CURRICULUM VITAE

Name:	Professor Arttatrana Pal	
Designation:	Professor	
School:	School of Life Sciences	
Department:	Department of Zoology	
Specialisation & Research Interests:	Metabolic Disease Biology and Therapeutics; Diabetic Neuropathy; Stem Cell Biology; Nanotechnology; Toxicology	
Email ID& **Webpage (if any):**	E-mail: arttatranapal@mgcub.ac.in arttatrana@yahoo.com	
Mobile No.:	08895760025	

2. ACADEMIC QUALIFICATION (in reverse Chronological order):

Degree	Year	University / Board
PhD	2006	Utkal University, Odisha
MSc	1999	Utkal University, Odisha
BSc	1996	Utkal University, Odisha
+2 (Intermediate)	1993	Council of Higher Secondary Education, Odisha
10+ (High School)	1991	Higher Secondary Education Odisha

3. ANY OTHER QUALIFICATION:

Nil

4. PROFESSIONAL EXPERIENCE:

Position Held	Duration	Organisation/Institute/University
Professor	23/08/2019 to till date	Mahatma Gandhi Central University, Bihar
Associate Professor	09/11/2016 to 22/08/2019	Mahatma Gandhi Central University, Bihar
Associate Professor	01/11/2015 to 05/11/2016	KIIT University, Bhubaneswar, Odisha
Assistant Professor	03/08/2010 to 31/10/2015	KIIT University, Bhubaneswar, Odisha
Research Associate	01/06/2007 to 02/08/2010	University of Colorado Denver, Colorado, USA
Research Fellow	16/11/2004-31/05/2007	Jawaharlal Nehru University (JNU), New Delhi, India
Research Fellow	01/06/2001-15/11/2004	Utkal University
Lecturer (on contract basis)	01/06/2000 to 31/05/2001	Post Graduate Department of Zoology, SCS College, Puri, Odisha

5. ADMINISTRATIVE ASSIGNMENTS:

Position Held	Duration	Nature of Work
Head of the Department-Zoology	September 18, 2019 to till date	Administrative activities

Head of the Department-Botany (I/C)	November 1, 2018 to September 17, 2019	Administrative activities
Centre Superintendent for the University Examinations, MGCU	Mid and End Semester Examinations	Examinations at MGCU
IQAC Member	October 10, 2019 to till date	Academic and administrative purpose
EC member	October 10, 2019 to till date	Academic and administrative purpose
AC Member	October 10, 2019 to till date	Academic and administrative purpose

6. COURSES TAUGHT:

- Cell Biology
- Molecular Biology
- Genetic Engineering
- Animal Physiology
- Animal Biotechnology

7. RESEARCH SUPERVISION:

A. Ph.D.:

i. Awarded : 04
ii. Submitted : 01
iii. Ongoing : 02

B. M.Phil.:

i. Awarded :0
ii. Submitted :0
iii. Ongoing :0

C. M.Tech/MSc.:

i.Awarded : 10
ii. Submitted :0
iii. Ongoing :0

8. CONTRIBUTION TO CORPORATE LIFE OF THE UNIVERSITY:

- EC member, MGCU

- AC member, MGCU
- IQAC member, MGCU
- Different committee chairmen
- Different committee member
- Head, Department of Zoology, MGCU
- Head (I/C) of the Department of Botany, MGCU
- Centre Superintendent for the University Examinations, MGCU
- Board of Studies (BOS) Chairmen, Department of Botany, MGCU
- BOS member for Department of Zoology, MGCU
- Vice-Chancellor nominee for BOS member of Department of Botany, MGCU
- Vice-Chancellor nominee for BOS member of Department of Chemistry, MGCU
- Nominee of the Vice-Chancellor for School Board of School of Life Sciences, MGCU
- Convener for Surgical Strike day celebration, MGCU
- Member of Space relocation Committee, MGCU
- Flying squared for the University Examinations at MGCU
- Member of the opening of Tender committee for MGCU
- Member of the rate contract committee for MGCU
- Convener in different committee for the Foundation Day celebration at MGCU
- Different Committee member in development of Mahatma Gandhi Central University
- BOS member at Department of Zoology, KISS, KIIT University
- Flying squared for the University Examinations at KIIT University
- Batch-Coordinator for different semester in BTech-MTech integrated programme, KIIT University
- Centre Coordinator for Mentor-Mentee programme at School at Biotechnology, KIIT University
- Entrance examination Observer for different centre all over India, KIIT University
- External Examiner for different examinations for different School and Universities
- Question setter and answer script evaluator for Different University throughout India.
- Examiner/answer script evaluator for Biological subjects for CBSE, NCERT examinations
- External subject Expert for recruitment of Faculty members at Department of Zoology, KISS, KIIT University
- External resource person for college level UGC programmes talk in different colleges of Odisha

