


CURRICULUM VITAE-2017

Title	Prof./Dr./Ms.	First Name	Rita	Last Name	Singh	
Designation		Professor				
Address		Chair, Division of Molecular Endocrinology and Reproduction Department of Zoology, University of Delhi, Delhi –110007				
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EDUCATIONAL QUALIFICATIONS

Degree	Institution	Year
Ph.D.	University of Delhi	1990
PG	University of Delhi	1984
UG	Hindu College, University of Delhi	1982

CAREER PROFILE

Delhi University, Division of Molecular Endocrinology and Reproduction Department of Zoology	Professor Associate Professor Reader	Jan 1, 2011 May 7, 2006 May 7, 2003	Teaching: M.Sc. Molecular Endocrinology, Cell Signaling, Protein Structure and Function, Computational Biology. Research: Cell regulatory mechanisms, Molecular defects in human PCOS and infertility, Proteomics based diagnostic tools.
Delhi University, Dr. B. R. Ambedkar center for Biomedical Research (ACBR)	Lecturer	Jan 2002– May 2003	Teaching: Biochemistry, Receptors and Cell Signaling. Research: Molecular mechanisms of FSH regulation of Fertility.
All India Institute of Medical Sciences (AIIMS), Department of Biochemistry	Scientist	1999-2002	Teaching: M.Sc. / MD, and B.Sc. Nursing, B.Sc. Human Biology Biochemistry and Cell Biology, Research: Signaling involved in foeto-placental cross-talk.
Delhi University, Department of Biotechnology, South Campus	Lecturer	1990-1991	Post graduate Diploma in Biotechnology, Theoretical aspects of practical Immunology.

Post Doctoral Research Experience

Scientist DST-SYS (1997-1999)	Indian Institute of Science (I.I.Sc.), Bangalore Worked on “Interaction of SH3 domain of <i>Hck</i> and <i>Src</i> tyrosine Kinase with Guanylyl Cyclase C”
CSIR-Research Associate (1991-1997)	Centre for Cellular & Molecular Biology (CCMB), Hyderabad from June 1994-Sept 1996. Worked on “The identification of SH3 domain interaction protein in signal transduction” Indian Institute of Integrative Medicine. Jammu, J & K from March 1992 – June 1994 Worked on “Post-Coital contraceptive anti-oestrogenic compounds”
MEMBER SCIENTIST, 9th INDIAN ANTARCTIC EXPEDITION (1989-90)	Funded by Department of Ocean Development, New Delhi, “The impact of Antarctic Environment on the Hormonal Profile & Immunity of Human Volunteers”

AREAS OF INTEREST / SPECIALIZATION

Molecular defects in Polycystic Ovary Syndrome (PCOS): Susceptibility Genes, Life Style and Environment. Molecular determinants of Follicular growth arrest and Infertility in Human Polycystic Ovary Syndrome, Differential gene expression in PCOS by Microarray analysis and modeling of metabolic pathways, Identification of defects in gene expression and metabolism in granulosa cells, Defects in follicular contents and Insulin resistance.

Cross-talk between Signaling pathways of Insulin/IGF-1 and FSH in Granulosa cells, and role of Insulin receptor substrates (IRS-1 and IRS-2) and Src family tyrosine kinases in follicle development.

Proteomics based Diagnostic tools: Analysis of human Plasma of Breast, Ovary and Lung cancer Patients for the diagnostic Biomarkers.

DATA BANKS CREATED**1. HUMAN PCOS GENOME DATA BANK:**

<http://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE34526>

(MICROARRAY DATA FOR NORMAL, INSULIN RESISTANT & NON-RESISTANT PCOS WOMEN) AT GENE EXPRESSION OMNIBUS (GEO:)

