

## **CURRICULUM VITAE**

Name : **DR. PURBAJYOTI SAIKIA**  
Educational Qualification : M.Sc. (Gold Medalist), Ph.D  
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**Corresponding Address** : Dr. Purbajyoti Saikia  
Department of Zoology  
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### **Area of Research:**

Molecular Reproduction (female) in laboratory model system (Mice/Rat); Indigenous traditional herbal medicines especially in north east India for reproduction regulation; Natural product as reproduction modulator, Isolation of phytocompound (phytosteroids) and its effects on implantation, decidualization and female reproductive cycle. Study on effects of the phytocompound(s) on expression of protein/peptide, Growth factors; mechanism of action of the phytocompound(s) in uterine tissues and embryonic tissues during early gestation (periimplantation) period.

**Title of Ph.D Research** : A study on expression pattern of Vascular Endothelial Growth Factor (VEGF) in uterine tissues and fetal maternal interface during periimplantation (day1 to Day8 of gestation) in albino mice.

**Teaching** : Assistant Professor of Zoology (from January, 2020 to present)  
Institute: Dhemaji College, Dhemaji, Assam, India

### **Professional Experience:**

- i. JRF in DBT sponsored project entitled “Developing a digital database of medicinal plants used as food in north east India” in the Department of Zoology, Rajiv Gandhi University, Itanagar, Arunachal Pradesh from December, 2008 to December, 2009.
- ii. JRF in University Grants Commission (UGC), New Delhi sponsored Center with Potential for Excellence in Biodiversity (CPEB), Rajiv Gandhi University, Itanagar, Arunachal Pradesh from February, 2012 to August, 2016.
- iii. Post Doctoral Research Associate (RA) in University Grants Commission (UGC), New Delhi sponsored Center with Potential for Excellence in Biodiversity (CPEB), Rajiv Gandhi University, Itanagar, Arunachal Pradesh from September, 2016 to August, 2017.

### **Editorial Membership:**

- i. **Associate Editor** of “**Journal of BioResources**” a UGC-CARE recognized peer reviewed scientific journal published by CPEB of Rajiv Gandhi University (A Central University), Itanagar, Arunachal Pradesh, India from 2016 to 2019.
- ii. **Editor** of “**Journal of Basic Research in Science, Arts and Humanities**” a peer reviewed multi-disciplinary research journal published by Dhemaji College, Assam, India.
- iii. **Editorial Member** of “**Biodiversity Newsletter**”, a quarterly published scientific bulletin published by CPEB, Rajiv Gandhi University (A Central University), Itanagar, Arunachal Pradesh, India from 2015-2019.

### **Professional Membership:**

- i. Life Member of Indian Society for the Study of Reproduction & Fertility (ISSRF, INDIA) from 2013 to present.
- ii. Life Member of Zoological Society of Assam (ZSA) from 2020 to present.
- iii. Life member of Red Cross Society, India

### **Awards & Fellowships:**

2006      Gold medal in M.Sc (Zoology) from Rajiv Gandhi University (RGU)

2012	JRF in CPEB-II, RGU, India
2016	Post Doctoral Research Associate (RA) in CPEB-II, RGU, India
2017	State Level Eligibility Test (SLET) for Lectureship in NE.

### **International/National Seminar/ Symposium/ Workshop attended:**

1. Hands on training on Reproductive Biomedicine, October, 16-25, 2010, National Institute of Health and Family Welfare (NIHFW), New Delhi, India.
2. International symposium on current trends in endocrine and reproductive health, SRBCE, February 10- 12, 2011, University of Mysore, India.
3. International congress on embryo implantation and pregnancy: Intricacies and strategies for its success, March 9-11, 2015, NII, New Delhi, India.
4. International conference on reproductive health with emphasis on occupational, environmental and life style factors, February 18-20, 2016, National Institute of Occupational Health (NIOH), Ahmedabad, India.

### **Publications:**

#### **Books : 3 nos**

- i. Food plants as medicine: Eternal panacea for human health. ISBN: 978-81-287-0028-6.
- ii. Traditional medicine of Tai Khamti of Arunachal Pradesh. ISBN: 978-81-287-0027-9.
- iii. A Textbook of Animal Physiology. ISBN: 978-93-272-9451-4.

### **List of Publications:**

#### **A. Research articles:**

1. **Purba J. Saikia**, Dimpimoni Das, Daniel Mize, Moushumi Das, Hirendra N. Sarma  
Spatiotemporal expression of Vascular Endothelial Growth Factor-C in mice fetal-maternal tissues during periimplantation (D4–D7). Middle East Fertility Society Journal (Elsevier). 2017; 22: 115-124. ISSN: 2090-3251.

