

**Dr. SUNIL KUMAR MOHAPATRA**

C/o- Gangadhara Mohapatra,

P.O.- Balia, P.S.- Industrial area police station, Tahasil- Remuna,

District- Balasore, State-Odisha (India).

PIN-756056

DOB – 9<sup>th</sup> May, 1993

☎: 9040419774 / 8569828633

✉: [sunilium46@gmail.com](mailto:sunilium46@gmail.com) / [sunilium46@rediffmail.com](mailto:sunilium46@rediffmail.com)**ACADEMIC QUALIFICATION**

Qualification	Period of Study		Subjects	University/ Board	Percentage of marks / OGPA	Division
	From	To				
Ph.D.	2018	2022	Animal Biochemistry	National Dairy Research Institute, Karnal	8.41/10	First class
M. V. Sc.	2016	2018	Animal Biochemistry	National Dairy Research Institute, Karnal	8.76/10	First class with Distinction
B. V. Sc. & A.H	2011	2016	Animal Science and Veterinary Science	Orissa University of Agriculture and Technology, Bhubaneswar	8.092/10	First class with Distinction
S. S. C. E	2009	2011	Physics, Chemistry, Maths, Biology, English, General Studies	K.V. Balasore/ CBSE	92.2%	First class (3 <sup>rd</sup> position in school)
S. S. E	2008	2009	English, Hindi Maths, Science, Social Science	K.V. Balasore/ CBSE	87.8%	First class

## VISION & OBJECTIVES

- To acquire zenith in the field of science and apply this knowledge in the welfare of animal and human race.

## M. V. Sc. DISSERTATION

- ✓ Completed one year of research work (August, 2017- June 2018) during M.V.Sc. programme (August, 2016- June 2018) on the topic **“Role of Probiotics on steroidogenesis and male fertility through *in vitro* approach”**

### ❖ Objectives of Research project-

1. To investigate the effect of probiotics on viability and fertility related hormone in leydig/testicular cell line.
2. To study the expression pattern of genes related to fertility in leydig/testicular cell lines.

## Ph. D. DISSERTATION

- ✓ Completed two and half year (2.5 years) research work (August, 2019- December 2021) during Ph.D. programme (August, 2018- April, 2022) on the topic **“Role of indoleamine-2,3-dioxygenase (IDO) on functionality of peripheral blood cells during pregnancy establishment in crossbred dairy cows”**

### ❖ Objectives of Research project-

1. To decipher the relation between indoleamine-2, 3-dioxygenase (IDO) expression and functionality of peripheral blood cells (PBMCs and Neutrophils) in pregnant and non-pregnant dairy cows.
2. To evaluate the influence of interferons (IFN $\tau$  and IFN $\gamma$ ) on indoleamine-2,3-dioxygenase (IDO) expression in PBMC and neutrophils *in vitro*.
3. To check the diagnostic potential of indoleamine-2,3-dioxygenase (IDO) for early pregnancy diagnosis.

## EXPERIMENTAL SKILLS

- **Microbiology Skills:** Skilled with basic microbiology culturing techniques.
- **Animal Cell Culture Techniques:** Experience in handling and maintenance of ovarian cell line, Leydig cell line, mammary cells, liver cells, intestinal cells, neutrophils and lymphocytes (PBMCs).
- **Biochemical Analysis:** Experience in all basic biochemical tests, Spectrophotometry, Tissue homogenization and extraction, quantitative and qualitative analysis by UV-Visible spectrophotometer.

- **Molecular Biology skills:** Expertise in isolation of genomic DNA and total RNA, cDNA synthesis, RT-PCR, qPCR, Agarose gel electrophoresis, SDS-PAGE, Western blot, dot blot, Immunofluorescence, immunocytochemistry and ELISA.
- **Bioinformatics:** Primer Designing, phylogenetic analysis, retrieving gene and protein sequences from data bank, BLAST, Multiple sequence alignment CLUSTAL W, sequence homology,
- **Small Animal Handling:** Diet preparation and feeding. Expertise in handling rat, mice and rabbit including breeding, oral gavaging, i.p. injection etc., and dissection of small animals. Isolation of various organs and collection of peritoneal fluid as well as peripheral blood by cardiac puncture from small animals.
- **Biological Sample Processing:** Blood processing (expertise in isolation of neutrophils and lymphocytes from whole blood), estimation of different analytes in blood serum including BUN, creatinine, total protein, albumin, LFT, Lipid profile analysis, Blood glucose measurements etc.

