

Curriculum Vitae Prof. Seema Jain

Personal Profile:

Name: Dr. Seema Jain

Date Of Birth: 1-10-1961

Designation Retired Prof. & Head, Department of Zoology
R.G. (P.G.) College, Meerut

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Meerut U.P. – 250002

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E. mail ID- seema61@gmail.com

Academic & Professional Career

| Degree/Position | Institution/university | Year |
|----------------------------|--|--|
| B.sc (Hons) | Delhi University | 1980 |
| M.Sc. | Bombay University | 1982 |
| Ph.D (Fish & Fisheries) | Zoological Survey of India, Dehradun Garhwal University, Srinagar | 1988 |
| Temporary Lecturer | R.G. (P.G.) College, Meerut | Jan 1987- Apr 1990 & Jan 1993- Mar 1996 |
| Lecturer | R.G. (P.G.) College, Meerut | Apr 1996-2000 |
| Sr. Lecturer | R.G. (P.G.) College, Meerut | Apr 2000-2005 |
| Reader | R.G. (P.G.) College, Meerut | Apr 2005 onwards |
| Associate Professor | R.G. (P.G.) College, Meerut | Apr 2008 onwards |
| Professor | R.G. (P.G.) College, Meerut | 2022 onwards |

Academic Achievements

- 4th Position in M.Sc
- Recipient of Smt. Tarabai Karandikar award of Institute of Science, Bombay

Administrative Activities

| Name Of the Committee | Types Of Participation | Whether University or College Level |
|--|------------------------|-------------------------------------|
| Additional Superintendent in University Exams | | |
| Head Of Department | | College |
| Proctorial Board | Advisor | College |
| Observer Joint B.Ed Entrance Examination | | University |
| Departmental Research Committee | Member | University |
| Pre PhD-Course Work Classes in Zoology at Department of Zoology, C.C.S. University, Meerut | Resource Person | University |
| Assistant Superintendent in Back Papers, PG Semester Exams and UG Annual Exams | | |
| Subject Expert for Promotion of College Teachers in Zoology | | College |
| Vice Chancellors Nominee for Modification of UG and PG Syllabus | | University |
| Chief Proctor | | College |
| Academic And Career Counselling Cell | Advisor | College |
| College Website In charge | | College |
| NAAC/ IQAC Coordinator | | College |
| Nodal Officer AISHE | | College |
| Assistant Election Officer | | College |

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| | | |
| Cleanliness Committee | Convener | College |
| Coordinator Certificate Course In Aquarium And Its Maintenance | | College |
| IQAC In charge | | College |
| Assistant Controller of Evaluation | | College |
| Dean Students Welfare | | College |
| Medical aid Committee | Co- Convener | College |
| Zoology Association | Convener | College |
| Library Committee | Member | College |
| Beautification Committee | Member | College |

Awards and Honours

- **Awarded Best Performance Award** in Senior Scientist Presentation by Zoological Society of India in 21st All India Congress Of Zoology at CIFRI, Barrackpore, Kolkata from 21st – 23rd Dec. 2010.
- **Awarded ISCA Best Poster Presentation Award 2013** At 100th Indian Science Congress Held at University of Calcutta, Kolkata from 3-7 Jan. 13 and a cash prize of Rs. 5000/-
- **Co-Chaired** an Oral session on Aquatic Biology and Fishery Sciences at 102nd INDIAN SCIENCE CONGRESS ORGANIZED BY University of Mumbai, Mumbai from 3-7 Jan. 2015.
- Contributed as a **Jury member** in **VIGYAN GHAR: World's First Reality Show** from 15-24 June 2015, organized by UPCST, Zila Vigyan Club and Pragati Vigyan Sanstha, Meerut.
- Delivered an **Invited Lecture** on the Topic “Relationships between Fish Length and otolith length in *Labeo* species in Relation to Taxonomy. **In Aquatic Biology and Fishery Sciences section of 103rd Session of Indian Science Congress, Mysore.**

- **Subject expert in Zoology by C.C.S. University, Meerut** for appointment of teacher in 3 Self-Financed Colleges in July 2016.
 - (i) Kalindi College, Baraut
 - (ii) HLM College, Ghaziabad
 - (iii) St. R.C.C. College of Higher education, Shamli.
- Appointed as Part time **Academic Counsellor** at study center 39014D for BDP Programme for FST 01 course by INDIRA GANDHI NATIONAL OPEN UNIVERSITY, NOIDA.
- Invited Lecture on “DNA quantification of *Clarias* species by Nano drop” in International Conference on “**Global Initiatives in Applied Sciences and Green Technologies**” organized by science education and research society, SRM University, **Ghaziabad on 10th September 2016.**
- **Awarded Prof. D.K. Belsare Medal by Zoological Society Of India and Chaired a session at 28th All India Congress Of Zoology held at Davengere University, Davengere from 20-22 Oct. 2016.**
- Delivered an **Invited lecture on “Ecofriendly management of immune response of fish against diseases”** at 28th All India Congress Of Zoology Organised by **Department Of Life Science, Davengere University, Davengere, Karnatka from 20 – 22nd Oct. 2016.**
- Delivered an **Invited lecture on “Immunotoxic effects of Heavy metals on Freshwater fishes”** at National Seminar on Environmental Protection and sustainability, organized by Research Department of Zoology, Sir Theagaraya College, Chennai On **31st Dec. 2016.**
- Delivered an **Invited lecture on “Impact Of Climate Change on Harmful algal blooms and aquatic biodiversity”** at International Seminar on “Climate change and Biodiversity conservation” organized by Department Of Botany, R.G. P.G. College, Meerut on **21st Dec. 2016.**
- Delivered a **Guest lecture on “Application of Remote sensing in Fishery Science and Aquaculture”** organized by Department of Geography, R.G.P.G. College, Meerut on **23rd Feb.2017.**
- Delivered an **Invited lecture on “Immune responses against bacterial infection in Freshwater fishes and their modulation by Natural immunostimulants”** at National Symposium on “Zoonotic Diseases and their

preventive measures” organized by Department Of Zoology, C.C.S. University, Meerut from 16 – 18 March 2017.

