

Dr. Richa Sharma (PhD Scholar)

National Dairy Research Institute, Karnal, Haryana, Pin-132001

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Objectives:

To work with a reputed organization that provides an opportunity to capitalize my knowledge and skills in the field of the livestock sector and tune myself towards new technologies and innovations coming for the betterment of production, health and welfare of animals.

Personal Details:

Date of Birth : 22-09-1990
Father's Name : Shri G.K Sharma
Address : M.I.G 31 dr. Headgevar Colony, Sanchi, Raisen, (Madhya Pradesh)- 464661
Nationality : Indian
Sex : female
Marital Status : Unmarried
Languages Known : English, Hindi
Current Address : Room No. 115, Kaveri Hostel, Karnal, (Haryana)-132001
Designation : PhD Scholar
Subject : Animal Physiology

Professional Qualification

Examination*	High School	Intermediate	B.V.Sc. & A.H.	M.V.Sc.	Ph.D.
Name of School / College	Trinity Convent High School Vidisha (Madhya Pradesh)	Central Academy H S School, Vidisha (Madhya Pradesh)	NDVSVU, Jabalpur (Madhya Pradesh)	DUVASU, Mathura (Uttar Pradesh)	ICAR-NDRI, Karnal (Haryana)
Name of Board / University	M.P. Board	M.P. Board	NDVSVU, Jabalpur (Madhya Pradesh)	DUVASU, Mathura (Uttar Pradesh)	Deemed University ICAR-NDRI, Karnal
Year of passing	2007	2009	2017	2019	2019- (Persuing)

Maximum Marks	500	500	10	10	10
Marks/OGPA Obtained	445	377	7.120	8.010	7.85
Percentage of Marks	89	75.4	71.20	80.10	78.5
Division	First	First	First	First	First
Subjects	Hindi, English, Maths, Science, Social Science	English, Hindi, Physics, Chemistry, Biology,	As per VCI Syllabus	Animal Physiology	Animal Physiology

- ✓ Pursuing Ph.D. (Animal Physiology) from ICAR-National Dairy Research Institute, Karnal, Haryana (2019-), securing **OGPA-7.85/10 (1st Division)**
- ✓ M.V.Sc. (Animal Physiology) from DUVASU, Mathura (Uttar Pradesh), (2017-2019), securing **OGPA-8.01/10 (1st Division)**
- ✓ B.V.Sc. & A.H. from NDVSU, Jabalpur (Madhya Pradesh), securing **OGPA-7.12/10 (1st Division in BVSc & AH professional programme)**

Professional Skills:

<i>Primary / Core Skills:</i>
<i>Have a good exposure in laboratory assessment of semen as ejaculate volume, Mass Motility, Individual Motility, Concentration, Viability and Morphology, Acrosome Integrity by Giemsa stain, Hypo Osmotic Swelling Test, etc.</i>
<i>Have a good exposure in the evaluation, processing, packaging, equilibration and modern cryopreservation of semen along with Quality Test.</i>
<i>Have a good knowledge in biochemical, hematological and physiological tests.</i>
<i>Secondary Skills:</i>
<i>Efficient in the study of milk and blood plasma parameters</i>
<i>Domain Expertise:</i>
<i>Metabolomics</i>
<i>Gene expression (RNA isolation, PCR)</i>

RESEARCH EXPERIENCE

Ph.D. Thesis Title

“Expression, localization and cellular immunohistochemistry of different aquaporins in the reproductive tract of buffalo bull”

Description of Ph.D. Research Work

The primary objective of my Ph.D. research is to ascertain the presence of distinct aquaporins within the reproductive tract of buffalo bulls. This investigation involves a two-step process: initial localization of aquaporins in tissue through immunohistochemistry, followed by a comprehensive assessment of AQP gene expression in various tissues of the male reproductive system. Additionally, the study encompasses an evaluation of the endocrine and metabolic profile of buffalo bulls, providing a holistic understanding of the physiological aspects associated with aquaporin presence in the reproductive tract.

M.V. Sc. Thesis Title

“Effect of Quercetin on sperm characters, capacitation like changes and seminal antioxidative status in cryopreserved Barbari buck semen”

Description of Master's Research Work

My work was aimed to investigate the effects of Quercetin supplementation in extender on post thaw seminal attributes so that the quality semen from Goat can be kept longer without much decline in its fertilizing capacity. The study was designed to cover the maximum facts of cryopreservation with two objectives. Under first objective, the semen from 10 Barbari goats were taken and assessed for the percentage of progressive motility, viability, membrane integrity (HOST +ve), acrosome integrity, total abnormalities, capacitation and other semen biomarkers before and after cryopreservation in different time intervals. The second objective emphasizes on elucidating the efficacy of adding the Quercetin in extender to improve the post thaw semen quality. My research work highlighted that the addition of Quercetin in cryopreservation media at an optimized dose of 75 μ M improved the seminal attributes significantly and thereby protects the spermatozoa from deleterious effects of cryopreservation.

