University, Chandigarh from 25th -27th February, 2015.

4. Presented poster entitled “Fenvalerate-induced ultrastructural changes in the gill architecture of grass carp, *Ctenopharyngodon idellus* (Cuvier and Valenciennes)” in „National Conference on Translating Biodiversity Research into Deliverables for Human welfare“, organized by Department of Zoology Centre for Advanced Studies (UGC), Panjab University, held on 19-20 March, 2015 at Panjab University, Chandigarh, India.
5. Presented poster entitled “Fenvalerate-induced toxicity and protective effect of ascorbic acid on *Ctenopharyngodon idellus* (Cuvier and Valenciennes)” in “National Conference on Leveraging Biodiversity for Translational Therapeutic Research”, organized by Department of Zoology Centre for Advanced Studies 17- (UGC), Panjab University, held on 18 March, 2016 at Panjab University, Chandigarh, India.

CONFERENCE/SEMINAR ATTENDED

1. Attended 5th Chandigarh Science Congress, “CHASCON-2011” held at Panjab University, Chandigarh from 26th-28th February, 2011.
2. Attended 6th Chandigarh Science Congress, “CHASCON-2012” held at Panjab University, Chandigarh from 26th-28th February, 2012.
3. Attended the International Conference of Pharmacology & Drug Discovery On “Pharmacology for Future: Towards Translational Approach for Next Generation Pharmacologists”, October 4-6, 2018.

OTHER ACTIVITIES

1. Actively Participated in Cultural Activity at University level- festival “JHANKAAR BEATS” in 2011, Punjab University, Chandigarh.
2. Attended and participated 7 days N.S.S. Special Camp held under the theme “Swachh Bharat Abhiyaan Cleanliness” from 1st Jan, 2018 - 7th Jan, 2018.
3. Successfully completed Online Course on “Infection Prevention and Control (IPC) for Novel Coronavirus (COVID-19)” organized by WHO on April 29, 2020.
4. Successfully completed Online Course on “ePROTECT Respiratory Infections (EN)” organized by WHO on April 29, 2020.
5. Attended India’s First Leadership Talk Series- Session with Dr. Madhuri Kanitkar, Lieutenant General on May 2, 2020.

6. Attended India's First Leadership Talk Series- Session with Prof. DP Singh, Chairman, UGC on May 9, 2020.
7. Attended India's First Leadership Talk Series- Session with Dr. Pramod Chaudhari, Founder, Chairman, Praj Industries Limited on May 16, 2020.
8. Attended India's First Leadership Talk Series- Session with Mr Mahesh Babu, CEO Mahindra Electric Mobility Ltd on May 23, 2020.
9. Attended India's First Leadership Talk Series- Session with Ms. Ashwini Deshpande (Co-Founder & Director Elephant Design) on June 6, 2020.
10. Attended India's First Leadership Talk Series- Session with Shri R Subrahmanyam, IAS (Secretary Ministry of Social Justice & Empowerment) on June 13, 2020.

I hereby declare that the above information is true to the best of my knowledge.

Date: 26.11.2021

Place: Chandigarh

Dr. Smriti Batoye