- **Awarded with SERS Fellow Award -2017, at 2nd International Conference** on “Innovative Approaches in Applied Sciences and Technologies, organized by Scientific and Educational Research Society, India and NanYang Technological University, Singapore- 639673 from **19-23 June,2017**.
- **Jury Member for Poster and Oral Presentation & Delivered an Invited lecture on “Immune responses against bacterial infection in Freshwater fishes and their modulation by Natural immunostimulants”** at National Symposium on “Zoonotic Diseases and their preventive measures” organized by Department Of Zoology, C.C.S. University, Meerut from **16 – 18 March 2017**.
- **Organizing Conference Convener and Delivered an Invited lecture on “Comparative morphology and morphometry of Sagitta in *Channa* species (channiformes: channidae) in relation to taxonomy at 2nd International Conference on “Innovative Approaches in Applied Sciences and Technologies, organized by Scientific and Educational Research Society, India and NanYang Technological University, Singapore- 639673 from 19-23 June,2017**.
- Delivered an **Invited lecture on “freshwater fish otoliths and their significance in taxonomy”** at 37th annual session of Academy of Environmental Biology, Lucknow and National symposium on Biodiversity and Natural resources for Sustainable Development organized by Department Of Zoology, C.C.S. University, Meerut from **24-26 Nov. 2017**.
- Delivered an **Invited lecture on “Time Management” in seven days NSS special camp** on 2 Feb.2018 organized by National service scheme, R.G.P.G. College, Meerut.
- **Awarded with SERS- WOMEN SCIENTIST OF THE YEAR AWARD- 2018** for her outstanding contribution in the field of **Fish & Fisheries** at **Ist Indo Asean Conference on Innovative approaches in applied sciences and technologies (iAsT-2018)** organized by Scientific and Educational Research Society, India and Nong Lam University, Ho Chi Minh City, Vietnam, from **13-17 June,2018**.
- **Associate Director of the conference and Delivered an Invited lecture on “Bacterial diseases of Freshwater fishes and their Ecofriendly**

management” in Ist Indo Asean Conference on Innovative approaches in applied sciences and technologies (iAsT-2018) organised by Scientific and Educational Research Society, India and Nong Lam University, Ho Chi Minh City, Vietnam, from **13-17 June,2018**.

Life Member

- INDIAN SCIENCE CONGRESS ASSOOCIATION (**L-15721**)
- ZOOLOGICAL SOCIETY OF INDIA (**S-127**)
- INLAND FISHERIES SOCIETY OF INDIA (**286**)
- INDIAN ACADEMY OF ENVIRONMENTAL SCIENCES
- VIGYAN PARISHAD, ALLAHABAD (**289**)
- AQUATIC BIODIVERSITY CONSERVATION SOCIETY(**ABCS/L/G-168**)
- Academic Coordinator of National Children Science Congress Meerut (under DST, New Delhi)
- National evaluator for Projects of NCSC, DST, New Delhi
- Member of IAEC of Shobhit University, Meerut.2008- 2012.
- Member of Management Committee of Army School, Meerut Cantt as Educationist 2002-2017.
- Subject expert in army school for TGT and PGT appointments.
- Editor, VOYAGER – A JOURNAL OF LIFE SCIENCES, ISSN – 0976-7436 ---2010-Till date
- Editor, Monthly science magazine – VIGYAN AAO KARKE SEEKHEIN – 2015- Til date.
- **Vice Chairman-** Pragati Vigyan Sansthan, Meerut.
- **Examiner For Ph.D Thesis** Of Manomaniam Sundarnar University, Palayamkottai, Tamilnadu

Research Publications

1. Raj Tilak, Zeba Jaffer and **Seema Jain** - Studies on Pectoral & Pelvic Girdles of *Salmostoma* & *Chela* (Subfamily: Cultrinae, Cyprinidae) in relation to Taxonomy. **Zoo. Anz. Jena 214 (1985) ¾ S.203-208.Impact Factor 1.821**

2. Raj Tilak and **Seema Jain** - On the systematic status of the species of the genus *Danio* (Danio) Barman (Pisces: Cyprinidae), **J. Bombay Nat. Hist. Soc.**, **84**, 693-694 (1987). Print ISSN- 0006-6982. Online ISSN- 2454-1095
3. Raj Tilak and **Seema Jain** - Description of new rasborine fish, *Esomus manipurensis* from Manipur, India. **J. Bombay Nat. Hist. Soc.** (1989) Vol.86 No.3, 408-411. PISSN- 0006-6982. Online ISSN- 2454-1095
4. Raj Tilak and **Seema Jain** On the systematic status of the species of the genus *Danio* (Hamilton) described by Barman (1983, 84, 85). **J. Bombay Nat. Hist. Soc.**, **85**(1) 207-209 April 1988. Print ISSN- 0006-6982. Online ISSN- 2454-1095
5. Raj Tilak, **Seema Jain** and Zeba Jaffer - On sexual dimorphism in *Barilius barna*, Hamilton (Pisces: Cyprinidae). **Rec. Zool.Surv. India.** **88**(1), 23-27 (1991).
6. **Seema Jain** and Raj Tilak - Fishes of subfamily Rasborinae in relation to mankind. **Voyager**.(2010) Vol. I, 1-4. ISSN No. 0976-7436.
7. Pratibha, **Seema Jain** and W.S. Lakra - Application of Electrophoretic Analysis of Muscle Myogen to Taxonomic Studies in two species of genus *Cirrhinus* and two species of Genus *Labeo*. **J. Exp Zool . Vol. 13, No. 1 2010, pp -83-85.** Print ISSN – 0972-0030, Online ISSN -0976-1780.
8. Pratibha, **Seema Jain** and W.S. Lakra - Comparative Electropherograms of Muscle Myogens of three Indian Major Carps. **J Exp Zool. Vol. 13, No. 1 2010, pp-103-105.** Print ISSN – 0972-0030, Online ISSN -0976-1780
9. Pratibha, **Seema Jain** and W.S. Lakra - Systematic Status of Fishes of Subfamily Rasborinae based on Electrophoretic Studies. **Voyager (2010), Vol.I. 9-12.** ISSN No. 0976-7436.
10. **Seema Jain** and Manu Varma - Seasonal and Sexual Variations in Splenic Macrophage function in *Channa punctatus* (Bl.). **Voyager (2010), Vol.I.41-48.** ISSN No. 0976-7436
11. **Seema Jain**, Manu Varma and Anumohini - Effect of Season & Sex on Macrophage Phagocytic activity in *Channa striatus*. **Voyager(2011), Vol.II No.1, 1-8.** ISSN No. 0976-7436.
12. Shilpi Panwar, **Seema Jain** and Manu Varma - Variation in Total serum protein in *Clarias* Species of Meerut. **Voyager. (2011), Vol.II No.1, 61-67.** ISSN No. 0976-7436.
13. Shanti Razora, **Seema Jain** and S.S. Lal - *In vitro* effects of two Anthelmintics on the Sheep modular worm (*Oesophagostomum columbianum*. **J.Exp.Zool.India.2012 Vol.15 No.2 pp. 615-618.** PrintI SSN – 0972- 0030, Online ISSN -0976-1780.
14. Shanti Razora, **Seema Jain** and S.S. Lal - SEM Study of the effect of Antiparasitic drug Ivermectin on the *Ascaridia galli* .**Voyager Vol.III Dec.2012, pp. 1-6.** ISSN No. 0976-7436.

