Dr. Dinesh Kumar Gautam

Assistant Professor, Department of Zoology Hansraj College, University of Delhi, Delhi- 110007

Email: gautamdk21@yahoo.co.in

Academic Qualification:

PhD from University of Delhi, awarded in 2007 Role of Oxidative Stress in the Regulation of Spermatogenesis in Rats (Holtzmann Strain)

M.Sc. in Zoology from Department of Zoology, University of Delhi in 2000

Specialization in M.Sc.: Reproductive Physiology/Endocrinology

B.Sc. (H) Zoology from University of Delhi in 1998

Honors and Scholarships:

CSIR-UGC: July 2000: Qualified for Lecturer ship (LS).

NET Exam

December 2000: Qualified for Junior Research Fellowship (JRF) and LS.

July 2001: Qualified for JRF and LS.

Nov 2003: promoted to Senior Research Fellowship (SRF).

Teaching Experience:

More than 14 years as Assistant Professor at Department of Zoology, Hans Raj College, University of Delhi, Delhi-110007

Research Paper Publications:

- 1. Ambika, Pradeep Pratap Singh, Satish Chand, <u>Dinesh Kumar Gautam</u>, Rishabh Kumar, Kritika Nagpal, Ritika Verma, Manika Mittal,Nidhi Kaushik, Simaranjeet Kaur, Niyati Piplani, Shubham Mukherjee, Sonal Gupta and Rajnish Rai (2016) Interaction studies of carbon monoxide and iron porphyrins in ionic liquids. DU Journal of Undergraduate Research and Innovation Volume 2, Issue 1 pp 13-19
- 2. <u>Dinesh K Gautam</u>, M.M.Misro, S P Chaki, Mahesh Chandra and N.Sehgal (**2007**) hCG treatment raises H₂O₂ levels and induces germ cell apoptosis in rat testis. **Apoptosis**, 12, 1173-1182
- 3. Chaki SP, Misro MM, <u>Gautam DK</u>, Kaushik M, Ghosh D and Chainy GBN (2006) Estradiol treatment induces testicular oxidative stress and germ cell apoptosis in rats. **Apoptosis** 11 (8), 1427-1437

- 4. <u>Dinesh K Gautam</u>, M.M.Misro, S P Chaki and N.Sehgal (**2006**) H₂O₂ at physiological concentrations modulates Leydig cell function inducing oxidative stress and apoptosis. **Apoptosis** 11 (1), 39-46
- 5. Chaki SP, Misro MM & Ghosh D, <u>Gautam DK</u> and Srinivas M (2005) Apoptosis and cell removal in cryptorchid rat testis. Apoptosis 10 (2), 395-405
- Misro MM, Chaki SP & <u>Gautam DK</u> (2005) Germ cell death and their removal during initial stages of testicular ischemia and cryptorchidism: A comparative analysis. <u>Indian J of Expt Bio</u> 43, Nov, 1080-1087
- 7. Misro MM, Choudhury L, Upreti K, <u>Gautam DK</u>, Chaki SP, A. S. Mahajan, R.Babbar (2004) Use of hydrogen peroxide to assess the sperm susceptibility to oxidative stress in subjects presenting a normal semen profile. **Int J Androl** 27: 82-87

Innovation Project (2013-15): HRC-205

Project Title: Developing a synthetic molecule imitating the properties of hemoglobin to reduce carbon monoxide emission from automobile exhaust.

Project Investigators: Dinesh Kumar Gautam Ambika and Satish Chand

The project was sanctioned from University of Delhi as Interdisciplinary Research Project.

Innovation Project (2015-16): HRC- 305

Project Title: Nutritional profiling and correlation with functional residue capacity in soldiers/volunteers

Project Investigators are Dr. Dinesh Kumar Gautam, Dr. Kaveri Chakrabarty and Dr. Satyakam Guha

The project was sanctioned from University of Delhi as Interdisciplinary Research Project.

Small Research Projects with students under DBT STAR College scheme

- 1. Supervised 9 students of B.Sc. (H) Zoology IIIrd year, Semester VI, FYUP batch (2016) for a research project entitled "Study of Bacterial Communities Present in Soil of Different Habitats". This project work was carried out under DBT Star College Scheme from Department of Biotechnology, Government of India.
- 2. Supervised 7 students of B.Sc. (H) Zoology IIIrd year, Semester V (2017) for a research project entitled "Isolation and Genomic Characterization of Soil Bacteria". This project work was carried out under DBT Star College Scheme from Department of Biotechnology, Government of India.