## COMPUTER & STATISTICAL SKILLS

- ✓ Expertise in Windows, Microsoft Office (Word, Excel, Power Point).
- ✓ Ability to operate the software's required for conducting different Biochemical and other Laboratory techniques.
- ✓ Studied statistics courses at post graduate level i.e. **“Software packages for statistical computing”** which gave a foundation in designing experiments and using statistical tools to analyse research data.
- ✓ Expertise in **GraphPad-PRISM** statistical software for analysis of research data.

## SEMINARS/CONFERENCES/SYMPOSIUM/WORKSHOP ATTENDED

Particulars	Topic	Duration (days)
Seminar/ Conference/ Webinar	1. Bioprocessing India. ( <b>National Conference</b> )	3
	2. Improvement of Small Ruminant Production System for Livelihood Security. ( <b>National Seminar</b> )	2
	3. Proteomics for System Integrated Bio-omics, One Health and Food Safety. ( <b>International Conference</b> )	3
	4. Impact of COVID-19 on dairy industry. ( <b>National Webinar</b> )	1
Symposium	1. New Generation Vaccines, Diagnostics For Improvement Of Animal Health And Productivity <i>Vis-À-Vis</i> Genomic Interventions For The Societal Benefit. ( <b>National</b>	2

	<b>Symposium)</b>	
	2. Strengthening of governance in animal health and production activities for the benefit of farmers and livestock owners. <b>(National Symposium)</b>	2
Workshop/ Training	1. Mammalian Genome Editing by CRISPR Technique. <b>(National Workshop)</b>	1
	2. Metabolomics: Basic Principles and Application. <b>(National Workshop cum Training)</b>	3
	3. Practical Training Camp (Central Poultry Development Organisation, Eastern Region, Bhubaneswar). <b>(State level training camp)</b>	10
	4. International e-Training cum Orientation Programme on “Physiological and Biotechnological Interventions for the Improvement of Production, Reproduction and Health Status in Animals”. <b>(International e-Training)</b>	21
	5. National e-Training Programme on “Safety Security and Quality Assurance of Food: Recent Updates”. <b>(National e-Training)</b>	10

## LIST OF RESEARCH PUBLICATIONS

S. No.	Name of the Author(s)	Title of the Research Paper/Review Article	Name of Journal with Year, Volume & Page Number	NAAS Rating/IF	Number of citations
1.	Mohapatra, S. K., Panda, B. S., Verma, A. K., Kapila, R., & Dang, A. K.	Implantation associated changes in expression profile of indoleamine-2, 3-dioxygenase 1, Th1-Th2 cytokines and interferon-stimulated genes on neutrophils and peripheral blood mononuclear cells of crossbred cows	Journal of Reproductive Immunology 2020, 142, p.103188.	NAAS-10.05 (IF-4.054)	1
2.	Panda, B. S., Mohapatra, S. K.,	Proteomics and transcriptomics study reveals the utility of ISGs	Journal of Reproductive	NAAS-10.05	4