- Chief Speaker, State level Science exhibition, Odisha
- Chief guest for Biotechnology Departmental Inaugural seminar function at different college level at Odisha
- Chief Speaker for DST-Inspire program at different Universities and colleges of Odisha
- Organizer a 2 days Conference at KIIT University, Odisha

9. MEMBERSHIP OF SOCIETIES/ PROFESSIONAL BODIES:

- Society of Toxicology (SOT), USA (International; 2008-present).
- The Association for Research in Vision and Ophthalmology, USA (International, USA, Regular member, 2009-present)
- Indian Science Congress, India (2011-present)

10. PUBLICATIONS:

A. BOOKS/MONOGRAPHS:

1. Authored:

i. Book Chapter: **Arttatrana Pal*** and Pramod C. Rath Metabolic Diseases and Aging. **Springer Nature**, 2020. [* Corresponding Author] (In Press)

B. PAPERS IN REFEREED/PEER REVIEWED JOURNALS:

[*Corresponding Author]

I. Huma Rizwan, Sweta Pal, Silpa Sabnam, **Arttatrana Pal*** (2020) High glucose augments ROS generation regulates mitochondrial dysfunction and apoptosis via stress signalling cascades in keratinocytes. ***Life Sciences***. 2020 Jan 15;241:117148. IF: 3.44.

II. Roy P, Rout AK, Sahoo DR, Panda SP, **Arttatrana Pal**, Maharana J, Nayak KK, Behera BK, Das BK. Molecular characterization constitutive expression and GTP binding mechanism in Cirrhinus mrigala (Hamilton, 1822) Myxovirus resistance (Mx) protein: A molecular dynamics approach. ***International Journal of Biological Macromolecules*** . 2019 Jun 23;136:1258-1272. IF: 4.78. ISSN: 0141-8130. IF: 4.78.

III. Silpa Sabnam, and **Arttatrana Pal*** (2019). Relevance of Erk1/2-PI3K/Akt signaling pathway in CEES-induced oxidative stress regulates inflammation and apoptosis in keratinocytes. ***Cell Biology Toxicolog,*** 2019 Feb 25. doi: 10.1007/s10565-019-09467-7. [IF= 5.09]

IV. Sebaranjan Biswal, Huma Rizwan, Sweta Pal, Silpa Sabnam, Preetinanda

Parida and **Arttatrana Pal*** (2019). Oxidative stress, antioxidant capacity, biomolecule damage, and in!ammation symptoms of sickle cell disease in children. ***Hematology,*** 16:1-9. [IF= 1.47]

V. G Nageswar Rao, Silpa Sabnam, Sweta Pal, Huma Rizwan, Bhaskar Thakur and **Arttatrana Pa*** (2018). Prevalence of ocular morbidity in the Eastern India among children aged seventeen years and younger. ***Clinical Ophthalmology***, 2018:12 1645–1652. [IF= 1.6]

VI. Huma Rizwan, Jagdeep Mohanta, Satyabrata Si and **Arttatrana Pal*** (2017). Gold nanoparticles reduces high glucose-induced oxidative-nitrosative stress regulated inflammation and apoptosis via Tuberin-mTOR/NF-κB pathways in macrophages**.** ***International Journal of Nanomedicine*** 2017:12: 5841–5862. [IF=5.1]

VII. Premranjan Kumar, Thiagarajan Raman, Mitali Madhusmita Swain, Rangnath Mishra, and **Arttatrana Pal*** (2017). Hyperglycemia-induced Oxidative-nitrosative Stress Induces Inflammation and Neurodegeneration via Augmented Tuberous Sclerosis Complex-2 (TSC-2) Activation in Neuronal Cells. ***Molecular Neurobiology***, 54(1):238-254. [IF=6.39**]**

VIII. Satish Sagar, Soumya Ranjan Parida, Silpa Sabnam, Huma Rizwan, Sweta Pal, Mitali Madhusmita Swain, and **Arttatrana Pal*** (2017) Increasing NO level regulates apoptosis and inflammation in macrophages after 2-chloroethyl ethyl sulphide challenge. **The International Journal of Biochemistry & Cell Biology.** 83:1-14. [IF=4.9]