15. Neetu Nimesh, G.S. Virdi and **Seema Jain** - Evaluation of oxygen tolerance Freshwater fishes. **Voyager**, Vol.III. Dec. 2012, pp 49-61. ISSN No. 0976-7436
16. Shobhna, Shilpi Panwar, **Seema Jain** and H.S. Singh - Hybrids: The Agents in the loss of Biodiversity, **Voyager 2013**, Vol.IV pp. 31-34. ISSN:0976-7436.
17. Shanti Razora, **Seema Jain** and S.S. Lal - A Study on the *in vitro* survival of *A. galli* in two different antihelminthics. **Voyager 2013**, Vol.IV pp. 57-60. ISSN:0976-7436.
18. Shobhna, Manu Varma, **Seema Jain** and H.S. Singh - Loss of diversification of Fish Species in Meerut region: A threat to natural Fauna. **IOSR Journal of Agriculture & Veterinary Science**, Vol.X Issue X Nov.-Dec.2013 pp. eISSN: 2319-2380 pISSN : 2319-2372. Impact Factor:1.739
19. **Seema Jain** and Manu Varma - Effect of Garlic on non-specific immune parameters in *Channa punctatus* (Bl.) infected with *Aeromonas hydrophila*. Published in Proceedings of 21st All India Congress of Zoology by **Narendra Publishing House, New Delhi In Management issues in Inland Fisheries and Aquaculture.2012**, PP 129-143. ISBN: 978-93-80428-59-58.
20. Manu Varma and **Seema Jain** - Seasonal Variation in Macrophage Phagocytic activity in Genus *Channa* (Gr.) of Meerut region. Published in Proceedings of 21st All India Congress Of Zoology by **Narendra Publishing House, New Delhi In Management issues in Inland Fisheries and Aquaculture.2012**, PP 161-172.ISBN: 978-93-80428-59-58.
- 21.Sudha Garg and **Seema Jain** – Mitochondrial DNA variation in four species of Snakeheaded fish *Channa*. Published in Proceedings of 21st All India Congress Of Zoology by **Narendra Publishing House, New Delhi In Management issues in Inland Fisheries and Aquaculture.2012**, PP 199-209.ISBN: 978-93-80428-59-58.
- 22.Shubhra Mathur, **Seema Jain** and Manu Varma - Fish otoliths and their significance in Taxonomy. **Journal of Exp. Zool. India**, 2014 Vol.17,No.2 pp407-410. Print ISSN: 0972-0030 Online ISSN -0976-1780.
- 23.**Seema Jain**, Nisha Rana, Manu Varma - Ichthyofaunal survey of various fish `ponds of Mawana region of district Meerut (U.P.), India. **International Journal of Fisheries and Aquaculture sciences**, Vol.4, No.1 2014, pp 81-91.ISSN 2248-9975.
24. Shilpi Panwar, **Seema Jain**, Manu Varma and Anumohini - Zymmogrammatic study of different forms of *Clarias*. **Voyager –A journal of Life sciences**. 2014 Vol.V pp. 71- 78. ISSN: 0976-7436.
25. Shubhra Mathur, **Seema Jain**, Manu Varma and Anumohini - Review of Otolith studies in Fishes of India. **Voyager –A journal of Life sciences.2014**, Vol.V pp. 88-95. ISSN 0976-7436.

26. Neetu Nimesh and **Seema Jain** - DNA Barcoding for identification of fishes of Sub family Rasborinae(Family : Cyprinidae)in India . **Voyager –A journal of Life sciences.2015, Vol.V pp. 60- 70 , ISSN 0976-7436.**

27. Shobhna, Haren Ram Chiary, **Seema Jain** and Hridaya shanker Singh - Molecular comparison of *Clarias batrachus*(Linnaeus, 1758) found in India with the species reported from Bangladesh. **J.Bio. &Env.Sci.Vol.6, No.5, p. 253-257, 2015. ISSN: 2220-6663(Print) 2222-3045(Online)**

28. Shilpi Panwar, **Seema Jain**, Manu Varma and Anumohini - A Comparative Biochemical comparison on Iron Content in Various Forms of *CLARIAS* Species". **International Journal of Fisheries and Aquaculture Sciences (IJFAS) Vol.5, No.1 2015, pp 21-25.ISSN 2248-9975.**