2. BIOINFORMATIC DATA BANK:**HUMAN IRS-2 PROMOTER AND TRANSCRIPTION FACTOR BINDING SITES**

<http://dx.doi.org/10.1016/j.dib.2015.12.001>

RESEARCH GUIDANCE

Supervision of awarded Doctoral Thesis	9
Supervision of Doctoral Thesis, under progress	4
Supervision of awarded M. Phil dissertations	14
Supervision of M. Phil dissertations, under progress	1
<i>Ph. D Adviser</i>	14
<i>M.Sc. Summer projects</i>	21 (Completed)
<i>M.Sc. and M.Tech 4th Semester projects</i>	8 (Completed)
<i>B.Sc. Biomed./ B. Tech. (Engineering) Summer project</i>	9 (Completed)
<i>B. Tech. (Engineering) IV SEM Project</i>	2 (Completed)

RESEARCH PROJECTS (MAJOR GRANTS/RESEARCH COLLABORATION)**RESEARCH PROJECTS: 17 (Major- 9 and Minor- 8, Total 17 as PI-Single institutional Grants)**

Projects	International	National	Funding Agencies
No.	1 (INDO-US)	16	DBT, DBT-INDO-US, CSIR, UGC, R&D-DU-UGC, DST-DU-PURSE
Collaborations	Medical School, VCU, USA	AIIMS, Fortis Hospital and Research Centre, Gouri Hospitals, ICGEB, NIHFW, NCCS Pune, Rajiv Gandhi Cancer Institute.	

AWARDS AND DISTINCTIONS

Governing Body Member, Keshav College, Delhi University, 2017-2019.

Adviser, Reproductive Biomedicine, Amity University, Noida, Haryana, 2017

Task-Force member, Indian Council of Medical research (ICMR), 2016

Provost, North eastern hostel for women, Delhi University

Convener, Division of Molecular and Cellular Endocrinology, Department of Zoology, Delhi University, 2009 onwards.

Member, Examination Disciplinary Committee, Delhi University (North and South Campus).

Member, Faculty of Science, Delhi University.

Vice Chancellor Nominee, Departmental research Committee, Department of Biochemistry, Delhi University (South Campus)

Scientist selection board member, Ministry of Environment, New Delhi.

Member, Departmental Research Committee, Department of Zoology.

Convener, Animal house, Department of Zoology, Delhi University.

Member Secretary, Human Ethics Committee, Department of Zoology, Delhi University, Delhi.

Member, Ethics Committee, Sunder Lal Jain Hospital, Ashok Vihar, Delhi.

Member, Curriculum development committee/Syllabi restructure Committee for Neuro-endocrinology, Molecular Cell Biology and Computational Biology, Member, Committee of Courses in Zoology.

Academic Visitor, 5th Annual Graduate Scientific congress, Decoding Science: Translating Medicine, AGSC2015, Yong Loo Lin School of Medicine, **National University of Singapore (NUS)**, Jan 27-30, 2015.

Mentor, **Star College Project on Reproductive Health and Incidence of PCOS in college girls**, Department of Biochemistry, Daulat Ram College, Delhi University, 2016-2019.

Visiting Professor, Department of Cancer Research, Perelman School of Medicine, **University of Pennsylvania, USA**. Aug, 2012- July 2013, Breast cancer stem Cells: Wnt 1 transgenic model of breast cancer.

CREST Award, Department of Biotechnology (**DBT**), 2012-2013.

Visitor, 6th Annual Retreat of Department of Breast Cancer, Perelman School of Medicine, University of Pennsylvania, Philadelphia, held at Mohonk Mountain House in New Paltz, New York, USA, May 21 to June 2, 2013.

Member, Expert Panel, "Hazardous Metals and Minerals Pollution in India: sources, toxicity, and management" **Indian National Science Academy (INSA)**, New Delhi 2010.

Member, **UNESCO South Asia and South East Asia Science and Technology Policy Forum**, 2010.

Visiting A/Professor, Medical School, Virginia Commonwealth University, USA, DBT-INDO-US-CRHR, June-July 2007.

Visitor, **Frontiers in Reproduction**, 10th Annual Symposium Woods Hole Oceanographic Institution Clark Laboratory 507-Quissett Campus, **Woods Hole, Massachusetts, USA**, June 14-16, 2007.

Member, Faculty Promotion committee, Medical School, Virginia Commonwealth University, USA, 2008.