Orientation/Refresher Courses/Faculty Development Programme attended:

- 1. UGC-Sponsored **Orientation Programme** (**OR63**) jointly organized by Centre for Professional Development in Higher Education (CPDHE) and Institute of Life Long Learning (ILLL), University of Delhi held form July 12, 2010 to August 07, 2010
- 2. UGC- Sponsored **Refresher Course in Life Sciences** jointly organized by Centre for Professional Development in Higher Education (CPDHE) and Institute of Life Long Learning (ILLL), University of Delhi held form Feb 15th, 2011 to March 9th, 2011.
- 3. UGC- Sponsored **Refresher Course in Life Sciences** jointly organized by Centre for Professional Development in Higher Education (CPDHE) and Institute of Life Long Learning (ILLL), University of Delhi held form December 08th to 30th, 2014.
- 4. **Faculty Development Programme** on "Challenges before the Academia in the era of Gadgets, E-communication and Artificial Intelligence" organized by Mahatma Hansraj Faculty Development Centre (MHRFDC) HANSRAJ COLLEGE held at Hansraj College from December 15th to 28th, 2018.
- 5. **Faculty Development Programme** on "Emerging Trends in Research Methodology" organized by Mahatma Hansraj Faculty Development Centre (MHRFDC), Hansraj College in collaboration with Mata Sundri College for Women, University of Delhi held at Mata Sundri College for Women from **7**th **12**th October, **2019**.
- 6. Faculty Development Programme on "Recent Trends in Research Methodology, E-Content, Mathematical and Statistical Methods in Open Education World" organized by Mahatma Hansraj Faculty Development Centre (MHRFDC), Hansraj College in collaboration with Kalindi College, University of Delhi from 17th 23rd December, 2019.
- 7. Faculty Development Programme on "Fundamentals of Intellectual Property Rights" organized by Department of Botany and IQAC, Hansraj College under Mahatma Hansraj Faculty Development Centre (MHRFDC), Hansraj College, University of Delhi from 23rd to 25th January, 2020.

Workshops/Seminars/Conferences/Lectures attended:

- 1. Workshop on "Genetics, Genomics and Biotechnology" organized by Department of Zoology, University of Delhi, Delhi 110 007 from August 10-12, 2006.
- 2. Workshop on **Biology Laboratory Course** organized by Institute of Life Long Learning (ILLL) and Daulat Ram College, University of Delhi, Delhi held from September 2-4, 2008 at Daulat Ram College, Delhi.
- **3.** Face to Face **Learning for Content (L4C)-43-** Workshop on Open Educational Resources, WikiED'09 jointly organized by Acharya Narendra Dev College and University of Delhi South Campus with support from Commonwealth of Learning, Vancouver, held from April 13-17 2009.

- **4.** EASY NOW-2: A Workshop on Multimedia Content Development jointly organized by Acharya Narendra Dev College, University of Delhi and Commonwealth Educational Media Centre for Asia at ANDC held from April 20-25, 2009.
- 5. Training programme on Entrepreneurship Development in Mitigating Climate Change, held at Mahatma Gandhi Institute for Combating Climate Change (MGICCC), Bakoli, Alipur, Delhi, from Nov. 20-21, 2009.
- 6. "Bioinformatics: Unraveling Genes and Proteins, a workshop for Teachers", organized by the D S Kothari Centre for Research and Innovation in Science Education, Miranda House, University of Delhi, held from May 10-15, 2010.
- 7. Workshop on **Food, Nutrition and Health** for B.Sc. (Prog) Life Sciences Ist Year, jointly organized by Lady Irwin College, University of Delhi and Institute of Life Long Learning (ILLL) held at Lady Irwin College from Feb 10-12, 2011.
- 8. Academic Congress titled "Enabling the Young: Redefining Education" organized by the University of Delhi on September 6-7, 2012.
- 9. Participated in **Outreach activity** organized during the International congress on Chronobiology by the Indian Society for Chronobiology and Department of Zoology, University of Delhi on October 7th, 2012.
- 10. Attended a Lecture on Foldscope organized by Department of Biotechnology at Gargi College, University of Delhi on December 16th, 2015
- 11. Participated in the "Science Setu Workshop on DNA Fingerprinting" held at Hindu College, University of Delhi on January 22nd, 2016
- **12.** Participated in the **Indo-Portuguese Workshop on Emerging Trends of Nanotechnology in Chemistry and Biology (INCB 2016)**, February 12-13, 2016, organized by Department of Chemistry, Hans Raj College and Deshbandhu College, University of Delhi in association with Centro de Quimica da Madeira University da Madeira, PORTUGAL
- 13. Attended the **National Seminar on Role of Analytical Sciences in Sustainable Development** on March 4-5, 2016, organized by Department of Chemistry, Hans Raj College, University of Delhi in association with Indian Society of Analytical Scientists and Petrotech Society
- 14. Attended a seven days workshop on "Hands on Training in Basic Techniques in Genomics and Proteomics" held on 20.09.16 to 26.09.16 at St. Edmund's College, Shillong
- 15. Attended a one day Undergraduate Science Teacher's Workshop on "Developing Scientific Temper in Students: Tools and Techniques" held at Ramjas College, University of Delhi, Delhi on January 31st, 2017.
- 16. Participated as organizing committee member in the programme held on **World Water Day** organized by Millenium India Education Foundation, Haritima and Department of Botany, Hansraj College, University of Delhi at Hansraj College on March 22nd, 2017.