IX. Satyabrata Si; Arttatrana Pal; Jagdeep Mohanta. (2017). Gold Nanostructure Materials in Diabetes Management. **Journal of Physics D: Applied Physics. 50** (2017) 134003 (15pp). [IF=2.8]

X. Premranjan Kumar, Mitali M Swain, **Arttatrana Pal*** (2016). Hyperglycemia-induced Inflammation Caused Down-Regulation of 8-oxoG-DNA Glycosylase Levels in Macrophages is mediated by Oxidative-nitrosative Stress-dependent Pathways. ***International Journal of Biochemistry and Cell Biology*** 73 (2016) 82–98. [IF=4.9]

XI. Bhakti Patel, Premranjan Kumar, Rajanya Banerjee, Madhubanti Basu, **Arttatrana Pal**, Mrinal Samanta and Surajit Das (2016). Lactobacillus acidophilus attenuates Aeromonas hydrophila induced cytotoxicity in Catla thymus macrophages by modulating oxidative stress and inflammation. ***Molecular Immunology***, 75:69-83. (July 2016) [IF=3.8]

XII. Pragyan Roy, Soumya P Panda, **Arttratrana Pal,** Sudhanshu S Mishra, P Jayasankar, Basanta Das (2016). Ontogenetic profile of Antiviral Mx gene and its role in innate immunity in Mrigal, Cirrhinus mrigala (Hamilton 1822)". ***Aquaculture Research***. 48(6): 3230–3243 (1 August 2016) [IF=1.5]

XIII. Pragyan Roy, Soumya P Panda, **Arttratrana Pal,** Sudhanshu S Mishra, P Jayasankar, Basanta Das (2016). Expression of MX gene in *Cirrhinus mrigala* (hamilton, 1822) to OMPC protein of *Aeromonas hydrophila* and bacterial infection. ***Applied Biochemistry and Biotechnology***. 178(4):640-653. [IF=2.5]

XIV. Amaresh Mishra, Subrat Kumar Mohanty, Madhabananda Kar, **Arttatrana Pal.** (2016). Usefulness of diagnostic laparoscopy over CECT abdomen in assessing operability in gastrointestinal malignancy. ***Journal of Evolution of Medical and Dental Sciences*,** 2016;5(56):3830-3835.

XV. Anson Snow, Biehuoy Shieh, Kun-Che Chang, **Arttatrana Pal**, Patricia Lenhart, David Ammar, Philip Ruzycki, Suryanarayana Palla, G. Bhanuprakesh Reddy, and J. Mark Petrash. (2015). Aldose Reductase expression as a risk factor for cataract. ***Chemico-Biological Interactions*** 234:247-53. [IF=3.0]

XVI. Partha Bandyopadhyay, Snehasish Mishra, Biplab Sarkar, Saroj Kumar Swain, **Arttatrana Pal**, Prangya Paramita Tripathy and Sanjay Kumar Ojha. (2015). Dietary *Saccharomyces cerevisiae* boosts growth and immunity of IMC *Labeo rohita* (Ham.) juveniles. ***Indian Journal of Microbiology*** 55(1): 81-87. [IF: 0.98]

XVII. Satish Sagar, Premranjan Kumar, Reena Rani Behera and **Arttatrana Pal*.** (2014). Effects of CEES and LPS synergistically stimulate oxidative stress inactivates OGG1 signaling in macrophage cells. ***Journal of Hazardous Materials* 27**8: 236–249. [IF=6.57]

XVIII. Premranjan Kumar, G Nageswar Rao, Bibhuti Bhusan Pal, and **Arttatrana Pal*.** (2014). Hyperglycemia-induced oxidative stress induces apoptosis by inhibiting PI3-kinase/Akt and ERK1/2 MAPK mediated signaling pathway causing downregulation of 8-oxoG-DNA glycosylase levels in glial cells. ***The International Journal of Biochemistry and Cell Biology*** 53C:302-319. [IF=4.9]

XIX. Anupam Samanta, Premranjan Kumar, Sanghamitra Machhua, G Nageswar Rao, and **Arttatrana Pal*.** (2014). Incidence of cystoid

macular edema in diabetic patients after phacoemulsification and free radical link to its pathogenesis. ***British Journal of Ophthalmology*** 98(9):1266-72. [IF=3.9]