Outstanding Research award from DBT Monitoring committee, 2008.

Member, 9th Indo-US Contraception and Reproductive Health Research Meeting, New Delhi, Sept. 19-21, 2007.

Council of Scientific and Industrial Research (CSIR) Pool-Scientist award, 1999.

DST young Scientist Award, 1997.

Scientist Member, 9th Indian Antarctic Expedition 1989-1990.

Fellowship of CSIR, 1985; University Grant Commission Fellowship Award, 1985.

Science Merit awards 1982-83; Science Merit award 1983-84.

RESEARCH STUDENT AWARDS

Best Poster Award, 2013, G. Anjali, National Symposium on changing environment and lifestyle: Impact on Reproductive Health (NSCEL-2013), All India Institute of Medical Sciences, New Delhi, Nov 19-21, 2013.

Best Poster Award, 2011, G. Anjali, International Conference on Frontiers in Reproductive Technology and 21st Annual meeting of the Indian Society for the Study of Reproduction and fertility, NDRI, Karnal, Feb 9-11, 2011.

Best Innovation Award, 2009, Gaganjot Singh Kalsey, Magic: Multiple Affinity Gel Immuno-depletion Column, India Innovation Initiative-i3 National Fair 2009, DST, IIT, New Delhi, India, Oct 27, 2009.

Best Oral Presentation, 2009, Surleen Kaur, Microarray and Pathway Analysis of Differentially expressed genes in Human Ovarian Follicular Compartment of PCOS patients, International Congress on Bio-immunoregulatory Mechanisms Associated with Reproductive Organs: Relevance in Fertility, NII, New Delhi, India, Feb 9-12, 2009.

AWARENESS PROGRAMS ON REPRODUCTIVE HEALTH, PCOD/PCOS AND ENVIRONMENT

Gynaecologist-Student interaction workshop on PCOS/PCOD management at young age, Auditorium, Department of Zoology, Delhi University, Aug. 12, 2016.

Reproductive Health Awareness for Senior School students of Birla Balika Vidyapeeth, Pilani, September 10 – 11, 2016.

Reproductive Health Awareness for University students in Four girl hostels in University Campus, by Master students specializing in Molecular Endocrinology and Reproduction, Jan-March 2016

Reproductive Health Awareness for Senior School students of G. D. Goenka Public School, Agra, Nov. 28, 2015.

International awareness program for "Environmental Threats to Fertility" during International congress on *Embryo Implantation and Pregnancy: Intricacies and strategies for its success*, National Institute of Immunology, March 9-11, 2015.

Daulat Ram College, *Environmental causes of PCOS/PCOD: Management of Reproductive Health in young women*, 7 Oct, 2015.

Miranda House: *Endocrine Disruptors, Obesity and Infertility*, Feb. 10, 2015.

Khalsa College: *Cancer Stem Cells and Breast Cancer*, Feb. 25, 2015.

Daulat Ram College, *PCOS: Life Style, Obesity and Infertility*, April 11, 2015.

Hazards of Plastics and Reproductive health, Delhi University Annual Festival, Antardhvani, 2014, 2015,

Free Camp on PCOS and hereditary Diabetes type II at Gouri Hospital, Malka Ganj, 2009.

MEMBERSHIP OF PROFESSIONAL/ACADEMIC BODIES, SOCIETIES

1. American Association for Cancer Research, USA.
2. American Society for Biochemistry and Molecular Biology (ASBMB), USA.
3. Federation for American Societies for Experimental Biology (FASEB), USA.
4. Indian Society for the Study of Reproduction and Fertility (ISSRF).
5. Society for Cell Biology, India.
6. Society for Biochemists of India.
7. Fertility Society of India.
8. Society for Reproductive Biology and Comparative Endocrinology.

CONFERENCE ORGANIZATION/ PRESENTATIONS

INTERNATIONAL CONFERENCES

Chairperson and Panelist, Selected topics in cancer awareness in India, World Cancer Congress 2018, Jaipur Feb. 3-5, 2018.