29. **Seema Jain** and Nisha Rana - Comparative study of Physico Chemical parameters of ponds of Kheri Manihar, Mawana (U.P) in relation to Fish Production. **Proc. Zool. Soc. India. 2015, 14 (2) : 15-18. ISSN 0972-6683. Indexed and abstracted.**

30. Shanti Razora, **Seema Jain** and S.S. Lal - A Study on the *in vitro* survival of *B. Trigonoecephalum* in two different Anthelmintics. **Journal of Exp. Zool. India, 2015 Vol.18,No.2 pp967- 969. pISSN: 0972-0030. Online ISSN -0976-1780.**

31. Shanti Razora, **Seema Jain** and S.S. Lal – In vitro effect of an antihelmintic Ivermectin on *Ascaridia galli* – A parasitic nematode of fowl. **Journal of Exp. Zool. India, 2016 Vol.19. No.1 pp 83—88 . PISSN: 0972-0030. Online ISSN -0976-1780.**

32. Shanti Razora, **Seema Jain** and S.S. Lal – Scanning Electron microscopic study of the effect of antiparasitic drug Morantel On *Ascaridia galli*. **Journal of Exp. Zool. India, 2016 Vol.19. No.1 pp 17 - 21 . PISSN: 0972-0030. Online ISSN -0976-1780.**

33. Nisha Rana, Manu Varma and **Seema Jain**- A Review on Impact Of Birth Control Pills on municipal waste water on Male fish Population. **Voyager –A journal of Life sciences. 2016 , Vol.VI pp. 145 - 155 ,P ISSN0976-7436, E ISSN-2455-054X**

34. Neetu Nimesh and **Seema Jain** – Effect Of Dissolved oxygen on Physiology and Behaviour of Fresh water Fishes. **Voyager –A journal of Life sciences.2016, Vol.VII pp. 1-7 , p- ISSN 0976-7436, e ISSN-2455-054X.**

35. **Seema Jain**, Nisha Rana and Manu Varma – Comparative morphology of Alimentary canal in relation to feeding habit of Indian Rasborine fishes. **Proc. Zool. Soc. India. 2015, 15 (1) : 87-93. 2016. ISSN 0972-6683. Indexed and abstracted.**

36. **Seema Jain** and Manu Varma – Effect of *Curcuma longa* on Non specific immunological profile of Indian Snake head *Channa punctatus* infected with *Aeromonas hydrophila*. **South Asian J. Exp. Biol. 2016, 6 (2): 59-63. ISSN – 2230-9799.**

37. Manu Varma and **Seema Jain** - Immunotoxicity of Cadmium in Fishes: A Review **Adv. Pharmacol. Toxicol. 2016, 17 (2) , 1-8. ISSN – 0973- 2381.**

38. Nisha Rana, Manu Varma and **Seema Jain**- Assessment of different water quality parameters of water sources of Meerut Region (U.P.) India for suitability for Fish production. **J.Env. Bio. Sciences.** 2016. Vol.30(2) pp 381-383, 2016, p- ISSN – 0973-6913, e- ISSN – 0976-3384. NAAS rating 4.20.

39. Manu Varma and **Seema Jain** - Immunological and Histopathological alterations in Kidney of *Channa marulius* (Ham.) exposed to Cadmium chloride. **BioChem. Cel. Arch.** 2017, Vol.17, No.1. pp 383-387. ISSN- 0972-5075.

40. **Seema Jain** - Current status of ichthyofaunal diversity of various water sources of western Uttar Pradesh, India. **Int. Journal of Fisheries and Aquatic Studies.** 2017, 5(2): 473-478. , p- ISSN –2394-0506, e- ISSN – 2347-5129.

41. Shobhna, H.S. Singh, **Seema Jain** and Manu Varma - Molecular variations due to phylogeographic factors in *Channa punctatus* found in different regions of India.2017.**Int. Jour. Of Env.,Agr. & Biotech.** Vol.2 (1), pp 370-374. ISSN - 2456-1878.

42. Manu Varma and **Seema Jain** - Temperature induced changes in macrophage phagocytic activity in giant snake head, *Channa marulius* (ham.) **J.Env. Bio. Sciences.** 2017. Vol. 31 (1):267-270 p- ISSN – 0973-6913, e- ISSN – 0976-3384. NAAS rating 4.20

43. Nisha Rana and **Seema Jain** (2018)-Analysis of DNA content of Wild and Cultured *Labeo calbasu* (Hamilton, 1822) using nanophotometer., **International Journal of Trends in Scientific Research and Development**, Vol- 3 (I) November- December 2018, pp 906-909, ISSN No: 2456 – 6470.

44. Nisha Rana and **Seema Jain** (2018)- DNA Quantification of Wild and Cultured *Cirrhinus mrigala* (Hamilton, 1822) Collected from Different Sites of Western Uttar Pradesh, India, **International Journal of Zoological Investigations** Vol. 4, No. 2, pp 181-185 (2018), ISSN: 2454-3055.

44. Nisha Rana and **Seema Jain** (2018): Seasonal Variation in DNA content of *Labeo angra* (Hamilton,1822), **Recent Trends in Fish Molecular Biology and Stress Physiology**, ISBN - 9788170196273, pp83-91.

45. Neetu Nimesh and **Seema Jain** (2018) -Otolith morphometry and fish length relation of *Amblypharyngodon mola* (Ham.) from Middle Ganga region (India). **Internatonal Journal of Fisheries and Aquaculture** Vol. 10(10), pp. 122-128, October 2018 DOI: 10.5897/ IJFA2018.0698, Article Number: 0A75E4159159 . ISSN: 2006-9839.

46. Neetu Nimesh and **Seema Jain** (2018) – Importance of otolith biochemistry as a pollution indicator: A brief review. **Journal of environment and Biosciences.** (2018) Vol.32 , issue no.2 .pp-285-290. p- ISSN – 0973-6913, e- ISSN – 0976-3384. NAAS rating 4.20.