XX. Sunil C Pradhan, Ajaya K Patra and **Arttatrana Pal*.** (2014). Hematological and Plasma Chemistry of Indian major carp, *Labeo rohita* (Hamilton, 1822). ***Journal of Applied Ichthyology*** 30(1): 48–54. [IF: 0.774]

XXI. Siba Prasad Parida, Sushil K Dutta and **Arttatrana Pal*.** (2014). Hematology and plasma biochemistry of wild-caught Indian cobra *Naja naja* (Linnaeus, 1758). ***Journal of Venomous Animals and Toxins including Tropical Diseases*** 15; 20(1):14. [IF=1.8]

XXII. Biplab Sarkar, Arabinda Mahanty, Ashis Saha, **Arttatrana Pal**, Partha Bandyapadhyay, Sampad Kumar Sarkar, Subhendu Adhikari, S. Ayyappan (2014). Impact of Cypermethrin and Carbofuran on the Ovarian Cycle of the Indian Major Carp, Labeo rohita (Hamilton). ***Proceedings of the*** **National Academy** ***of Sciences,*** **India**.84 (4): 989-996. [IF: 0.39]

XXIII. Sunil C Pradhan, Ajaya K Patra and **Arttatrana Pal*.** (2014). Seasonal analysis of the biochemical composition of muscle and liver of *Catla catla* in a tropical climate of India. ***Comparative Clinical Pathology*** 24: 593-603. [IF=0.47]

XXIV. Sunil Chandra Pradhan, Ajya Ku Patra and **Arttatrana Pal*.** (2014). Hematological and plasma biochemistry in *Cirrhinus mrigala* (Hamilton 1822). ***Comparative Clinical Pathology*** 23(3): 509-518. [IF=0.47]

XXV. Tariq Bhat, Dhanya Nambiar, Dhanir Tailor, **Arttatarana Pal**, Rajesh Agarwal, and Rana Singh (2013). Acacetin inhibits in vitro and in vivo angiogenesis and down-regulates Stat signaling and VEGF expression. ***Cancer Prevention Research*** 10:1128-39. [IF=5.2]

XXVI. Siba Prasad Parida, Sushil K. Dutta and **Arttatrana Pal*.** (2013). Hematology and plasma chemistry of wild Keeled Indian Mabuya, *Eutropis carinata* (Schneider 1801). ***Comparative Clinical Pathology***, 22(5): 869-873. [IF: 0.47]

XXVII. Tariq A Bhat, Nambiar D, **Arttatrana Pal,** Rajesh Agarwal and Rana P Singh. (2012). Fisetin Inhibits Various Attributes of Angiogenesis in

vitro and in vivo - Implications for Angioprevention. ***Carcinogenesis*** 33(2):385-93. [IF=5.6]

XXVIII. G Nageswar Rao, Khageswar Rout and **Arttatrana Pal*.** (2012) Central retinal artery occlusion and third cranial nerve palsy following nasal septoplasty. ***Case Report in Ophthalmology*** 3:321–326. [IF: 0.78]

XXIX. Siba Prasad Parida, Sushil K. Dutta and **Arttatrana Pal*** (2012). Hematological and Plasma Biochemistry in *Psammophilus blanfordanus* (Sauria: Agamidae). ***Comparative Clinical Pathology***, 21(6):1387-1394. [IF: 0.47]

XXX. Sunil Chandra Pradhan, Ajya Ku Patra and **Arttatrana Pal*.** (2011) Seasonal changes in hematological parameters of *Catla catla* (Hamilton). ***Comparative Clinical Pathology,*** 21(6):1473-1481. [IF: 0.47]

XXXI. **Arttatrana Pal***, Mitali Madhusmita Swain and Swapnananda Rath (2011). Reproduction and sexual dichromatism in *Sitana ponticeriana* (Reptilia: Draconinae: Agamidae). ***Taprobanica: The journal of Asian Biodiversity*** 3(1): 31-38.

XXXII. G Nageswar Rao, Suresh Chandra Dash, Gayatri Kanungo and **Arttatrana Pal*.** (2011). Bilateral exudative multifocal retinal detachment: An unusual presentation of accelerated hypertension with obstructive uropathy. ***International Journal of Case Reports and Images*** 2(1 2):1 5-1 8.