Invited Speaker, Novel FSH signaling mechanisms in PCOS, International Conference on Gonadotropins and Receptors 12th International Symposium on GnRH, The hypothalamic-pituitary-gonadal axis in cancer and reproduction, ICGR-IV Sept 20-23, Modena, Italy 2017.

Invited Speaker, *Environment, Lifestyle and Reproductive Health Challenges in Young Women*, International Conference on "Reproductive Health with Emphasis on strategies for infertility, assisted reproduction and Family Planning held at AIIMS, New Delhi, Jan 23-25 2017.

Paper Presentation on *Role of FSH in Metabolic Disturbances in Polycystic Ovary Syndrome: a partial defect in FSHR (GPCR) activation in PCOS granulosa cells*, **41st European Symposium on Hormones and Cell Regulation: GPCR dynamics for fine tuning of physiological processes**, Monte Ste Odile, Alsace, **France**, Oct. 5-8, 2016

Invited Speaker, *Role of FSH in Metabolic Disturbances in Polycystic Ovary Syndrome*, **International congress on Reproductive Biomedicine, Royan institute, Tehran, Iran**, Aug 31-Sept. 2, 2016

Invited Speaker, *Molecular Defects in Polycystic Ovary Syndrome (PCOS) and Prediction of Infertility in PCOS Patients*, **International congress on Reproductive Biomedicine, Royan institute, Tehran, Iran**, Aug 31-Sept. 2, 2016

Invited Speaker, *Defects in the cross-talk between FSH and IGF-1/insulin signaling pathways and infertility in PCOS patients*, International Conference on "Reproductive Health with Emphasis on Occupational, Environmental and Lifestyle Factors held at **Ahmadabad**, 18 - 20 Feb. 2016

Invited Speaker, "Metabolic Disturbance in Polycystic Ovary Syndrome: Susceptibility Genes, Life Style and Environment", Department of Anatomy, **Yong Loo Lin School of Medicine (NUH), National University of Singapore (NUS)**, Jan 28, 2015.

Invited speaker, "Proteomic profiling of Lung Cancer Specific Plasma Proteins: Novel diagnostic strategy for environmentally exposed Male Lung Cancer Patients" **6th International conference on Environmental mutagens in Human Populations, Doha, Qatar**, Mar. 26-29, 2012.

Attended Symposium on *Obesity, diabetes and cardiovascular Disease: concept and challenges* at Translational Research Center, **University of Pennsylvania, Philadelphia, USA**, 2012.

Invited speaker, "PI3K/AKT dependent and independent pathways in the Regulation of Glycogenesis by Follicle Stimulating Hormone in Granulosa Cells" **International Conference on Reproductive Health with Emphasis on Strategies for Family Planning ICMR, New Delhi**, Feb. 19 -21, 2012.

Invited speaker, "The susceptibility gene expression profiles in Granulosa cells of Women with Polycystic Ovary Syndrome" **15th All India Congress of Cytology and Genetics and Forgarty International workshop**, Magadh University, Bodhgaya, India, Nov. 21 -23, 2011.

Invited speaker, *Microarray gene expression profile of granulosa cells from PCOS women: Identification of Polycystic Ovary Syndrome Susceptibility Gene Sets through Network Analysis*. **International Conference on Frontiers in Reproductive Technology, NDRI, Karnal**, Feb 9-11, 2011.

Invited Speaker, "Reproductive Health Concerns: The impact of Environmental Toxicants on Reproductive health of women/men". World conclave of Scientists on Regional Co-operation in Science and Technology. Organized by **UNESCO South Asia and South East Asia Science and Technology Policy Forum** at INSA Auditorium, Nov. 26-29, 2010.

Invited Speaker, "Molecular Mechanisms to Molecular Medicine, Identification of Polycystic Ovary Syndrome Susceptibility Gene Sets through Network Analysis". International symposium on **Endocrinology and Reproduction: SRBC JNU**, New Delhi, Feb. 4-6 2010.

