



DR. ALIVIA ROY

Flat no A-47, Siddharth Kunj Apartment
Plot no-17, Sector-7
Dwarka, Delhi- 110075
aliviaroy20@gmail.com,
alivia.roy@bcas.du.ac.in
+91-9891276742
[linkedin.com/in/alivia-roy-98a87a20b/](https://www.linkedin.com/in/alivia-roy-98a87a20b/)

Professional Summary

A passionate researcher and a dedicated academician with 7+ years experience of teaching undergraduate students pursuing Zoology in eminent colleges of Delhi University. Exemplary communication and administrative skills. Leadership and team management, innovative strategies and sincere endeavors are key attributes of work ethics.

Educational qualifications

- **Ph. D. (2017)** - Department of Zoology, University of Delhi
Title of thesis: RNA-Seq analysis of testis during different reproductive phases in spotted snakehead *Channa punctatus*: expression analysis of *jag1*, *notch1*, *kpna2*, *ssr2*, *klhl10*, *gria1*, *arnt2*, *foxj1*, *plzf* and *lhx8* along the testicular cycle and under the effect of human chorionic gonadotropin
- **M.Sc. Zoology (2010)** Department of Zoology, University of Delhi
Specialization- Reproductive physiology
Percentage obtained- 82.4%
- **B.Sc. (H) Zoology (2008)** Miranda House, University of Delhi
Percentage obtained- 77.18%
- **Std. XII (2005)** South-Eastern Railway Mixed Higher Secondary School
Kharagpur, West Bengal
Percentage obtained- 90%
- **Std. X (2003)** St. Agnes High School
Kharagpur, West Bengal
Percentage obtained- 93%

Teaching experience

- **Assistant Professor (Ad-Hoc) in Department of Zoology, Bhaskaracharya College of Applied Sciences, University of Delhi (July 2017 – till date)**
- Guest faculty at Department of Zoology, University of Delhi for teaching a portion of the M.Sc. semester IV paper Biology of Pregnancy, Parturition and Lactation (2021 & 2022)
- Assistant Professor (Guest) in Zoology department, Maitreyi College, University of Delhi (August 2016 - April 2017)
- Assistant Professor (Guest) in Zoology department, Miranda House, University of Delhi (January 2017 - April 2017)

Notable accomplishments

- **Second position in Delhi University in Master of Zoology program** (academic session 2010-2011)
- Qualified **Eligibility for Lecturership (NET)** in the subject Life Sciences securing 26/1232 rank
- Appointed as **University Teaching Assistant (UTA)** in the Department of Zoology for a period of four years during which M.Sc. practical classes were conducted for papers such as Comparative animal physiology, Metabolism: concepts and regulation, Biology of parasitism, Comparative endocrine physiology and Biology of reproduction.

Research expertise

***In situ* techniques:** In-depth analysis of RNA sequencing data, Primer designing, Phylogenetic studies

Other tools & techniques: DNA/RNA extraction, semi-quantitative and Real time PCR, Gel electrophoresis, Tissue processing, Microtomy & staining, Immunohistochemistry, Hormone treatments, ELISA, performing various types of surgery in rat model.

Research Publications

- *In silico* analysis, seasonal variation and gonadotropic regulation of *jagl* and its receptor *notch1* in testis of spotted snakehead *Channa punctatus*
Authors: **Alivia Roy**, Reetuparna Basak, Umesh Rai
Journal and issue: General and Comparative Endocrinology; **2018**; Volume 266, 166-177
doi: 10.1016/j.ygcen.2018.05.014
- *De novo* sequencing and comparative analysis of testicular transcriptome from different reproductive phases in freshwater spotted snakehead *Channa punctatus*
Authors: **Alivia Roy**, Reetuparna Basak, Umesh Rai

Journal and issue: PlosOne; **2017**; 12(3): e0173178

doi:10.1371/journal.pone.0173178

- *In silico* analysis, temporal expression and gonadotropic regulation of receptors for follicle-stimulating hormone and luteinizing hormone in testis of spotted snakehead *Channa punctata*

Authors: Reetuparna Basak, **Alivia Roy**, Umesh Rai

Journal and issue: *Journal of Fish Biology*; **2018**; 93 (1):53-71

doi: 10.1111/jfb.13727

- Seasonality of reproduction in male spotted murrel *Channa punctatus*: correlation of environmental variables and plasma sex steroids with histological changes in testis

