Dr. Anand Kumar Pandey

Designation	**Professor and Head**
	Department of Veterinary Gynaecology and Obstetrics College of Veterinary Sciences Lala Lajpat Rai University of Veterinary and Animal Sciences (LUVAS), Hisar -125004 (Haryana) India Phone: 01662-256112 (O) Mobile: +918278288210 E-mail: dranandpandey@luvas.edu.in
Educational Qualifications	• 2018-2019: PDF. Deptt. DGE, UFSCar, Brazil • 2010: Ph.D. (Animal Reproduction Gynaecology and Obstetrics), Deptt. VGO, COVS, GADVASU, Ludhiana (Punjab) • 2006: M.V.Sc. (Animal Reproduction Gynaecology and Obstetrics), Deptt. VGO, COVS, Mhow, JNKVV (Jabalpur), M.P. • 2004: B.V.Sc. & A.H., COVS, Mhow, JNKVV (Jabalpur), M.P.
Employment Details	• Head of Department of VGO: 15.07.2020-continuing • Professor, VGO, LUVAS: 17.09.2022-continuing • Associate Professor, VGO, LUVAS: 17.09.2019-16.09.2022 • Assistant Professor: 25.08.2009-16.09.2019
Research Interests	• Large animals' infertility (Endocrinology) • In-vitro fertilization and Embryo transfer technology in Bovine
Students Guided	• As Major Advisor: 06 M.V.Sc., and 02 Ph.D. students • As Co-Major Advisor: 1 Ph.D. student • As Member Advisory Committee: 23 M.V.Sc., and 17 Ph.D. students
Research Projects Handled/Undergoing	• **As PI:** **1.** "Diagnosis of infertility owing to hormonal imbalance and optimizing fertility through hormonal approaches in dairy animals" (2014-2017) sanctioned from Rashtriya Krishi Vikas Yojana, New Delhi. Sanctioned budget: Rs. 52.5 lakh. **2.** "Characterization of the Murrah buffaloes based on melatonin receptor (MTNR1A) gene polymorphism and its association with reproductive seasonality" (2016-2018), sanctioned from Haryana State Council for Science Innovation and Technology. Sanctioned budget: Rs. 9.89 lakh. **3.** "Size-specific follicles selection and identification of non-invasive biomarkers of oocyte competence and embryo development in buffalo" (2016-2018), sanctioned from Haryana State Council for Science Innovation and Technology. Sanctioned budget: Rs. 40.00 lakh. • **As Co-PI:** **1.** "Embryo transfer, In-vitro fertilization laboratory and production of High genetic IVF embryos from Indigenous cattle breed of Haryana" (2018-2021) sanctioned from Rashtriya Krishi Vikas Yojana, New Delhi. Sanctioned budget: Rs. 183.0 lakh. **2.** "Implementation of Embryo transfer and In-vitro fertilization technologies for Bovine breeding" (2019-2024) sanctioned from Rashtriya Gokul Mission, New Delhi. Sanctioned budget: Rs. 583.0 lakh. **3.** "Strengthening and upgradation of diagnostic and therapeutic tool for management of different disease conditions in domestic animals" (2011-2015) sanctioned from Rashtriya Krishi Vikas Yojana, New Delhi. **4.** "Transfer of ultrasound knowledge from lab to farmer's doorstep" sanctioned from Rashtriya Krishi Vikas Yojana, New Delhi. Sanctioned budget: Rs. 14.00 lakh.

	Total Research Papers Published: 160 **>8.0 NAAS rating:** 20 **6-8 NAAS rating:** 10 **Google Scholar index** **Research Citations**: 999 **h-index**: 18	**Books Published:** 04 **Book Chapters:** 09 **Practical/Training Manuals:** 12	**PopularArticles:** 12 **Gene Sequences Submitted:** 04 **Seminar/ Conference Attended:** 15

Publications

Research publications in APA format (Best 10 only)