NATIONAL CONFERENCES (INVITED SPEAKER):

Human ethics committee considerations for research on human subjects, Acharya Narendra Dev College, University of Delhi, Govind Puri, Kalkaji, New Delhi, Delhi 110019

Plenary Lecture, *Molecular defects in Human PCOS Ovary* 2nd JK Medical Science Congress 2017 1st Annual Conference of M P PCOS Society, Srinagar, J&K, May 10-13, 2017.

Metabolic defects in Granulosa cells of PCOS Women, 2nd JK Medical Science Congress 2017 1st Annual Conference of M P PCOS Society, Srinagar, J&K, May 10-13, 2017.

Environmental Pollutants and Health Hazards, Speaker and Organizer, National Symposium & Awareness Program on "Lifestyle and Reproductive Health Challenges, Daulat Ram College, Delhi University, Delhi, March 29, 2017.

Polycystic ovary syndrome (PCOS): Is it a genetic or environmental disorder? National Symposium of communicable and non-communicable disorders, Punjab University, Chandigarh Feb 21, 2017.

Invited member, "Global Biotechnology Summit" on 5th & 6th February 2016 organized by Department of Biotechnology, Ministry of Science and Technology, at Vigyan Bhawan, New Delhi.

Endocrine Disruptors, PCOS and Reproductive Health: "Hazards of Plastics" & Chairperson, National Seminar on Reproductive Health Awareness for Senior School students of Birla Balika Vidyapeeth, BITS Campus, **Pilani, Rajasthan, Sept. 10 – 11, 2016.**

Endocrine Disruptors & Reproductive Health, 2nd National Seminar on Reproductive Health Awareness for Senior School students of G. D. Goenka Public School, **Agra. 28 Nov, 2015**

Environmental causes of PCOS/PCOD: Management of Reproductive Health and Fertility in young women Conference on Reproductive Health Challenges: Issues & Remedies (**NCRHC-2015**), **Jaipur, Sept. 11-13, 2015.**

"Metabolic Defects in Polycystic Ovary Syndrome: Susceptibility Genes and Infertility", Sixth Symposium on "**Frontiers in Molecular Medicine**", Organized by Special Centre for Molecular Medicine, Jawaharlal Nehru University (JNU), **New Delhi, Feb. 13-14, 2015.**

"Molecular defects in Polycystic Ovary Syndrome: Susceptibility Genes, Life Style and Environment" National Symposium on changing environment and lifestyle: Impact on Reproductive Health (NSCEL-2013), **All India Institute of Medical Sciences (AIIMS), New Delhi, Nov 19-21, 2013.**

"Expression of Diabetes susceptibility genes in Granulosa Cells of Polycystic Ovary Syndrome (PCOS) Women with and without Insulin Resistance", 7th Annual National Conference of **Indian Fertility Society: Infertility and Assisted Reproductive Technologies**, India Habitat Centre, New Delhi, Dec 17-18, 2011.

RESOURCE PERSON, TEACHER TRAINING LECTURES IN OTHER UNIVERSITIES

Academic Staff College, University of Kashmir, J&K 2015, Lecture 1. "Environmental Endocrine Disruption: Management of Reproductive Health and Infertility", Refresher course for University and College teachers, May 14, 2015; Lecture 2. "Molecular aspects of Polycystic Ovary Syndrome: Causes, Diagnosis and Prevention", Refresher course for University and College teachers, May 15, 2015.

Botany Department, University of Delhi, "Current Trends in Environmental Neuroendocrine Disruptors, Obesity and Infertility", Refresher Course for University teachers, Dec 11, 2014.

Ambedkar Centre for Biomedical Research (ACBR) Microarray: High-Throughput analysis of Gene Expression, 3rd workshop on "Bioinformatics and Molecular Modeling in Drug Design", at Bioinformatics Facility (DBT), 2012.

Punjab University, Chandigarh 2011, Proteomics in cancer Biomarker Discovery, Lecture 2. Microarray and bioinformatics approaches to find Susceptibility Gene Sets through Network Analysis, Refresher course in Life Sciences, May 15, 2011.