47. Nisha Rana and **Seema Jain (2019)** - Analysis Of DNA Content In *Catla catla* (Hamilton, 1822) Collected From Three Different Sites Of Western Uttar Pradesh, India. **Proceeding Of Zoological Society Of India**18(1):97-102. ISSN-0972-6683(Print)ISSN-2456-8589(online), UGC listed, NAAS Rating 4.42

48. Nisha Rana and **Seema Jain (2019)** - Variation In DNA Content Of Wild And Cultured *Labeo bata*(Ham,1822) In Different Seasons . **Bull. Env. Pharmacol. Life Sciences** ,2019 Pp70-74. ISSN 2277-1808 , Naas Rating 4.95

49. Neetu Nimesh, **Seema Jain** , Rigzin Kang and Manoj Nimesh (2021)- Otolith Morphometry –Total Fish Length Relationship in the population of *Rasbora daniconius* (Hamilton,1822) (Cyprinid) **Uttar Pradesh J.Zool.**42 (24) :958-96, 2021 ISSN0256-971X (P) (UGC Care List)

50. Ankita Singh & **Seema Jain** (2022) - Immunomodulatory Effect of Ascorbic Acid, Alpha Tocopherol and their combination on Asian Catfish , *Clarias batrachus* (Linn.1758) **J.Exp.Zool India** 25(I) 1113-118,2022 ISSN 0972-0030 eISSN 0976-1780 Doc ID: <https://connectjournals.com/03895.2022.52.1113> (Web of Science)

51. Ankita Singh & **Seema Jain** (2022) - Immunomodulatory Effect of Vitamin C and E on Non-Specific immune Parameters in Fishes –A Review. **South Asian J.Exp.Biol** 12 (4): 468-475, 2022 (DOI : 10.38150/sajeb.12 (4).p 468-475) UGC Care List.

52. Neetu Nimesh, **Seema Jain** (2024) - Otolith morphometry and body size relationships of Rasborine fishes in Ganga River water. **J. Exp. Zool. India** 27, 635-641. DOI: <https://doi.org/10.51470/jez.2024.27.1.635>

Books Published

1. Immunomodulation Induced by Vitamin C on Healthy and Immunocompromised Indian snake head *Channa punctatus* (Bl.) published in the form of Book by **Lap Publishing House, Germany. ISBN: 978-3-659-79000-3.**
2. **Nootan Jantu Vigyan-** Published by Nageen Prakashan, W.K.Road, Meerut (1997).
3. The Immunomodulatory effects of Natural immunostimulants on Non –specific immune parameters in *Channa punctatus* (Bl.) **published by Anu Books, Delhi , ISBN – 978-90-82166-43-6 (2015).**

Chapters In Book

1. **Seema Jain** and Manu Varma - Effect of Garlic on non-specific immune parameters in *Channa punctatus* (Bl.) infected with *Aeromonas hydrophila*. Published in Proceedings of 21st All India Congress of Zoology by **Narendra Publishing House, New Delhi In Management issues in Inland Fisheries and Aquaculture.2012, PP 129-143. ISBN: 978-93-80428-59-58.**
2. Manu Varma and **Seema Jain** - Seasonal Variation in Macrophage Phagocytic activity in Genus *Channa* (Gr.) of Meerut region. Published in Proceedings of 21st All India Congress Of Zoology by **Narendra Publishing House, New Delhi In Management issues in Inland Fisheries and Aquaculture.2012, PP 161-172.ISBN: 978-93-80428-59-58.**
3. Sudha Garg and **Seema Jain** – Mitochondrial DNA variation in four species of Snakeheaded fish *Channa*. Published in Proceedings of 21st All India Congress Of Zoology by **Narendra Publishing House, New Delhi In Management issues in Inland Fisheries and Aquaculture.2012, PP 199-209.ISBN: 978-93-80428-59-58.**
4. **Seema Jain** and Manu Varma - Empowering Women through Financial Inclusion with special reference to Pradhan Mantri Jan Dhan Yojna in **Book entitled Women empowerment through skill development, 2015, (pp 198-207), ISBN: 9789350567562. Published by Discovery publishing house, New Delhi.**
5. **Seema Jain**, Manu Varma and Nisha Rana - Declining Status and Coservation of Indian Shad *Tenulosa ilisha* (HILSA), (Hamilton1822) in **Book entitled Wild life and Biodiversity, 2016 published by Daya publishing house, New Delhi. pp. 21-28. ISBN: 978-81-7035-**
6. **Seema Jain** and Manu Varma – Conservation and Management of Indian Gangetic Dolphin in **Book entitled Wild life and Biodiversity, 2016 published by Daya publishing house, New Delhi. pp 57-72.ISBN: 978-81-7035-**
7. Pratibha, **Seema Jain** and Nisha Rana - Present Status and Conservation of the Indian Rhinoceros (*Rhinoceros unicornis*) in **Book entitled Wild life and Biodiversity, 2016 published by Daya Publishing house, New Delhi.pp 103-110. ISBN: 978-81-7035-**

Special Achievements

- Has completed **UGC sponsored Major Research Project** entitled “Immunomodulatory effects of natural immunostimulants on non-specific immune parameters in *Channa punctatus* (Bl.) Feb.2009-2012 with **A+** grade. **Amount – 10,09,800/-**

Consultancy Projects:

- **Research Associate: Dr.Pratibha, 2009 – 2011 (Under Scientist Guide Dr. Seema Jain)** Topic :Study of Wild fishes of North India & their utility for Rural population. **Amount : 7,41,840**
- **Research Associate in UGC PDFW scheme: Dr. Manu Varma, 2014-2019 (Under Scientist Guide Dr. Seema Jain)** Topic: Immunotoxic Effects of Heavy Metal Pollutants on Giant Snake Head *Channa marulius* (Ham.)