XXXIII. **Arttatrana Pal,** Kameswaran Ravichandran, and Ravichandran Ramanibai (2010). Effect of indirubin-3-monoxime against lung cancer as evaluated by histological and transmission electron microscopic studies. ***Microscopic Research and Techniques*** 73(11):1053-1058. [IF=1.7]

XXXIV. **Arttatrana Pal*,** Mitali Madhusmita Swain and Swapnananda Rath (2010). Growth and demography of fan-throated lizard, *Sitana ponticeriana* (Sauria: Agamidae) from a tropical environment in India. ***The Herpetological Bulletin, London*** 111: 25-35.

XXXV. **Arttatrana Pal*,** Mitali Madhusmita Swain and Swapnananda Rath (2010). Observations on microhabitat use and activity patterns in *Sitana ponticeriana* (Sauria: Agamidae). ***Russian Journal of Herpetology, Russia*** 17 (1): 22-30. [IF:0.4]

XXXVI. **Arttatrana Pal,** Neera Tewari-Singh, Mallikarjuna Gu, Chapla Agarwal, Jie Huang, Brian J. Day , Carl W. White, Rajesh Agarwal (2009). Sulfur mustard analog induces oxidative stress and activates signaling cascades in SKH-1 hairless mouse skin. ***Free Radical Biology and Medicine*** 47 (2009) 1640–1651. [IF=5.96]

XXXVII. Neera Tewari-Singh, Sumeet Rana, Mallikarjuna GU, **Arttatrana Pal**, David J. Orlicky, Carl W. White and Rajesh Agarwal (2009). Primary inflammatory biomarkers of sulfur mustard analog 2 chloroethyl ethyl sulfide (CEES)-induced skin injury in SKH-1 hairless mouse. ***Toxicological Sciences*** 108(1):194-206. [IF=4.8]

XXXVIII. **Arttatrana Pal*,** Mitali Madhusmita Swain and Swapnananda Rath. (2009). Long Bone Histology and Skeletochronology in a Tropical Indian Lizard, Sitana ponticeriana (Sauria: Agamidae). ***Current Herpetology*** 28(1): 13–18.

XXXIX. **Arttatrana Pal***, Siba Prasad Parida and Mitali Madhusmita Swain (2008). Hematological and Plasma Biochemistry in Fan-throated Lizard, *Sitana ponticeriana* (Sauria: Agamidae). ***Russian Journal of Herpetology, Russia*** 15(2): 110-116. [IF:0.4]

XL. **Arttatrana Pal***, Mitali Madhusmita Swain and Swapnananda Rath. (2007). Seasonal variation of diet in the Fan-Throated Lizard, *Sitana ponticeriana* (Sauria: Agamidae). ***Herpetological Conservation and Biology*** 2 (2): 145-147. [IF:0.59]

XLI. Swapnananda Rath and **Arttatrana Pal*.** (2007). Age determination in Fan-Throated Lizard, *Sitana ponticeriana* (Cuvier). ***Indian Journal of Gerontology*** 21(1): 1-8.

XLII. Amaresh Mishra, Subrat Kumar Mohanty, Sakti Prasad Sahoo, and **Arttatrana Pal,** (2015). Evaluation of usefulness of laparoscopic subtotal cholecystectomy in complicated cholecystitis. ***MedPulse – International Medical Journal*** 2(6):342-345.

C. RESEARCH PAPERS IN EDITED AND PEER REVIEWED CONFERENCES:

i. ……Nil

11. INVITED TALKS:

1. **ArttatranaPal**, Sweta Pal, G Nageswar Rao, Soumya Ranjan Parida, Premranjan Kumar, Satish Sagar, Anupam Samanta. Exploiting IRF-3 signaling via tuberin/mTOR pathway: Oxidative stress mediated mitochondrial dysfunction and diabetic retinopathy. International Conference on Mitochondria in Health and Disease. February10-11, 2017. School of Life Sciences, Jawaharlal Nehru University, New Delhi, India.

2. G Nageswar Rao, Premranjan Kumar, Bikash ranjan Sahoo, and **Arttatrana Pal**. Hyperglycemia induces oxidative stress and activates signaling cascades a new mechanism for diabetic retinopathy. The 8th International Symposium of Ophthalmology. Hong Kong. December 14-16, 2012.

3. **Arttatrana Pal** and J. Mark Petrash. Up-regulation of MAPK signaling by Aldose Reductase (AKR1B1) deregulate the normal cell functions in Eye. International Symposium on Recent Advances in Cancer Research: Therapeutics to Chemoprevention" at Central University of Gujarat (CUG), Gandhinagar, India during 8-9th Feb-2012.