Kumaun University, Nainital, UP 2011, Bioinformatics resources in Genomics and Proteomics, "Bioinformatics and its applications in Drug Designing" training Program, at Bioinformatics Infrastructure Facility, Department of Biotechnology, March 22-23, 2011.

CPDHE/UGC-ASC refresher course in Life Sciences, Delhi University, "Reproductive health Concerns: The Impact of Environmental Toxicants/ Endocrine disruptors on Reproductive Health, at "Current Trends in Life Sciences: The Indian Scenario", Feb 23, 2011.

EXPERT SERVICES

Mentor: Research Training (2-4 months) to several B.Sc./B.Sc.Biomed/B.Sc.Biochem/B.Tech.(Eng) Students.

Moderator: **Vimersh**, Delhi University.

Reviewer, ILL - Delhi University. 2007-2011.

Various competitions at the College level, 2007-2011.

University Science Quest, CSEC, Delhi University, 2007-2012.

Nodal Officer, Antardhvani, 2015.

Member of Board of Paper Setters, Rector Prize, Delhi University.

SAC invited member, Talwar Foundation.

Adviser, Molecular Mechanisms to Molecular Medicine, SRBC, JNU. Adviser, International symposium on Endocrinology and Reproduction, Member adviser, International conference at AIIMS.

Reviewer: Indian Journal of Clinical Biochemistry, Journal of Reproductive Immunology-Elsevier Publication, Indian Journal of Experimental Biology, Biology of Reproduction, Journal of cell and Animal Biology (International), Projects: DBT, ICMR.