International Conferences Attended

1. International Consultation on DNA Barcoding at National Agricultural Science Complex, New Delhi organized by CBOL, I BOL & ICAR on 6th -7th Nov.2010.
2. **Abstract published and Poster presented** in Indraprastha International Conference on Biotechnology, Guru gobind singh Indraprastha University, New Delhi, 22-25th Oct. 2013.
3. **4 Abstract published and Poster presented in 26th All India congress of Zoology and International symposium** on Innovation in animal Sciences for Food Security, Health security and livelihood organised by Zoological Society Of India and Babasaheb Bhimrao Ambedkar University, Lucknow from 29-31 Oct. 2015.
4. International Workshop on Malaria Awareness – Causes, symptoms and Vaccines.on 27th Nov. 2015 organised by Department Of Zoology, R,G,P,G, College, Meerut.
5. **Delivered an Invited lecture on** “DNA quantification of *Clarias* species by Nano drop in International Conference on “**Global Initiatives in Applied Sciences and Green Technologies**” organized by science education and research society, SRM University , Ghaziabad on 9th - 11th September 2016.
6. **Delivered an Invited lecture on Ecofriendly management of Immune response of fish against diseases in 28th All India Congress of Zoology and**

International symposium on Understanding the molecules of life in the era of new biology, organised by Department Of Life sciences, Davengere University, Davengere, Karnataka from 20 – 22nd Oct. 2016.

7. Delivered an **Invited lecture on “Impact Of Climate Change on Harmful algal blooms and aquatic biodiversity”** at **International Seminar** on “Climate change and Biodiversity conservation” organised by Department Of Botany, R.G. P.G. College, Meerut on 21st Dec. 2016.

National Seminars and Workshops Attended

1. All India Symposium On Environment and health, organised by C.C.S. University, Meerut and society of Biosciences, Muzaffarnagar, Meerut from 19-21 October, 1997.
2. 15 days workshop on Faculty Development programme, organised by Institute of Entrepreneurship Development, U.P. sponsored by DST from 22nd Dec.1997- 5th Jan. 1998.
3. National Symposium on Genetics and Gene Banking of Fish and Shellfish, Organised by CIFE, Mumbai on March 29-30, 2003 and was **Rapporteur** for one of the Sessions.
4. XII Annual Conference and National Seminar organized by ICF and CCS University, Meerut from 11-13 Feb 2005 and was also **the member of the organizing committee.**
5. National Colloquium on Wild Life Conservation and Animal Welfare issues in India on 22 Oct. 2005 held at Meerut College, Meerut.
6. National symposium on Biology in the service of mankind in the post genomic era on 18 Nov. 2005 organized by Botany Department, R.G.P.G. College, Meerut and was also the member of the **Organizing Committee and Rappourteur.**
7. Faculty Development Programme on Innovative Pedagogy in Higher Education organized by ICFAI National College, Meerut on 24 Jan 2006.
8. National Conference on Recent Advance in Applied Zoology organized by Deptt. of Zoology, C.C.S. University, Meerut on 23 & 24 March 06.

9. State key Resource Person Training Workshop on Detection and prevention of Food Adulteration for Science Teacher VICAS, Allahabad and DST, New Delhi held at R.G.P.G. College, Meerut on 16-18 June 2006 and was also the **member of the organizing committee.**
10. National symposium on Application and Recent Advances in Life Science organized by DNPG College, Meerut on 18 Nov. 06.
11. Workshop on Recent Advance in Biochemical Techniques and their applications organized by Science Deptt. R.G.P.G. College, Meerut on 9-10 Mar-2007 and was also **the organizing secretary of the workshop.**
12. National seminar on Application of Intellectual Property rights in Developing Countries organized by Deptt. of History on 6 Oct. 2006 at R.G.P.G. College, Meerut and **was member of organizing team.**
13. National Conference on Recent Advances in Fishery Science Education, Research and Training organized by Deptt. of Zoology, D.A.V. College, Muzaffarnagar on from 20-22 Dec. 2007 and **paper was also presented here.**
14. Faculty Development Programme organized by ICFAI University, Meerut on 17 Nov. 07.
15. National workshop for formulation of Project on Understanding Planet Earth organized by NCSTC-DST from 17-19 Jan 2008 at CCMB, Hyderabad.
16. Workshop on Hypnotherapy and Past Life Regression held on 11 Dec. 07 organized by Department of Psychology, R.G. (P.G.) College, Meerut.
17. National Conference on Recent Advances in Life Sciences held on Feb 28-29 2008 organized by Deptt. of Zoology, Meerut College, Meerut.
18. National Seminar on Ailing Earth and Health Threats organized by Deptt. of Zoology, D.N.P.G. College, Meerut on 19-20 Dec. 07.
19. Seminar on Women Entrepreneurship Development Programme Challenges and opportunities organized by NRDC on 22 Aug. 2008 at Meerut.
20. 4th National level Training Workshop on Immunological Techniques held at Lady Doak College, Madurai from Jan. 27-Feb. 5, 2009.
21. Attended UGC Sponsored SAM Workshop for “Capacity building in Women Managers in Higher Education”. Organized by Kirori mal College, New Delhi from 26- 30th Oct. 2009.