4. **Arttatrana Pal** and J. Mark Petrash. Aldose reductase (AKR1B1): MAPK signaling and lens abnormalities. International Conference on Cell Signaling and Diseases. KIIT University, India, October 29-30, 2010.

5. **Arttatrana Pal**, Neera Tewari-Singh, Mallikarjuna Gu, Carl W. White and Rajesh Agarwal. "*Exposure to CEES induces oxidative stress and produces an inflammatory response in SKH-1 hairless mouse skin*". 48th Annual Meeting of the Society of Toxicology, Baltimore, Washington, USA, March 16 th -20 th, 2009.

6. Jyothi Ramanathan, **Arttatrana Pal**, and Pramod C. Rath *"Interferon Regulatory Factor (IRF-1 and IRF-2) as links between Inflammation and cancer and potential target for natural target for natural products".* 2nd International symposium on Translational Research on Natural Products and Cancer. Fariyas Holiday Resort, Lonavala, Mumbai, India, December 9 th -12 th, 2007.

7. **Arttatrana Pal**, Jyothi Ramanathan and Pramod C. Rath "*Alterations in interferon regulatory factors (IRF-1, IRF-2) in response to lipopolysaccharide (LPS) in mouse liver"*. Society of Biological Chemists (India) 75th Annual Meeting, J.N.U., New Delhi, India, 8th -11th December 2006.

8. **Arttatrana Pal**, Swapnananda Rath and Shushil Ku. Dutta *"Population Dynamics of Sitana ponticeriana (Sauria: Agamidae) in Konark-Balukhanda Wildlife Sanctuary, Orissa".* National Conference on Innovations and Prospects in Life Sciences, Pt. Ravisankar Sukla University, Raipur, Chhattisgarh, India,15th -17th December 2002.

9. **Arttatrana Pal** ***"****Diabetes".* DST–Inspire Internship Programme, April 28-May 02, 2011, KIIT University, Orissa, India.

10. **Arttatrana Pal** ***"****Diabetes and the Eye".* DST –Inspire Internship Programme, 26-30 April 2011, Sambalpur University, Orissa, India.

11. **Arttatrana Pal** "Genetic Engineering and Biotechnology". UGC Sponsored program. 13 March, 2011, School of Biotechnology, SVM Autonomous Govt. College, Cuttack, Orissa, India.

12. **Arttatrana Pal** ***"****Science: as you think a subject Biotechnology and Diseases".* DST –Inspire Internship Programme, 11-15 January 2011, School of Biotechnology, KIIT University, Bhubaneswar, India.

13. **Arttatrana Pal** *"Exposure to CEES induces oxidative stress and activation of signaling cascades in SKH-1 hairless mouse skin".* Rocky Mountain Lions Eye Institute, Department of Ophthalmology, School of Medicine, University of Colorado Denver, 12801 East 17th Avenue, PO Box 6511, Mail Stop 8131, Aurora, Colorado 80045,USA.

14. **Arttatrana Pal** ***"****Differntial leukocyte count on thin blood smears by Leishman'".* DST –Inspire Internship Programme, 20-24 October 2010, School of Biotechnology, KIIT University, Bhubaneswar, India.

15. **Arttatrana Pal** ***"****Science: as you think a subject Biotechnology and Diseases".* DST –Inspire Internship Programme, 11-15 January 2011, School of Biotechnology, KIIT University, Bhubaneswar, India.

16. **Arttatrana Pal** ***"****Extrachromosomal DNA isolation Strategies".* DST–Inspire Internship Programme, KIIT University

12. RESEARCH PROJECTS *(COMPLETED/ONGOING)*:

a) Oxidative damage to cell organelle and it relationship to diabetic retinopathy. No. 5/4/5-12/Diab.16-NCD-II, ICMR, India. [**2018-2021**] [on hold] **[Principal Investigator]**

b) Hyperglycemia-induced oxidative stress in diabetic complications in retina. (BT/PR14241/MED/30/423/2010). DBT, India. [2011-2014] **[Principal Investigator]**

c) 2-chloroethyl ethyl sulfide as part of the cytotoxicity: the underlying cellular and molecular mechanisms in mouse skin. 53/21/2010-CMB/BMS, ICMR, India. [2012-2015] **[Principal Investigator]**