2. Moushumi Das, **Purba Jyoti Saikia**, Hirendra N Sarma. Crude bark extract of *dysozylum alliarium* induces alterations in histological structures and VEGF-C expression in uterus during days 4-7 of gestation in albino rat. *Reproductive Medicine and Biology* (Springer). 2013; 12 (3): 85-98. ISSN: 1447-0578.
3. Daniel Mize, **Purba Jyoti Saikia**, Hirendra N Sarma. Expression of Insulin-like Growth factor-I in uterus is ovarian steroid dependent : An In-situ immunohistochemical study in rat. *Journal of Reproduction and Contraception* (Elsevier). 2012; 23(4): 222-236. ISSN: 1001-7844.
4. Dimpimoni Das, **Purba J Saikia** & Hirendra N Sarma. Immuno-localization of Vascular Endothelial Growth factor-C (VEGF-C) and its receptor (Flk-1/KDR) in preimplantation mice uterus: An *in situ* investigation. *Journal of Bioresources*. 2018, 5(2): 33-43. ISSN: 2394-4315.
5. Ajit Hazarika, **P.J. Saikia** & H.N. Sarma. *Polygonum hydropiper* crude root extract estrogenic effects on uterine DNA content in female albino rat. *Indian Journal of Fundamental and applied Life Sciences*. 2011, 1 (4): 112-116. ISSN: 2231-6345.
6. Doje Tana, **Purba J. Saikia**, Hiranmaya Sharma and Hirendra N Sarma. Traditional Hunting & Trapping Practices Among The Nyishi Tribe Of Arunachal Pradesh And Its Impact On Biodiversity. *Journal of Bioresources*. 2014, 1(1): 25-32. ISSN: 2394-4315.
7. Anju Jaishi, Moushumi Das, **Purba J Saikia** and Hirendra N Sarma. Secondary Root Extract Of *Piper Betleoides* Causes Changes In Structural Organization Of Graafian Follicle And Uterine Epithelium In Rat During Estrus And Early Gestational Period. *Journal of Bioresources*. 2015 2(1): 40-49. ISSN: 2394-4315.
8. P. Mothilal Yuvaraja, Neelam Yania, Sanjay Talukdar, **Purba J. Saikia** and Hirendra N. Sarma. Field study on Herpetofauna in Arunachal Pradesh: The Eastern Himalayan Biodiversity Hot Spot, India. 2016. *Journal of Bioresources* 3(2): 33-42. ISSN: 2394-4315.

9. Rakesh Miyu, Khamhee Wangsa, Indira Sarma, Upasha Gowala, **Purba Jyoti Saikia**, Hirendra N. Sarma. HPLC Fractionation of Crude Root Bark Extract of *Cynoglossum zeylanicum* and its Estrogenic Effects Evaluated by Vaginal Cornification Assay. 2016. *Journal of Bioresources* 4(1): 61-70. ISSN 2394- 4315
  
10. Choudhury S, Moulick D, **Saikia P**, Mazumder MK. (2020) Evaluating the potential of different inhibitors on RNA-dependent RNA polymerase of severe acute respiratory syndrome coronavirus 2: A molecular modeling approach. *Medical Journal Armed Forces India* (Elsevier). DOI: [10.1016/j.mjafi.2020.05.005](https://doi.org/10.1016/j.mjafi.2020.05.005). [ISSN: 0377-1237].
  
11. Wangsa K, Sarma I, **Saikia P**, Ananthakrishnan D, Sarma HN, Velmurugan D,. (2020). Estrogenic Effect of *Scoparia dulcis* (Linn) Extract in Mice Uterus and In Silico Molecular Docking Studies of Certain Compounds with Human Estrogen Receptors. *Journal of Reproduction and Infertility*. DOI: [10.18502/jri.v21i4.4329](https://doi.org/10.18502/jri.v21i4.4329). [ISSN: 2228-5482, eISSN: 2251-676X]
  
12. Das D., **Saikia P.**, Gowala, U., Sarma, H. (2020). Cell specific expression of Vascular Endothelial Growth Factor Receptor-2 (Flk-1/KDR) in developing mice embryo and supporting maternal uterine tissue during early gestation (D4-D7). *International Journal of Fertility and Sterility*. 15(2): 148-157 DOI: [10.22074/ijfs.2020.134530](https://doi.org/10.22074/ijfs.2020.134530). [ISSN: 2008-076X, eISSN: 2008-0778].
  