22. Attended five days workshop on Team building & Conflict Management Organised by Academic Staff College, Lucknow and sponsored by Deptt of Education, UP Govt from 9th March- 13th March 2010.
23. National Seminar on Nanotechnology & Microbes organized by Deptt. of Botany, R.G.P.G. College, Meerut on 25th Oct. 2010.
24. Abstract Published and **Paper Presented** in 21st All India Congress of Zoology, organized by Zoological Society of India , **IFSI at Central Inland Fisheries Research Institute, Barrackpore, Kolkata from 21st -23rd Dec. 2010.**
25. National Seminar on Recent advancements in Life Sciences: Potential Benefits & Risks on 5 & 6th Feb. 2011, Organised by Department Of zoology D.N. P.G. College, Meerut.
26. **Abstract Published and Poster presented** In Xth Agricultural Science Congress organized by National bureau of Fish Genetic Resources From 10-12 Feb 2011.
27. National Seminar on Chemistry – our life and Future on 1st Oct. 2011, organised by Department Of Chemistry, R.G.P.G. College, Meerut.
28. Workshop on Biotechnology and Bioinformatics on 21st & 22nd Nov. 2011, organised by Department Of Biosciences, College of Applied Education and health Sciences, Meerut.
29. Abstract published & **Poster presented In 22nd All India Congress of Zoology at Lucknow University, Lucknow, 28-30th Dec. 2011.**
30. **Abstract published & Paper Presented in 99th Indian Science Congress held at KIIT University, Bhubaneshwar, 3-7th Jan. 2012.**
31. **Abstract published** in Proceedings of National conference on Innovation in Modern biology. Department of Zoology, Meerut College, Meerut on 16-17 Mar. 2012.
32. **Abstract Published and Paper Presented** Does e- learning, technology of Teaching improve the higher education in National seminar on Higher education in India: Contemporary Challenges on 18th & 19th October 2012.
33. **Abstract published & Poster Presented** in 100th Indian Science Congress held at, University of Calcutta, Kolkata, 3-7th Jan. 2013.
34. **Abstract published & Paper Presented in 25th All India Congress of Zoology and** National seminar on Threats to biodiversity and ecosystems: impacts of

- developmental projects and climate change organised by Department of Zoology, Gurukul Kangri University, Haridwar from 17-19 Nov. 2014.
35. **Abstract published and Paper presented in 102 INDIAN SCIENCE CONGRESS** held at University of Mumbai, Mumbai from 3-7 Jan. 2015.
 36. National seminar “Spiritual Orientation: A Predictor of Mental Health in Teaching Professionals “on 28th January 2015 organized by Department of Education R.G.P.G. College, Meerut.
 37. National Seminar “Philosophy: its Dimensions and Relevance.” On 20th November, 2015 organised by Department Of Philosophy, R.G.P.G. College, Meerut.
 38. **Abstract published in Invited Lecture Category in 103 INDIAN SCIENCE CONGRESS** held at University of Mysore, Mysore from 3-7 Jan. 2016.
 39. **2 Abstract Published** and Attended National Seminar On Environmental issues and Challenges in Present Scenario organized by Department Of Education of Sanjay Gandhi P.G. College, Sarurpur khurd, Meerut on 13 -14 March,2016.
 8. **Abstract published in Invited Lecture category in Proceedings of International Conference on “Global Initiatives in Applied Sciences and Green Technologies”** organized by science education and research society, SRM University , **Ghaziabad on 9th - 11th September 2016.**
 40. **Delivered an Invited lecture and Abstract published** at 28th All India Congress of Zoology and International symposium on Understanding the molecules of life in the era of new biology, organised by Department Of Life sciences, Davengere University, Davengere, Karnataka from 20 – 22nd Oct. 2016.
 41. Delivered an **Invited lecture on “Immunotoxic effects of Heavy metals on Freshwater fishes”** at National Seminar on Environmental Protection and sustainability, organised by Research Department of Zoology, Sir Theagaraya College, Chennai On **31st Dec. 2016.**
 42. Delivered an **Invited lecture on “Impact Of Climate Change on Harmful algal blooms and aquatic biodiversity”** at International Seminar on “ Climate change and Biodiversity conservation” organised by Department Of Botany, R.G. P.G. College, Meerut on 21st Dec. 2016.
 43. **Delivered an Invited lecture and Abstract published** on “Immune responses against bacterial infection in Freshwater fishes and their modulation by Natural immunostimulants” at National Symposium on “Zoonotic Diseases and their

preventive measures” organised by Department Of Zoology, C.C.S. University, Meerut from 16 – 18 March 2017.

Workshops Organized/Resource Person

- As a **member of organizing committee** in Principal’s Management Meet organised by Department Of higher Education, Allahabad on 24-25 Nov. 1995.
- **As a member of Organizing Team** in National Symposium on Biology In service of Mankind in Post Genomic era on 18th Nov. 2005, Organised by Department Of Botany, R.G.P.G. college, Meerut
- **Organizing Secretary Of** Seminar On Teachers Role In Quality enhancement of College education, organised by Students welfare Association, R.G.P.G. College, Meerut on 13th Sept. 2007.
- **Organizing Secretary** Of Intercollegiate Zoological Quiz, organized by Department Of Zoology, R.G.P.G. College, Meerut in Jan.2003.
- **Organizing Secretary** Of Intercollegiate Zoological Quiz and Science Exhibition, organized by Department Of Zoology, R.G.P.G. College, Meerut during Youth Festivals in College. Dec.2011
- **Organising Secretary of the** Workshop on Recent Advances in Bio Chemical Techniques and their applications organised By Science Block R.G.P.G. College, Meerut on 9-10 March 2007
- **Organizing Secretary in** One day Seminar on Role of Teacher in Quality Enhancement in College Education on 5 Sept. 2007 held at R.G.P.G. College, Meerut .
- **Organizing Secretary of** Symposium on “Mahilayein evam Mahila Kanoon” on 20 Oct. 2008 Supported by Women Commission. Lucknow
- As a **Co-organizer and Resource person** in Two days training Workshop on Food Adulteration and testing organized by Food Science and quality control Department, R.G.P.G. College, Meerut on 11-12 February, 2009.
- As **A Resource person** in Training and Testing Workshop on Milk and Milk Products Adulteration organised by Food Science and quality control Department, R.G.P.G. College, Meerut on 25th August, 2009.