SELECTED PUBLICATIONS

1. V Minhas, A Shrestha, N Wadhwa, **Rita Singh**, SK Gupta. Novel Sperm and Gonadotropin-releasing Hormone-based Recombinant Fusion Protein: Achievement of 100% Contraceptive Efficacy by Co-immunization of Male and Female Mice. **Mol. Reprod. Dev.** 83, 1048-1059, **2016**.
2. **Rita Singh**, Priya Bhardwaj and Shikha Sagar, *Polycystic ovary syndrome: Is it a consequence of endocrine disruption by BPA?* Newsletter of Indian Society for the Study of Reproduction and Fertility (ISSRF) on Environmental Impacts on Reproductive Health, Review, **ISSRF News Letter (ISSN 2395-2806)**, 85-88, **2016**.
3. S. Kaur, G. Anjali, P. Bhardwaj, J.Taneja and **Rita Singh**, *Data in support of FSH induction of IRS-2 in human granulosa cells: Mapping the transcription factor binding sites in human IRS-2 promoter*, **Data in Brief**, 6 162–167, **2015**.
4. Anjali G., S. Kaur, R. Lakra, J. Taneja, G.S. Kalsey, A. Nagendra, T.G. Shrivastav, M. Gouri Devi, N. Malhotra, A. Kriplani and **Rita Singh**, *FSH stimulates IRS-2 expression in human granulosa cells through cAMP/SP1, an inoperative FSH action in PCOS patients*, **Cellular Signalling**, **27**, 2452-2466, **2015**.
5. **Rita Singh** "Polycystic Ovary Syndrome: Susceptibility Genes, Life Style and Environment" Newsletter of Indian Society for the Study of Reproduction and Fertility (ISSRF) on Challenges of Reproductive Health due to Influence of Changing Environment & Lifestyle, Review, **ISSRF News Letter (ISSN 2395-2806)**, 27-29, **2014**.
6. S. Kaur, K.J. Archer, M. Gouri Devi, A. Kriplani, J.F. Strauss III, and **Rita Singh**, *Differential Gene Expression in Granulosa Cells from Polycystic Ovary Syndrome Patients with and without Insulin Resistance: Identification of Susceptibility Gene Sets through Network Analysis* **J Clin Endocrinol Metab. (JCEM)** 97, E2016-21, **2012**.
7. **Rita Singh** and M. Gouri Devi, *The Susceptibility gene expression profiles in granulosa cells of women with Polycystic Ovary syndrome*, **Perspectives in Cytology and Genetics**, XV 2011, 211-214, **2011**.
8. T.G. Shrivastav, S.K. Chaube, K.P. Kariya, **Rita Singh**, et al., *Influence of different length linker containing DHEA-7-CMO-enzyme conjugates on sensitivity and specificity of DHEA-3-HS-antibody*. **J Immuno-assay and Immunochem.** 33: 1-17, **2012**.
9. T.G. Shrivastav, S.K. Chaube, K.P. Kariya, K. Rangari, **Rita Singh**, *Development of an antigen heterologous enzyme linked immunosorbent assay for Measurement of corticosterone in rat serum*. **J Immunoassay and Immunochem.** 31: 4, 244-257, **2011**.
10. T.G. Shrivastav, S.K. Chaube, K.P. Kariya, P. Kumari, **Rita Singh**, and D. Kumar, *Influence of Different homologous and heterologous combinations of antibodies and Enzyme conjugates of Dehydroepiandrosterone on the Sensitivity and Specificity of DHEA ELISA*. **J Immuno-assay and Immunochem.** 32: 114-127, **2011**.
11. T.G. Shrivastav, S.K. Chaube, K.P. Kariya, **Rita Singh**, et al., *Influence of different length linker containing DHEA-7-CMO-enzyme conjugates on sensitivity and specificity of DHEA-17-CMO-antibody*. **J Immunoassay and Immunochem.** 32: 2, 269-283, **2011**.
12. T.G. Shrivastav, S.K. Chaube, K.P. Kariya, D. Kumar, and **Rita Singh**, *Antigen Heterologous Enzyme Linked Immunosorbent Assay for Measurement of DHEA in Serum*. **J Immuno-assay and Immunochem.** 32: 2, 326-341, **2011**.
13. **Rita Singh**, "Reproductive Health Concerns: The impact of Environmental Toxicants on Reproductive health of women/men". Proceedings of World conclave of Scientists: on Regional Co-operation in Science and Technology: Opportunities and Challenges in the context of Globalization. **UNESCO South Asia and South East Asia Science and Technology Policy Forum at INSA**, New Delhi, **Book edited by Mohsin U Khan** (website: www. Zaheerfoundation.com), published by CSIR National Institute of Science communication and Information Resources, New Delhi, 61-74, **2010**.
14. M.J. Hossain, R. Korde, P.K. Singh, S. Kanodia, R. Ranjan, G. Ram, G.S. Kalsey, **Rita Singh** and P. Malhotra, *Plasmodium falciparum Tudor staphylococcal Nuclease interacting proteins suggest its role in nuclear as well as splicing processes*. **Gene** 468, 48-57, **2010**.
15. T.G. Shrivastav, S.K. Chaube, Charu, K. Rangari, K.P. Kariya, **Rita Singh**, *Enzyme linked immunosorbent assay for milk progesterone*. **J Immunoassay and Immunochem.** 31: 4, 301-313, **2010**.
16. T. G. Shrivastav, S. K. Chaube, K. P. Kariya, S. Bhanot, **Rita Singh**. *Development of heterologous Enzyme linked immunosorbent assay for Dehydroepiandrosterone in serum*. **J Immunoassay and Immunochem.** 31: 4, 266-278, **2010**.