- 17. Attended the **DBT Star College Scheme: 7th Expert-cum-Coordinators Meet** organized by Doaba College, Jalandhar and sponsored by DBT at Doaba College, Jalandhar, Punjab on 11th 12th April, 2017.
- 18. Participated in the "STEM Teacher Training Workshop on Research Based Pedagogical Tools" held from 11th October 14th October, 2017 at Sacred Heart College, Kochi, Kerala. Workshop was jointly organized by the Department of Biotechnology (DBT), Govt. of India; Newton Bhabha Fund of the British Council; Center of Excellence in Science and Mathematics Education, IISER Pune (supported by the Ministry of Human Resource Development, Govt. of India) and Sacred Heart College, Kochi, Kerala. It was conducted by the experts from the Centre for Science Education, Sheffield Hallam University, UK.
- 19. Participated in the "National Conference on Technological Empowerment of Women Commemorating the International Women's Day" organized by The National Academy of Sciences, India (NASI) at Vigyan Bhawan, Delhi on 8th & 9th March, 2018.
- 20. Participated in the **India International Science Festival and National Science Teachers Congress** organized by Department of Biotechnology under Ministry of Science and Technology, Govt. of India from 5th to 8th October, 2018 at Indira Gandhi Pratishthan, Lucknow, U.P.

Online Webinar/Seminar/FDP/etc. attended:

- Faculty Development Programme: National Webinar entitled "Development of Higher Education in India: An Overview" organized by Guru Angad Dev Teaching Learning Centre, SGTB Khalsa College, University of Delhi under the Pandit Madan Mohan Malviya National Mission on Teachers and Teaching (PMMMNMTT) on April 16th, 2020.
- 2. One Day National Online Seminar on "Biorisk Assessment and Management: Preparedness for Future Researchers" being organized by Department of Biochemistry, Punjab University, Chandigarh on April 21st, 2020.
- 3. Faculty Development Programme: National Webinar entitled "Re-engineering Higher Education: A Seamless Knowledge Management System for the University" organized by Guru Angad Dev Teaching Learning Centre, SGTB Khalsa College, University of Delhi under the Pandit Madan Mohan Malviya National Mission on Teachers and Teaching (PMMMNMTT) on April 22nd, 2020.
- 4. One Day Webinar on "Teachers and Technology: The Road Ahead" being organized by Mahatma Hansraj Faculty Development Centre (MHRFDC) under the scheme Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT), Hansraj College, University of Delhi on April 25th, 2020.
- 5. Faculty Development Programme: National Webinar entitled "Towards Excellence in Higher Education in India in the 21st Century: Challenges and Opportunities" organized by Guru

- Angad Dev Teaching Learning Centre, SGTB Khalsa College, University of Delhi under the Pandit Madan Mohan Malviya National Mission on Teachers and Teaching (PMMMNMTT) on April 29th, 2020.
- 6. One day Webinar on "Leadership Role in Uncertain Times" being organized by Mahatma Hansraj Faculty Development Centre (MHRFDC) under the scheme Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT), Hansraj College, University of Delhi on April 30th, 2020.
- 7. One Day Webinar on "Strengthening the immune system through naturopathy" organized by the Department of Botany and Internal Quality Assurance Cell (IQAC), Hansraj College, University of Delhi on May 6th, 2020.
- 8. Three Day Webinar on "Covid 19: Challenges and Road Ahead" organized by Mahatma Hansraj Faculty Development Centre (MHRFDC) under the scheme Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT), Hansraj College, University of Delhi from May 7th 9th, 2020.
- 9. Webinar on "Biodiversity and Public Health" organized by Eco Club, Shivaji College, University of Delhi, (under the Aegis of IQAC) in collaboration with Society of Ecological Research and Natural Resources Management (SERNRM) to celebrate International Day for Biological Diversity on May 19th, 2020.
- 10. One Day Webinar on "ROLE OF ICC AND PREVENTION, PROHIBITION AND REDRESSAL OF SEXUAL HARASSMENT OF WORKMEN AT WORKPLACE" organized by Internal Complaints Committee (ICC) in collaboration with Internal Quality Assurance Cell (IQAC), Hansraj College, University of Delhi on May 22nd, 2020.
- 11. Webinar on "Basic Documentation for Teachers" organized in collaboration with IQAC, Hansraj College under the aegis of the UGC Paramarsh scheme on June 22nd, 2020.