Authors: Reetuparna Basak, **Alivia Roy**, Umesh Rai

Journal and issue: *Fish physiology and Biochemistry*; **2016** Oct; 42(5):1249-58.

doi: 10.1007/s10695-016-0214-6

- A mini review on influence of physical exercise in remodeling the immune mechanism

Authors: Anjali Saxena, Ankita Dua, Mohit Kumar, **Alivia Roy** and Aeshna Nigam

Journal and issue: *World Journal of Biology Pharmacy and Health Sciences*; 2024, 18(02), 349-358

- Book chapter: Anatomy and Histology of the Male Reproductive System. In *Human Reproductive Biology and Health*, Authors- Reetuparna Basak, **Alivia Roy** (2023). Pearson India Education Services Pvt. Ltd. (pp. 105-132). ISBN: 978-93-560-6632-8

Administrative Responsibilities

1. Secretary, Bhaskaracharya Teaching Staff Association (2021-till date)
2. Convener, Debate club of ECA committee (2023 onwards)
3. Convener, Dance club of ECA committee (2018-2021)
4. Member, Magazine & e-newsletter committee (2017- till date)
5. Member, IQAC committee (2019- till date)
6. Member, NAAC committee Group II (2018- till date)
7. Member, Biological & Chemical Waste Management committee (2020- till date)
8. Member, Annual Maintenance Contract committee (2021- till date)
9. Member, Annual Report committee (2020-2021)
10. Member, Gandhian study center (2017-2019)

11. Member, Decoration Committee of Annual day (2017-2019)
12. Member, Prospectus & Annual Report committee (2017-2018)
13. Member, Student Advisory & PR committee (2017-2018)
14. Member, Modern & Fine Arts club (2017-2018)

Organizational Skills

1. Organized online national workshop on ‘Good Laboratory Practices in Biological & Chemical Sciences’ organized by the Biological & Chemical Waste Management Committee of the college in collaboration with Mehr Chand Mahajan DAV College for Women, Chandigarh and AFSTI, Delhi on March 10, 2022.
2. Organized webinar entitled ‘I write my own story’ at Bhaskaracharya College of Applied Sciences on March 05, 2021.
3. Organized webinar entitled ‘Managing Mental Health and Promoting Mindfulness’ at Bhaskaracharya College of Applied Sciences on November 17, 2020.
4. Organized webinar entitled ‘Don’t Hesitate Vaccinate’ at Bhaskaracharya College of Applied Sciences on November 10, 2020.
5. Organized one-day Immunology workshop for B.Sc (H) Zoology third year students in collaboration with the research laboratory of Prof. Umesh Rai at Department of Zoology, University of Delhi on September 26, 2019.
6. Organized one day seminar on ‘Neuroplasticity: Role in learning, memory and spinal injury’ at Bhaskaracharya College of Applied Sciences on February 20, 2019.
7. Actively participated in organizing Department of Zoology stall at “Antardhwani” held at University of Delhi in 2014.
8. Actively volunteered in 56th Annual flower show held at University of Delhi in 2014.
9. Organized National workshop on “Techniques for Endocrine research” organized by Department of Zoology, University of Delhi and Indian Society for Comparative Endocrinology (ISCE) at Department of Zoology, University of Delhi in 2012.
10. Actively participated in organizing University of Delhi Academic Congress titled ‘Enabling the young: Redefining education’ held at University of Delhi in 2012.
11. Organized the annual festival “Zoologica” of Miranda House Zoological society at Miranda House, University of Delhi in 2006.