13. PARTICIPATION IN SEMINARS/SYMPOSIA/WORKSHOPS/CONFERENCES:

1. Huma Rizwan, and **Arttatrana Pal** "Hyperglycemia increases oxidative stress and Mitochondrial Dysfunction through modulation of Erk/Akt/IRF-3 in keratinocytes". International Conference on Translational Research in Free Radicals, Micronutrients Antooxidants and Functional Food. February18-20, 2018. All India Institute of Medical Sciences, New Delhi, India

2. Sweta Pal,G.N. Rao, Soumya Ranjan Parida, Premranjan Kumar, Satish Sagar, Anupam Samanta, **Arttatrana Pal**. "Hyperglycaemia induced ROS accumulation regulates antioxidant inactivation trigger mitochondrial dysfunction and neurodegeneration in retinal cells. International Conference on Translational Research in Free Radicals, Micronutrients Antooxidants and Functional Food. February18-20, 2018. All India Institute of Medical Sciences, New Delhi, India

3. Silpa Sabnam, Satish Sagar, **Arttatrana Pal** "Exposure of CEES Augments metabolomic deregulation and Mitochondrial Dysfunction via oxidative stress in keratinocytes". International Conference on Translational Research in Free Radicals, Micronutrients Antooxidants and Functional Food. February18-20, 2018. All India Institute of Medical Sciences, New Delhi, India.

4. Satish Sagar, Soumya Ranjan Parida, and **Arttatrana Pal**. (2016). 78 - LPS Infection Increasing ROS Level Regulates Stress Signaling Cascades, Inflammation and Apoptosis in Keratinocyte after 2-Chloroethyl Ethyl Sulphide Challenge. Free Radical Biology and Medicine. Volume 100, Supplement, November 2016, Page S45 https://doi.org/10.1016/j.freeradbiomed.2016.10.119

5. Silpa Sabnam, Satish Sagar, **Arttatrana Pal** "Oxidative Stress-induced Mitochondrial Dysfunction and Metabolite Disregulation regulates Keratinocyte injuries after CEES Challenge". International Conference on Mitochondria in Health and Disease. February10-11, 2017. School of Life Sciences, Jawaharlal Nehru University, New

Delhi, India

6. Sweta Pal,G.N. Rao, Soumya Ranjan Parida, Premranjan Kumar, Satish Sagar, Anupam Samanta, **Arttatrana Pal**. "Hyperglycaemia induced oxidative free radicalstrigger mitochondrial stress primes inflammation and retinal degeneration. International Conference on Mitochondria in Health and Disease. February10-11, 2017. School of Life Sciences, Jawaharlal Nehru University, New Delhi, India

7. Huma Rizwan, **Arttatrana Pal** "Hyperglycemia Induced Mitochondrial DNA Damage and Dysfunction Regulates Inflammation and Keratinocytes Injury via MTOR/IRF-3 Pathway". International Conference on Mitochondria in Health and Disease. February10-11, 2017. School of Life Sciences, Jawaharlal Nehru University, New Delhi, India

8. Ajay Kumar Patra, Sunil C Pradhan and **Arttatrana Pal**. Studies on Sewage treatment by Duckweed (*Lemna minor*) based technology". Indian Science Congress, KIIT University, Bhubaneswar, India January3-7, 2012.

9. Premranjan Kumar, Reena Rani Behera, Mitali Madhusmita Swain, J. Mark Petrash and **Arttatrana Pal**. ERK1/2 Mitogen-Activated Protein Kinase signaling in ocular disease. Cell Biology Coference, NISER, Bhubaneswar, India December 18-20, 2011.

10. Diptikanta Acharya, Birendra K Bindhani, Gintanjali Mishra, Premranjan Kumar, Reena Rani Behera, Mitali Madhusmita Swain, G Nageswar Rao, MD and **Arttatrana Pal**. Oxidative stress in the development of diabetes: a case report. Cell Biology Coference, NISER, Bhubaneswar, India December 18-20, 2011.

11. Jyothi Ramanathan, **Arttatrana Pal** and Pramod C. Rath. Interferon Regulatory Factor-1 (IRF-1) Transcription Factor: Inflammation, Disease and Therapeutic Possibility. 1st International Symposium on Industry-Academia Interactions in Advanced Biotechnology & Drug Discovery New Delhi, India, Nov 22- 26, 2010.

12. **Arttatrana Pal**, Suryanarayana Pala, Philip Ruzycki, G. Bhanuprakash Reddy, J. Mark Petrash. Selective up-regulation of MAPK signaling by Aldose Reductase (AKR1B1). The Association for Research in Vision and Ophthalmology (ARVO), Florida, USA, May 2-6, 2010.