Online Workshops attended:

- 1. Two Day Workshop on "Online Basic Training on Use of ICT in Teaching" conducted in Online Mode on April 20 and 23, 2020, organized by Teaching Learning Centre, Tezpur University under PMMMNMTT Scheme of Ministry of Human Resource Development, Government of India. held from April 20th to 23rd, 2020
- 2. "Effective and Efficient Online Teaching in the Age of Corona: A Hands-On Workshop" being organized on 17 May 2020, through IIT Bombay BodhiTree platform by The Teaching Learning Centre (TLC) at Indian Institute of Technology (IIT) Bombay funded by PMMMNMTT Scheme of Ministry of Human Resource Development, Government of India.
- 3. Workshop on "Empowering Educators with ICT Skills" organized by the Institute of Institutional & Industrial Research (IIIR), India from June 8th to 14th, 2020.
- 4. "The BodhiTree and SAFE Tools for Effective Online Teaching: A Hands-On Workshop" being organized on June 20th, 2020, through IIT Bombay BodhiTree platform by The Teaching

- Learning Centre (TLC) at Indian Institute of Technology (IIT) Bombay funded by PMMMNMTT Scheme of Ministry of Human Resource Development, Government of India.
- 5. A Five Days Online National level Faculty Development Programme on "ICT Based Teaching and Learning Process" organized by the Roorkee College of Polytechnic, Roorkee from July 1st to 5th, 2020.

Resource person/Organizer/Convener in Workshops/FDP/Conferences, etc:

- 1. **Resource person** in the "INSPIRE Internship Programme-2012" organized by Hans Raj College, University of Delhi, held from December 17-21, 2012.
- 2. **Treasurer** for the "National Conference on Relevance of Nanotechnology in Biology" on March 1st, 2013, held by Department of Botany and Zoology, Hans Raj College, University of Delhi.
- 3. **Convener** for the Workshop on "**Molecular Biotechnology Techniques**" held at Department of Zoology, Hans Raj College on March 21st to 23rd, 2013 under the DBT's Star College Scheme
- 4. **Convener** for the "Workshop for students on Bioinformatics" held at Department of Zoology, Hans Raj College on September 28th, 2015 under the DBT's Star College Scheme
- 5. **Convener** for the Workshop on "Model Organisms in Biological Sciences" held at Department of Zoology, Hans Raj College on December 14-21st, 2015under the DBT's Star College Scheme.
- 6. **Convener** for two days Workshop on "**Biotechnology Techniques**" held at Department of Zoology, Hans Raj College on $21^{st} 22^{nd}$ March, 2016 under the DBT's Star College Scheme.
- 7. **Convener** for the Workshop on "**Techniques in Immunology**" held at Department of Zoology, Hans Raj College on December 19th and 20th, 2016 under the DBT's Star College Scheme
- 8. **Convener** for the Workshop on "**Drosophila- as a model organism**" held at Department of Zoology, Hans Raj College on January 20th and 21st, 2017 under the DBT's Star College Scheme.
- 9. **Convener** for the Workshop on "**Zebrafish- as model organism**" held at Department of Zoology, Hans Raj College on February 21st and 22nd, 2017 under the DBT's Star College Scheme.
- 10. **Convener** for the Workshop on "Construction and Analysis of Phylogenetic Trees" held at Department of Zoology, Hans Raj College on February 23rd, 2017 under the DBT's Star College Scheme.
- 11. **Resource person** for "**TGT Science Workshop**" in Bal Bharati Teachers Training Center, Pitampura on 23rd May, 2017.