- As **Resource person** in summer certificate course on recent Techniques in Biotechnology, Immunology, Bioinformatics, & Agro informatics organized by Shobhit University, School of Biotechnology from 1-15 July 2009.
 - As **Organising Secretary, Resource person and Trainer** in Four Weeks Training Workshop on **Pryogshala ka Rakhrakhav evam Sanchalan** organised by U.P.S.T. Lucknow. From 29th March 2010-21 April 2010.
 - As **Organizing secretary** in Intercollegiate Poster Competition on Astronomy and animal Life. Organized by Department of Zoology on 5th Dec. 2010.
 - Appointed as **Nodal Officer** for Laptop Distribution to Students by Chief Minister Sh. Akhilesh Yadav. 2013.
 - **Co-Chaired** an Oral session on **Aquatic Biology and Fishery Sciences** at **102nd Indian Science Congress** Organized by University of Mumbai, Mumbai from 3-7 Jan. 2015.
 - Appointed as a **Jury Member** in the world's first Science reality show Vigyan Ghar from 15-24 June, 2015, organized by Zila Vigyan Club and Pragati Vigyan Sansthan, Meerut.
 - As **Organizing secretary** of “**The National Symposium on The Role Of Classical Zoology in Present day Scenario**” organized by Department Of Zoology, R.G.P.G. college, Meerut from 19-20 Dec.2015.
 - Delievered an **Invited Lecture** on the Topic “Relationships between Fish Length and otolith length in *Labeo* species in Relation to Taxonomy. **In Aquatic Biology and Fishery Sciences section of 103rd Session of Indian Science Congress, Mysore. 3-7 Jan.2016.**
9. **Abstract published in Invited Lecture category in Proceedings of “DNA quantification of Clarias species by Nano drop” in International Conference on “Global Initiatives in Applied Sciences and Green Technologies”** organized by science education and research society, SRM University , Ghaziabad on 9th - 11th September 2016.
44. **Delivered an Invited lecture and Abstract published** at 28th All India Congress of Zoology and International symposium on Understanding the molecules of life in the era of new biology, organised by Department Of Life sciences, Davengere University, Davengere, Karnataka from 20 – 22nd Oct. 2016.

45. Delivered an **Invited lecture on “Immunotoxic effects of Heavy metals on Freshwater fishes”** at National Seminar on Environmental Protection and sustainability, organised by Research Department of Zoology, Sir Theagaraya College, Chennai On **31st Dec. 2016**.
46. Delivered an **Invited lecture on “Impact Of Climate Change on Harmful algal blooms and aquatic biodiversity”** at International Seminar on “ Climate change and Biodiversity conservation” organised by Department Of Botany, R.G. P.G. College, Meerut on 21st Dec. 2016.
47. Delivered an **Invited lecture and Abstract published on “Immune responses against bacterial infection in Freshwater fishes and their modulation by Natural immunostimulants”** at National Symposium on “Zoonotic Diseases and their preventive measures” organised by Department Of Zoology, C.C.S. University, Meerut from 16 – 18 March 2017.

Ph. D Scholars

| S. No. | Name of Student | Topic | Awarded or Enrolled |
|--------|---|---|---------------------|
| 1. | Pratibha Res -2/C/ Zoology/ 20076/ 4073 | "Karyological and Zymogrammatic studies of some Cyprinid fishes of Meerut region" | Awarded 2003 |
| 2. | Mrs. Manu Varma Res-2/C/ 4318 | "Seasonal, Sexual and specific variations in macrophage phagocytic activity in the genus <i>Channa</i> (Gronovius) of Meerut region. | Awarded 2010 |
| 3. | Mrs. Sudha Garg Res/ 8705/1128 | "Genetic variations in the genus <i>Channa</i> " Teacher Fellow under UGC-FIP- Scheme | Awarded 2011 |
| 4. | Mrs. Shanti Rajora SVC/Res/9412-923 | "In-vitro effects of Ivermectin and Moxidectin on certain roundworms of fowl and sheep involving light microscope and scanning microscopic studies" Teacher Fellow under UGC-FIP- Scheme | Awarded 2012 |

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| 5. | Mrs. Shilpi Singh. Res - 2/A/ 7404 | "Variations in biochemical composition of <i>Clarias batrachus</i> and <i>Clarias gariepinus</i> in relation to taxonomy" | Awarded 2012 |
| 6. | Ms. Anu Mohini Res – 2/A/700669 | "Immunomodulatory effect of Beta Glucan on Some non-specific immune parameters in <i>Channa punctatus</i> (Bl.)" | Awarded 2013 |
| 7. | Mrs. Shubhra Mathur Res-2C/090243/1336 | "Comparative study of Otolith in native species of genus <i>Channa</i> with special reference to its taxonomic importance | Awarded 2015 |
| 8. | Mrs. Neetu Singh Res- 2/A/90507/891 | "Comparative study of Otolith in native species of genus <i>Labeo</i> with special reference to its taxonomic importance. | Awarded 2015 |
| 9. | Ms. Shobhana Res - 2/C/1034481/8722 | DNA Quantification & Molecular Characterization of <i>Clarias batrachus</i> , <i>Clarias gariepinus</i> & their hybrids. | Awarded 2017 |
| 10. | Ms. Nisha Rana Res- 2/B/1303101/2840 | Mitochondrial DNA based Phylogenetic analysis of Indian Major carps. | Awarded 2021 |
| 11. | Ms. Neetu Nimesh Res- 2/B/1303115/3107 | Studies on Microstructure and Microchemistry of Saggital Otolith of Rasborine Fishes. | Awarded 2021 |
| 12. | Ms. Ankita Res- 2/A/1603105/4228 | Effects of Alpha Tocopherol, Ascorbic acid and their Combination on Immunological parameters of Asian Cat fish <i>Clarias batrachus</i> (Linn.1758) | Awarded 2023 |
| 13. | Ms. Neelam Res - 2/A/1603112/4175 | Genetic Diversity assessment and DNA quantification of Cat fishes and their hybrids of Western U.P. | Registered 2017 |
| 14. | Ms. Anjali Res - 2/A/1703163/104 77 | Light and Scanning Electron microscopic study of Saggital otoliths of Fishes of Family Bagridae(Ord er: Siluriformes) i n relation to Taxonomy | Registered 2019 |
| 15. | Ms. Bhawna Verma Res 2/A/21310029/ 1006 | Microscopic Study of Sagittal Otolith in Native species of Genius <i>Puntius</i> (Family- Cyprinidae) by Light and Scanning Electron Microscope in Relation to Taxonomy | Registered 2022 |