13. Juli Bairagi, **Purba J Saikia**, Freeman Boro, Ajit Hazarika (2022) A review on the ethnopharmacology, phytochemistry and pharmacology of *Polygonum hydropiper* linn. *Journal of Pharmacy and Pharmacology*. 74(5): 619-645. DOI:[10.1093/jpp/rgab175](https://doi.org/10.1093/jpp/rgab175). [ ISSN: 0022-3573, eISSN: 2042-7158]

14. Juli Bairagi, **Purba J Saikia**, Freeman Boro, Ajit Hazarika (2022) Fertility regulatory potential of *Persicaria hydropiper* (L.) Delarbre methanolic root extract in female albino mice: An insight into the phytochemicals present and role of the extract in contraception. *Saudi Pharmaceutical Journal*. 30(11) 1623-1638. DOI: 10.1016/j.jsps.2022.09.005 [ ISSN: 1319-0164, eISSN: 2213-7475]
15. Talukdar, K.R., **Saikia, P.** & Sarma, H.N. (2022) Kruppel-like factor 5 (Klf5) in fetal-maternal tissue during periimplantation and effects of ovarian steroid hormone antagonist on its expression during uterine receptivity of albino mice. *Middle East Fertil Soc J* . **27** (1) 1-17  
DOI: 10.1186/s43043-021-00092-1 [ISSN: 2090-3251]

#### **B. National/ International Seminar Presentation:**

1. National seminar on integrated approach in Zoological research and Biennial conference of zoological Society of Assam. Department of Zoology, Gauhati University, 30-31<sup>st</sup> March, 2017.
2. International Conference on Ecosystem responses to Global Environmental Changes and Their Impact. Devi Ahilya University, Indore, M.P. India. 16-18<sup>th</sup> February, 2017.
3. International Conference on Global Biodiversity, Climate Change and Sustainable Development. Rajiv Gandhi University. 15-18 October, 2016.
4. International conference on reproductive health with emphasis on occupational, environmental and life style factors, NIOH, Ahmedabad, India, February 18-20, 2016.
5. International congress on embryo implantation and pregnancy: Intricacies and strategies for its success. NII, New Delhi, India. March 9-11, 2015.
6. International conference on new developments in drug discovery. NIPER, Punjab, India, 2012.
7. International symposium on current trend in endocrine and reproductive health. SRBCE. University of Mysore, India. February 10- 12, 2011.

### **C. International/ National Seminar/Webinar attended**

1. National Webinar on “Humanism as a driver for Responsible Leadership” organised by IIHMR University on May 30, 2020.
2. Week Long Webinar series on “Biodiversity and climate change” jointly organised by Nature Learning Centre (NLC), Assam, Climate Change Cell, Assam and Assam Climate Change Management Society (ACCMS) from 1-5 June, 2020.
3. Webinar on “Time for Nature- Appreciate and Protect Biodiversity” organised by Department of Zoology, Biswanath College, Assam, India on June 5, 2020.
4. National Webinar on “Biodiversity Conservation of NE with Special Reference to Endangered Species Conservation” organised by Department of Zoology, Pragjyotish College, Assam, India on June 5, 2020.
5. Webinar on “BIOTECHNIQUES” organised by Department of Botany, Dhemaji College and collaboration with IQAC, Dhemaji College on July 20, 2020.
6. National Webinar on “COMBATING WILDLIFE AND FOREST CRIME IN NORTH EAST INDIA DURING & POST COVID PANDEMIC” organised by VIBGIOR FOUNDATION, ASSAM and Department of Zoology, Handique Girls’ College, Assam, India on July 27, 2020.
7. National Webinar on “Current scenario and future Challenges with Emphasis on Awareness about COVID-19 Pandemic” organised by The National Academy of Sciences India (NASI), Rajasthan Chapter on December 20, 2020.

### **National/International Seminar/Webinar organized**

1. Coordinator of National Webinar entitled “**Defying Evolution: Causes and Challenges**” on 6<sup>th</sup> of August, 2020, organized by Department of Zoology, Dhemaji College in collaboration with IQAC, Dhemaji College, Dhemaji, Assam, India.

### **Faculty Development Programme and Faculty Induction Programme attended**

1. Participated National Level one week Faculty Development Programme (FDP) organized by IQAC, Dhemaji College and IQAC, Dibrugarh University on the topic “Aspects of Pedagogical Re-Design and Online Teaching-Learning Process” from 15<sup>th</sup> July to 21<sup>st</sup> July, 2020.
2. Participated Faculty Induction Programme (FIP) organized by UGC-HRDC, Aligarh Muslim University, India from 17<sup>th</sup> July to 24<sup>th</sup> August, 2021.

**Declaration:** I do hereby declare that the particulars stated above are true, correct to the best of my knowledge and belief.

**Date:**  
**Place:**

**Purbajyoti Saikia**