- 12. Convener for the Workshop on "Beekeeping Be a Bee" organized by the Department of Zoology, Hans Raj College under the DBT Star College Scheme at Department of Zoology, Hans Raj College on August 22nd, 2017.
- 13. Convener for the Interdepartmental Workshop on "Basic Blood and Biochemical Parameters of Human Health" organized by the Department of Zoology, Hans Raj College under the DBT Star College Scheme at Department of Zoology, Hans Raj College on September 07th, 2017.
- 14. Worked as a Coordinator for the "World Ozone day, 2017" conducted by Millennium India Education Foundation and Haritima- The Environmental Awareness Society, Hans Raj College at Hans Raj College on 16th September, 2017.
- 15. Convener for the Workshop on "Diagnostic Applications of Immunological Techniques" organized by the Department of Zoology, Hans Raj College under the DBT Star College Scheme at Department of Zoology, Hans Raj College on September 19th and 20th, 2017.
- 16. Worked in organizing committee as Treasure in the **INSPIRE Programme (DST)** held at Hansraj College, University of Delhi from 12th December, 2017 to 16th December, 2017
- 17. **Resource person** to give talk on "Preserving our Biosphere-Understanding Science Then and Now" as a part of a Project of Millennium India Education Foundation (MIEF) Calatysed & Supported by National Council for Science & Technology Communication (NCSTC) Division, Deptt. of Science & Technology, Govt. of India. This talk was given in different schools as below:

Vishwamitra Sarvodaya Kanya Vidhyalaya, Old Seema Puri, Delhi 82 on 23.01.2019 S.S.D. Saraswati Bal Mandir School, West Punjabi Bagh, Delhi on 06.02.19 Govt. Boys Sr. Sec. School, Karala, Delhi on 08.02.19

- 18. Organizing team member for **Faculty Development Programme** on "Agriculture, Health and Society" organized by Mahatma Hansraj Faculty Development Centre (MHRFDC) HANSRAJ COLLEGE held at Hansraj College from March 15th 16th, 2019.
- 19. Convener for the Workshop on "Hands on Training Programme for the Laboratory Staff" organized by the Internal Quality Assurance Cell (IQAC) and Department of Zoology, Hans Raj College at Department of Zoology, Hans Raj College on June 13th and 17th, 2019.
- 20. Coordinator for the Workshop on "Python for Biology" organized by the Department of Zoology, Hansraj College, University of Delhi on September 07th, 2019.

Other activities:

- 1. **Jury Member for INSPIRE AWARD** National Level Exhibition and Project Competition (NLEPC)-2012 organized by Department of Science and Technology on October 21-22, 2012
- 2. **Jury Member for INSPIRE AWARD** National Level Exhibition and Project Competition (NLEPC)-2013 organized by Department of Science and Technology on October 07-09, 2013.
- 3. **Jury Member for INSPIRE AWARD** National Level Exhibition and Project Competition (NLEPC)-2014 organized by Department of Science and Technology on December 07-09, 2014
- 4. **Jury Member for INSPIRE AWARD** National Level Exhibition and Project Competition (NLEPC)-2015 organized by Department of Science and Technology on December 6 and 7, 2015
- 5. **Jury Member for INSPIRE AWARD** National Level Exhibition and Project Competition (NLEPC)-2016 organized by Department of Science and Technology on December 10 and 11, 2016

Administrative duties in the College:

- 1. Member of various Staff Council Committees and participation in the activities organized by the committees.
- 2. Superintendent, Theory Examinations for the session 2010-2011
- 3. Liaison Officer and Observer for STC/ST/OBC from July 2012- June 2017 and for SC/ST from July 2017-July 2018.
- 4. Deputy Coordinator, Central Evaluation Center, Hans Raj College: May-June, 2016, June-July, 2016, SOL, Nov-Dec, 2016

Administrative duties in the Department of Zoology, Hansraj College:

- 1. Member of various Departmental Committees and participation in the activities organized by the committees.
- 2. Superintendent, Practical Examinations, Department of Zoology: 2010-11, 2017-18
- 3. Teacher in Charge, Department of Zoology, Hansraj College: 2012-14, 2019-20
- 4. Coordinator, Cluster classes for the B.Sc. (H) Zoology IIIrd year Annual mode, (2012-13)
- 5. Coordinator, DBT sponsored STAR College Scheme, Department of Zoology since May, 2013

Participation in the Sports activities organized by the Hansraj College Staff Association:

- 1. Participation in the cricket match organized by the Hansraj College Staff Association, 2009-2010.
- 2. Participation in the cricket match organized by the Hansraj College Staff Association, 2009-2010 and being Best Batsman in the match.
- 3. Participation in the Badminton Tournament Men Doubles organized by the Hansraj College Staff Association, 2009-2010.
- 4. Participation in the Cricket match organized by the Hansraj College Staff Association, 2010-2011
- 5. Participation as Captain in the Cricket Match organized by the Hansraj College Staff Association, 2011-2012

(Dr. Dinesh Kumar Gautam)