	Chaudhary, D., Alhussien, M. N., Kapila, R., & Dang, A. K.	as novel molecules for early pregnancy diagnosis in dairy cows.	Immunology 2020, 140, p.103148.	(IF-4.054)	
3.	Panda, B. S., <b>Mohapatra, S. K.</b> , Verma, A. K., Kamboj, A., Alhussien, M. N., & Dang, A. K.	A comparative study on various immunological parameters influencing embryo survivability in crossbred dairy cows.	Theriogenology 2020, 157, 140- 148.	NAAS- 8.74 (IF-2.740)	2
4.	Mohapatra, S., <b>Mohapatra, S. K.</b> , Sarangi, S., Jyotirajan, T., Sahoo, P. R., & Kundu, A. K.	A comparative evaluation of the Lead II Electrocardiogram in young and adult crossbred cows of Odisha.	Exploratory Animal and Medical Research 2017, 7(1), 74- 76.	NAAS- 5.85	1
5.	Surya, T., Selvarani, R., Singh, N. P., Koloi, S., Mohan, M., & <b>Mohapatra, S. K.</b>	A pilot study on identification of infectious mastitogen responsible for mastitis in Sahiwal and Karan Fries cows.	The Pharma Innovation Journal 2021, 10(7S): 846- 848.	NAAS- 5.23	0
6.	Panda, B. S., <b>Mohapatra, S. K.</b> , Alhussien, M. N., & Dang, A. K.	Amount of milk neutrophil percentage and associated CD molecular changes on the compositional and technological properties of milk.	The Open Biotechnology Journal 2019, 13(1).	IF-0.54	0
7.	<b>Mohapatra, S. K.</b> , Nayak, V. K., Paul, A., & Adhikary, S.	Mitochondrial DNA: A Molecular Tool for Assessment of Genetic Diversity.	International Journal of Livestock Research 2019, 9(8), 1.	NAAS- 5.36	0
8.	<b>Mohapatra, S. K.</b> , Ranvir, S., Nikam, P., & David, J.	Alleviation of Fertility Disorders Based on Probiotics Induced Immune System	Critical Reviews™ in Biomedical	IF-1.238	0

		Improvement: A Review.	Engineering 2019, 47(5).		
--	--	------------------------	-----------------------------	--	--

## LIST OF POPULAR ARTICLES

S.No.	Title	Authors	Year	No. of Pages	Vol. (Issue)	Publisher
1.	Dahi: The fertility protector!	<b>Sunil Kumar Mohapatra</b> and Gautam Kaul	May, 2018	04	--	Indian Dairyman
2.	Therapeutic potentials of Goat milk	<b>Sunil Kumar Mohapatra</b> , Sameni Deepika, Subrata Koloj , Narendra Pratap Singh and Abhishek Paul	Oct., 2018	04	05	Indian Farmer
3.	Vaccination failure: Causes and prevention	<b>Sunil Kumar Mohapatra</b> and Sameni Deepika	Mar., 2019	02	16	Dairy Planner
4.	Welfare of animals during transportation	Prachurya Biswal, Arun Somagond, Seema Yadav, Priyanka Patoliya, Susheel Kumar, <b>Sunil Mohapatra</b> and S. Deepika	May, 2019	05	16	Dairy Planner
5.	Common Respiratory Diseases in Poultry	Sameni Deepika and <b>Sunil Kumar Mohapatra</b>	Feb., 2020	02	22	Poultry Planner
6.	New Insights into the Diagnostic and Treatment Approaches for Subclinical Endometritis in Cattle	Nilendu Paul, <b>Sunil Kumar Mohapatra</b> and Abhishek Paul	Feb., 2020	04	IX	Raksha Technical Review
7.	The dichotomy of heat stress and its effect on dairy animals	Neela Madhav Patnaik, Parag Acharya, Bibhudatta S.K. Panda, <b>Sunil Kumar Mohapatra</b> and Arghyadeep Das	Jun., 2020	05	--	Pashusandesh
8.	Antimicrobial Use in Dairy Sector and Resistance Issue: No Action Today, No Cure Tomorrow!	Neela Madhav Patnaik, Bibhudatta S.K. Panda, Arghyadeep Das and <b>Sunil Kumar Mohapatra</b>	Jul., 2020	03	01	Food and Scientific Reports
9.	Immunomodulatory	<b>Sunil Kumar Mohapatra</b> ,	Sep.,	01	01 (6)	The