17. **Rita Singh** and M. Gouri Devi, *Role of LH in the etiology of PCOS: Intra-ovarian defect in human polycystic Ovary Syndrome patients without peripheral Insulin resistance*. **Chapter 31**, pg. 355-365, in **Book entitled Gonadal and Nongonadal Actions of Gonadotropins**, Nervosa publishing house Pvt Ltd. (ISBN 978-81-7319-983-7), no. 355-365, **2009**.
18. J. Taneja, and **Rita Singh**, *Regulation of Insulin receptor and its substrates by Follicle Stimulating Hormone in Granulosa cells*. **Reproduction, Fertility and Development 20** (Supplement) 86-86, **2008**.
19. R. Korde, A. Bhardwaj, **Rita Singh**, A. Srivastava, V.S. Chauhan, R.K. Bhatnagar and P. Malhotra, *A pro-domain Peptide of Plasmodium falciparum cysteine protease (falcipain-2) inhibits malaria parasite development*. **Journal Medicinal Chemistry 51**, 3116-3123, **2008**.
20. R. Korde, A. Bhardwaj, **Rita Singh**, A. Srivastava, V.S. Chauhan, R.K. Bhatnagar and P. Malhotra *Malaria bug starved to death*. **Nature India, 2008**.
21. R. Korde, A. Bhardwaj, **Rita Singh**, A. Srivastava, V.S. Chauhan, R.K. Bhatnagar and P. Malhotra, *Molecule show anti-malarial action*. A-IBMN Highlights NPG **Nature Asia Pacific, 2008**.
22. **Rita Singh**, *Biotechnology Chakravayuha: Biotechnology education in India* **Current Science 93** (7) 889, **2007**.
23. **Rita Singh**, *Interaction of Guanylyl Cyclase C with the SH3 domain of Src tyrosine kinase, Yet another mechanism for desensitization*. **J. Biol. Chem. 278**, 24342-24349, **2003**.
24. **Rita Singh**, *Trophoblast Differentiation: Towards understanding the regulatory mechanisms*. Department of Biochemistry, AIIMS, New Delhi. Review, **Proceedings of Indian National Academy of Sciences (PINSIA) B68** No 6 pp 547-558, **2002**.
25. Shivakrupa, **Rita Singh**, G. Swarup, *Identification of a Novel Splice Variant of C3G which shows Tissue Specific Expression*. **DNA and Cell Biology 18**: 701-708, **1999**.
26. **Rita Singh**, *Antifertility potential of 2-[piperdinoethoxy phenyl]-3-[4-methoxy phenyl]-2H benzo pyran : a potent antioestrogenic compound in rats*. **J Reproduction & Fertility 106**:49-53, **1996**.
27. **Rita Singh**, *The impact of Antarctic environment on the reproductive physiology and immune system*. **IX Antarctic Expedition: Technical Publication No. 6**, 269-273, DOD, **1994**.

Publications from Ph.D. work:

28. **Rita Kohli/Singh**, N. Chadha and K. Muralidhar *Are sheep and buffalo prolactins sulfated?* **Biochem Biophys Res Commun (BBRC)**. 149:515-522, **1987**.
29. **Rita Kohli/Singh**, N. Chadha and K. Muralidhar *Presence of tyrosine-o-sulfate in sheep pituitary prolactin*. **FEBS Lett.**, 242:139-143, **1988**.
30. **Rita Kohli/Singh** and K. Muralidhar *Effect of Gn-RH on sulfation on lutropin: A potential bioassay for Gn-RH*. **Endocrinol. Jap.** 37 (1):31-41, **1990**.
31. **Rita Kohli/Singh**, N. Chadha and K. Muralidhar *Does sulfate incorporation into pituitary proteins have any physiological significance?* In: *Neuroendocrine Regulation in Fertility Control*" (Eds. Vinod Singh and K. Muralidhar). **Biotechnology Series Vol. 1**, NEHU Publication, Shillong, **1989**.
32. N. Chadha, **Rita Kohli/Singh** and K. Muralidhar *Use of the discarded "acid pellet" for the purification of prolactin from sheep and buffalo pituitaries*. **IRCH Medical Science Research (Biochemistry)**. 15:711-71, **1987**.
33. N. Chadha, **Rita Kohli/Singh**, G.L. Kumari and K. Muralidhar *Physico-chemical characterisation of buffalo prolactin*. **Mol. Cell Biochem.**105:61-71, **1991**.
34. K. Muralidhar, N. Chadha and **Rita Kohli/Singh**, *Purification and characterization of prolactin from sheep and buffalo pituitaries*. **J. Bioscience**, 13:201-214, **1988**.
35. N. Chadha, **Rita Kohli/Singh**, K. Muralidhar *The effect of hypothyroid status on rat ovarian response to PMSG*. **J. Reprod. Biol. Comp. Endo.** 5:19-24, **1985**.

Prof. Rita Singh