- Anand Kumar Pandey, Pankaj Gunwant, Sandeep Kumar, Gitesh Saini, Chandra Shekhar Patil, Rakesh Kumar (2026). Association of intra-follicular melatonin with reduced oxidative DNA damage and improved oocyte quality in water buffalo: Effect of season and follicular size. *Domestic Animal Endocrinology* **97**:107043. https://doi.org/10.1016/j.domaniend.2026.107043.
- Mateus P Grejo, J Djaci Augusto Neto, Angélica C dos Santos, Lindomar O Alves, Carolina H Macabelli, Sérgio A G Pereira-Júnior, Tainã F Cardoso, Anand K Pandey, Suellen G B Clemente, Deborah N Yokomizo, Marcelo M Seneda, Ricardo P Nociti, Flávio V Meirelles, Patrick F Chinnery, Rodrigo A P Martins, Pierre-Olivier Frappart, Marcos R Chiaratti, Maternal DNA repair safeguards genome stability during the oocyte-to-embryo transition, *Molecular Human Reproduction*, 2026; 32(3), gaag050. https://doi.org/10.1093/molehr/gaag050.
- Sharma Garbhit, Pandey Anand Kumar, Jangra Hitesh, Kumar Sandeep, Saini Pradeep, Kumar Rajesh, Choudhary Divya (2026). Gamete co-incubation duration modulates blastocyst developmental competence in buffalo through regulation of growth factors, steroidogenesis and oxidative stress pathways. *Mol Biol Rep* 53, 1246 (2026). https://doi.org/10.1007/s11033-026-12448-9.
- Anupama Solanki, Anand Kumar Pandey*, Hitesh Jangra, Pradeep Saini, Sandeep Kumar, Ramakant Kaushik, Vinay Ganeshrao Joshi, Rajesh Kumar, Satish Kognole (2026). In vivo use of melatonin improves oocyte developmental competence and blastocyst development rate in indigenous donor cow during summer. Tropical Animal Health and Production 58:349. https://doi.org/10.1007/s11250-026-05116-4.
- Anupama Solanki, Anand Kumar Pandey*, Hitesh Jangra, Pradeep Saini, Sandeep Kumar, Ramakant Kaushik, Meenakshi Virmani, Rajesh Kumar, Rahul Verma, Yogesh Bangar (2025). Exogenous melatonin improves blastocyst developmental competence and levels of antioxidants in indigenous donor cattle under heat stress. Theriogenology 246: 117549. https://doi.org/10.1016/j.theriogenology.2025.117549.
- Pradeep Saini, Sandeep Kumar, Hitesh Jangra, Anupama Solanki, Rahul Verma, Rajesh Kumar, Ramakant Kaushik, Kushal Grakh, Gitesh Saini, Yogesh Bangar, Anand Kumar Pandey* (2025). The occurrence of follicular cyst affects the embryonic developmental competences of buffalo oocytes under in vitro culture conditions, Theriogenology; 235:152-161. https://doi.org/10.1016/j.theriogenology.2025.01.007.
- Saini, G., Kumar, S., Pandey, A.K.*, Yadav, V. and Sharma, S. (2023). Intensity of estrus expression–valuable obvious determinant of fertility in *Bos indicus* cows. *Anim. Biotechnol.*34(8): 3867–3876.
- Gitesh Saini, Sandeep Kumar, Anand Kumar Pandey**,** Harender Singh, Meenakshi Virmani (2023). Presynchronization with simultaneous administration of GnRH and prostaglandin F2α ($PGF_{2\alpha}$) 7 days prior to Ovsynch improves reproductive profile in Hariana zebu cow. *Tropical Animal Health and Production* **55**:19. https://doi.org/10.1007/s11250-022-03439-6.
- Bismarck M. Santiago, Welder A. Baldassini, Marcos R. Chiaratti, Anand K. Pandey, Juliana A. Torrecilhas, Rodrigo N.S. Torres, Richard V. Ribeiro, Dante P.D. Lanna, Guilherme L. Pereira, Rogerio A. Curi, Luis Artur L. Chardulo, Otavio R. Machado Neto (2023). Skeletal muscle gene expression and meat quality of F1 Angus–Nellore young steers and bulls feedlot finished. *Livestock Science* 268 (2023) 105151. https://doi.org/10.1016/j.livsci.2022.105151.
- A. K. Pandey, G. S. Dhaliwal, S. P. S. Ghuman, S. K. Agarwal (2011). Impact of pre-ovulatory follicle diameter on plasma estradiol, subsequent luteal profiles and conception rate in buffalo (Bubalus bubalis). *Animal Reproduction Science* 123: 169-174.

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Awards/ Fellowships/ Recognition received	(In brief) • Brazilian Govt. Fellowship for the Post-doctoral research • University Gold Medallist during M.V.Sc. (JNKVV Jabalpur) • Conferred Young scientist awards and several other awards for the Best Oral/Poster Presentation, including Nil's Lagerlof Memorial award, G. B. Singh Memorial award, Dr. N.C. Sharma award and Dr. R. D. Sharma Memorial awards by the ISSAR • Delivered three expert lectures at International level • Organised Two conference/National seminar as Organizing Secretary and One as Co-organizing Secretary
Membership of Professional Scientific Societies	• The Indian Society for the Study of Animal Reproduction (ISSAR) • Society of Animal Physiologist of India (SAPI) • Indian Society for Buffalo Development (ISBD) • Sociedade Brasileira de Tecnologia de Embrioes (SBTE) • Indian Association for the Advancement of Veterinary Research (IAAVR) • Society for Veterinary Science and Biotechnology (SVSBT)
Editorial board of Scientific Journal	• The Indian Journal of Animal Reproduction • The Haryana Veterinarian
Reviewer of Scientific Journals	• The Indian Journal of Animal Reproduction • Veterinary Research Communications • Frontiers in Veterinary Science • Theriogenology • Reproduction in Domestic Animals • Animal Reproduction Science • Animal Reproduction
Any Other (if any)	• Vice-President-II, Indian Society for the Study of Animal Reproduction