	properties of colostrum of dairy animals	Bibhudatta S. K. Panda, Dheeraj Chaudhary, Aarti Kamboj and Ajay Kumar Dang	2020			Marketeters
10.	दूध के दैहिक कोशिकाओं की गिनती से दूध की गुणवत्ता में सुधार और दूध के निर्यात में वृद्धि	बिभुदत्त सामंत कुमार पंडा, <b>सुनील कुमार मोहपात्रा</b> , आरती कम्बोज, अजय कुमार डंग	Sep., 2020	01	01 (6)	The Marketeters
11.	Ethics related to use of animals in biotechnology	Barathiraja S., Mathivathani C and <b>Sunil Kumar Mohapatra</b>	April., 2022	02	24	Dairy Planner
12.	Gout in Poultry	Barathiraja S., <b>Sunil Kumar Mohapatra</b> and R. Sumanth Kumar	May., 2022	02	24	Poultry Planner
13.	Heat stress and strategies to mitigate heat stress in dairy cattle	<b>Sunil Kumar Mohapatra</b> , Sameni Deepika, Md. Mofijul Islam and Sanjeev Kumar	July., 2022	04	24	Dairy Planner

## AWARDS & RECOGNITION

S. No.	Name and Year of Award/ Medal/Fellowship/Scholarship	Awarding Institute/ body	Year of Award
1.	2016 batch M.V.Sc. topper and awarded with <b>merit certificate for academic excellence</b> in NDRI, Karnal, Haryana.	ICAR-NDRI	2019
2.	Awarded with <b>Junior Research Fellowship (JRF)</b> during M.V.Sc. programme.	ICAR	2016
3.	Awarded with <b>second best poster</b> award in XXIII Annual Conference of IAAVR & National Symposium	Dept. of Clinical Medicine, College of Veterinary Science and Animal Husbandry, OUAT, Bhubaneswar	2016
4.	Awarded <b>merit certificate</b> in state level science quiz competition	Regional Science Centre, Bhubaneswar	2011
5.	Awarded <b>merit certificate</b> in <b>National level science</b>	Unified Council	2011

	talent search examination, 2011		
6.	School and city topper in 13 <sup>th</sup> National Science Olympiad, 2010 and received gold medal for the excellence.	National Science Olympiad	2010
7.	School and city topper in 12 <sup>th</sup> National Science Olympiad, 2009 and received gold medal for the excellence.	National Science Olympiad	2009

### EMPLOYMENT RECORD (Starting from the Present Position)

S.No.	Designation	Pay Scale/ Pay Band with Grade Pay	Name of University/ Institute	Period (From - To)	Duration (Years & Months)
1.	Assistant Professor	Rs. 15600- 39100 + AGP Rs. 6000	Institute of Veterinary Sciences and Animal Husbandry (IVS&AH), Siksha 'O' Anusandhan, Bhubaneswar-751003	01-06-2022 to Till continue	3 months
2.	Assistant Professor (On contract)	Rs. 57700/- (Consolidated pay)	Rajiv Gandhi Institute of Veterinary Education and Research (RIVER), Kurumbapet, Puducherry, 605009	01-10-2021 to 31-05-2022	8 months

### LANGUAGES KNOWN

- ✓ English, Hindi and Odia.

### ACHIEVEMENTS & EXTRA CURRICULAR ACTIVITIES

- Secured first position in Western dance in 23<sup>rd</sup> All India inter-university youth festival, 24<sup>th</sup> - 26<sup>th</sup>, April 2018 held at ICAR-NDRI, Karnal.
- Participated in various intra university cultural events and declared runner up in duet dance.
- Took distinguished part in the annual and Farewell function at College of Veterinary Science and Animal Husbandry, OUAT, Bhubaneswar, Odisha.

### HOBBIES/PERSONAL ATTRIBUTES

- ✓ Good team worker and gregarious.



- ✓ Playing basketball and badminton.
- ✓ Singing, dancing and listening to music.

**Declaration:** I hereby declare that all the above given information are true to the best of my knowledge and belief.

*Sunil Kumar Mohapatra*  
(Sunil Kumar Mohapatra)