13. J. Mark Petrash, Suryanarayana Palla, **Arttatrana Pal**, Philip Ruzycki, Gregory Zablocki, and G. Bhanuprakesh Reddy. "*Lens*

abnormalities in aldo-keto reductase transgenic mice". USA, December 6-9, 2009.

14. Neera Tewari-Singh, Mallikarjuna Gu, **Arttatrana Pal**, Carl W. White and Rajesh Agarwal. "*Prophylactic and therapeutic efficacy of glutathione (GSH) against sulfur mustard analog CEES-induced skin injury*". 48th Annual Meeting of the Society of Toxicology, Baltimore, Washington, USA, March 16 th -20 th, 2009.

15. Tariq A Bhat, **Arttatrana Pal**, Rajesh Agarwal and Rana P Singh. "*Fisetin-a promising antiangiogenic phytochemical".* International Symposium on Novel Strategies for Targeted Prevention and Treatment of Cancer, School of Life Sciences, Jawaharlal Nehru University, New Delhi, India, December 19 th -20 th, 2008.

16. **Arttatrana Pal**, Neera Tewari-Singh, Sumeet Rana, Mallikarjuna Gu,Neera Chapla Agarwal, Carl W. White and Rajesh Agarwal. "*Sulfur mustard analog-caused activation of signaling cascades in SKH-1 hairless mouse skin".* Annual Retreat of Department of Pharmaceutical Sciences, University of Colorado Denver, Estes Park, Colorado, USA, June 5 th -6 th, 2008.

17. **Arttatrana Pal**, Neera Tewari-Singh, Sumeet Rana, Mallikarjuna Gu,Neera Chapla Agarwal, Carl W. White and Rajesh Agarwal..*"Sulfur mustard analog-caused activation of signaling cascades in SKH-1 hairless mouse skin".* 2nd Annual CounterACT Network Research Symposium, Washington, DC, USA, April 15 th -17 th, 2008.

18. **Arttatrana Pal**, Chapla Agarwal, Sumeet Rana, Mallikarjuna Gu, Neera Tewari-Singh, Carl W. White and Rajesh Agarwal. "*Sulfur mustard analog-caused activation of signaling cascades in SKH-1 hairless mouse skin".* 47th Annual Meeting of the Society of Toxicology, Washington State Convention & Trade Center in Seattle, Washington, USA, March 16 th -20 th, 2008.

19. **Arttatrana Pal**, Krishna Prakash, Jyothi Ramanathan and Pramod C. Rath *"Modulation of DNA-binding activity of Interferon Regulatory Factor-1 (IRF-1) and 2 (IRF-2)".* Society of Biological Chemists (India) 75th Annual Meeting, JNU, New Delhi, India, December 8 th -11 th, 2006.

20. AWARDS, FELLOWSHIPS & OTHER DISTINCTIONS:

Research Associate/Teaching and Research Faculty, School of Medicine, Department of Ophthalmology, University of Colorado Denver, Colorado, USA. [02/2009- 08/2011]

Research Associate/Teaching and Research Faculty, School of Pharmacy, Department of Pharmaceutical Sciences, University of Colorado Denver, Denver, Colorado, USA. [05/2007-02/2009]

Research Fellowship, School of Life Sciences, Jawaharlal Nehru University (JNU), New Delhi, India. [12/2006-05/2007]

Research Fellowship from the University Grants Commission (U.G.C.), School of Life Sciences, Jawaharlal Nehru University (JNU), New Delhi, India. [01/2004-11/2006]

Junior Research Fellowship (JRF) from the University Grants Commission (U.G.C.), Utkal University, Orissa, India. [06/2001-12/2003]

Lecture, Post Graduate Department of Zoology, S.C.S. College, Puri, Orissa, India. Subjects taught: General Zoology, Biochemistry and Molecular Biology. [06/2000-05/2001]

21. ANY OTHER SIGNIFICANT INFORMATION:

International Journal Article Review Board

- Oncotarget
- Molecular Neurobiology
- Neurological Research
- Journal of Cellular Physiology
- Experimental Dermatology
- Molecular Vision
- Journal of Hazardous Materials
- Journal of Food Science and Technology
- BMC Complementary and Alternative Medicine
- BMC Dermatology
- Journal of Physiology and Pharmacology
- Microbiology and Immunology
- Comparative Clinical Pathology
- Mini-reviews in Medicinal Chemistry