Seminars, conferences and workshops

1. Participated in a workshop on 'Government e-Marketplace (GeM)' organized by the Central Purchase Committee of the college from January 27-28, 2022.
2. Completed an Online Short-Term Course on 'Immunological Techniques and their Applications' organized by the Department of Zoology of the College in collaboration with Department of Zoology, University of Delhi from October 22 - November 9, 2021.
3. Participated in an online workshop on 'Sparrow Conservation and Nest Building' organized by the Department of the Zoology of the college on October 8, 2021.
4. Participated in a workshop on 'Decoding Brahma' organized by the Digitization and Automation committee of the college on August 24, 2021.
5. Participated in National webinar titled 'Organ donation: Significance and Pledge' organized by Department of Chemistry, Bhaskaracharya College of Applied Sciences (BCAS) on August 13, 2021.
6. Participated in an online talk of Short-term certificate course on Fitness management on the topic 'Role of Lifestyle in Fitness management' organized by BCAS in association with Department of Physical Education and Sports Sciences, University of Delhi on August 7, 2021.
7. Participated in National webinar titled 'Injurious Invaders: Our Immune system and the Vaccines for Defense' organized by the NAAC Committee, BCAS on July 23, 2021.
8. Participated in online 'Launch of Menstrual Cafe' organized by Women Development Cell, BCAS and Sachhi Saheli (NGO) on July 16, 2021.
9. Participated in National webinar titled 'My life with Rocket science' by Padmashree awardee Mr. V. Gnana Gandhi organized on the occasion of India @ 75, Azadi ka Amrut Mahotsav by the ECA Committee, BCAS on July 8, 2021.
10. Participated in International Colloquium titled 'Regulatory mechanisms underlying Behaviour, Physiology and Development' organized by Department of Zoology, University of Delhi from March 24-26, 2021.
11. Participated in webinar titled 'Insight of Artificial Intelligence and its functionalities' organised by Department of Computer Science, BCAS held on February 28, 2021.
12. Participated in National webinar titled 'Opportunities for women in Hospital and Healthcare management' organized by Women Development Cell, BCAS on February 25, 2021.
13. Participated in webinar titled 'Cancer awareness for women' jointly organized by Department of Biomedical Science & Women Development Cell of BCAS and Dr. B.R. Ambedkar Centre for Biomedical Research (ACBR), DU on February 22, 2021.

14. Participated in National webinar on 'National Education Policy 2020: Futuristic policy for new India' organized by Vivekanand Vichar Manch of BCAS on August 25, 2020.
15. Participated in International webinar on 'Drug development, its challenges and role of nutrition in immunboosting against COVID-19' organised by Department of Zoology, Kalindi college, University of Delhi on May 20, 2020.
16. Participated in National webinar on 'Nutrition and Immunity- Simplified and Applied' organised by Department of Food Technology of BCAS on May 19, 2020.
17. Participated in two day International webinar on 'Prevalent crisis triggered by the Covid-19 pandemic and its appraisal' jointly organised by Department of Chemistry and Biomedical Science of BCAS from May 18-19, 2020.
18. Participated in webinar titled 'Botanical Secrets for Wellness: Clued From Nature's Signature' organised by Department of Botany of BCAS held on May 16, 2020.
19. Participated in National webinar on 'The Challenge of Personal and Social Being' jointly organized by BCAS and Bhagini Nivedita College, DU on May 16, 2020.
20. Attended National Conference on 'Golden Jubilee celebration of the Insecticides Act, 1968 (promoting Food Safety and Security)' organized by International Institute of Biotechnology and Toxicology (IIBAT) on February 22, 2019 at Hotel Radisson Blu, Faridabad.
21. Attended National Conference on 'Technological Empowerment of Women' commemorating the International Women's Day organized by the National Academy of Sciences, India at Vigyan Bhawan, New Delhi on March 8-9, 2018.
22. Attended International symposium on 'Comparative Endocrinology and Stress Physiology' held at Thiruvananthapuram, Kerala in 2012.
23. Attended National colloquium on 'Recent advances in Molecular and Cellular Endocrinology' held at Banaras Hindu University, Varanasi in 2011.
24. Attended Indo-Swiss collaboration in Biotechnology (ISCB) International conference on 'Recent trends in developing bioremediation strategies for Hexachlorocyclohexane (HCH) & other chlorinated contaminants' held at University of Delhi in 2011.
25. Attended workshop on 'Application of Molecular biology techniques in Reproductive biomedicine' under the auspices of Indian Society for Comparative Endocrinology (ISCE) held at National Institute of Health and Family welfare (NIHFW), New Delhi in 2010.
26. Attended symposium on 'Prevention is better than cure: ways to keep lifestyle diseases at bay' organized by Department of Zoology, Hindu college, University of Delhi in 2010.

27. Attended 49th Annual Conference of Association of Microbiologists of India titled 'International symposium on Microbial Biotechnology: Diversity, Genomics and Metagenomics' held at University of Delhi in 2008.

Hobbies

Travelling, Yoga, Music, Reading & Fine arts

Personal Dossier

- Languages proficient in: English, Hindi and Bengali
- Marital status: Married
- Date of birth: December 20, 1986