Working Experience

- ✓ Compulsory rotatory Internship Programme of Six Month as per VCI syllabus during B.V.Sc. & A.H.

Training/Workshop/Webinar

1. Workshop on “Silage: Hare chare ko sanrakshit karne ki saral aur upyogi vidhi ” organised by DUVASU, on 2nd December, 2017 at Mathura, Uttar Pradesh.
2. Workshop on “Bakriyo m kratim grabhdan- aay badhane ki uttam taknik ” organised by DUVASU, on 23rd December, 2017 at Mathura, Uttar Pradesh.
3. Training on “Physio biochemical and Biotechnological Approaches for Optimization of Health and Reproduction in Animals” organized by Department of Veterinary Physiology and Biochemistry, College of Veterinary Science and Animal Husbandry, Mhow (M.P.), India, during December 01 to 21, 2020. (21 Days).
4. International Web-Course on “Preclinical Studies in Biomedical Research and Regenerative Medicine” organized by Lakhimpur College of Veterinary Science, Assam Agricultural University, Joyhing, North Lakhimpur, Assam, India from 24th to 30th August, 2020. (7 Days).
5. National e training on “Wildlife Conservation and Management” organised by College of Forestry, Dr. Panjabrao Deshmukh Krishi Vidyapeeth, Akola, Maharashtra, India during 2nd to 6th October 2020.
6. National Webinar on “Understanding the biology of Newcastle Disease Virus for the Development of Recombinant Vaccine” organised by College of Veterinary and Animal Sciences, Parbhani (MH) on 17th August 2020.
7. Hands-on Bioinformatics and Statistics analysis tool: Molecular and Genetic study training course held on 12-14 september 2020, organised by: K.R. Network Cloud Technologies, Pvt. Ltd., New Delhi.
8. Workshop on “Academic Writing” organised under the institutional development plan of National Agricultural Higher Education Project on 24-25, 2023 at ICAR- National Dairy Research Institute, Karnal Haryana.

Honour/Awards/Scholarship

1. Institutional Scholarship in Phd from 1st August, 2019 to till date from Deemed University ICAR-NDRI Karnal.
2. Young Scientist Award at international Conference on Current Advances in Agriculture, Animal Husbandry and Allied Sciences (CAAAAS-2023) during 10-11 July, 2023 at Shri Vaishno Devi University, Katra.
3. I orally presented a research paper entitled 'Cryoprotective Effect of Quercetin Supplementation on Sperm Characteristics Using Flow Cytometry' at the international conference organized by ARCN and NADCL in Baramulla, J & K, on July 10-11, 2023.
4. I presented a poster on the topic 'Cryoprotective Effect of Quercetin Supplementation on Sperm Characteristics Using Flow Cytometry' at the XXVIII Annual conference & National Symposium organized by ICAR- CSWRI in Avikanagar on February 18-19, 2020.

Popular Articles

1. Richa Sharma, Veenesh Rajpoot and Manmohan Singh Rajput (2021). Management of Reproductive Efficiency in Dairy Animals. epashupalan, 3(2), 38-40.
2. Veenesh Rajpoot, Richa Sharma and Manmohan Singh Rajput (2021). Management of postpartum 38 anestrous in dairy animals. epashupalan, 2(2), 38-40.
3. V. R. Upadhyay, Raju Kr. Dewry, Richa Sharma and Panreiphy G. S. (March 2021). Role of aquaporins in thermoregulation and water balance, Indian Dairyman, 73(3): 86-89.

Membership of Professional Societies

1. Life Member of **The Society of Animal Physiologist of India (Reg. No. SAPI 20/16/0754)**
2. Registered Member of **Veterinary Council of India (VCI) (Reg. No. 008826)**
3. Registered Member of **Madhya Pradesh State Veterinary Council (Reg. No. MPSVC 3548/2017)**

Extra-curricular Activity

1. NCC 'B' & 'C' certificate with B-Grade.
2. Participate in intercollegiate cultural programme of N.D.V.S.U. Jabalpur (M.P.) in 2015.
3. Attended NATIONAL INTEGRATION CAMP -1 at AVC college, Mannampandal-609 305, District Nagapattinam, Tamilnadu.
4. Attended Combined Annual Training Camp- 12/Pre RDC conducted by 9 MP Battalion NCC, Indore from 17 Oct to 26 Oct 2015.

REFERENCES

Affirmation:-

I self-assuredly declare that above all the given details of the curriculum are fair and true as per best of my knowledge.

Date:

Richa

(Richa Sharma)