

Updated Resume: Prof. Anju Shrivastava

Title	Prof. Anju Shrivastava			
Designation	Professor			
Department	Zoology			
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Education				
Subject	Institution	Year	Details	
Ph.D. in Biotechnology	BHU, Varanasi	1996	Thesis topic: <i>In vitro</i> activation of murine peritoneal macrophage and macrophage cell lines: A comparative study	
M.Sc. Zoology	BHU, Varanasi	1991	Subjects: Specialization in Molecular and Cyto -Genetics, Animal Physiology, Biochemistry, Endocrinology, Biostatistics, Instrumentation, etc.	
B.Sc. Zoology (Hons.)	Ranchi University	1989	Subjects: Zoology, Botany and Chemistry	
Career Profile				
Organization / Institution	Designation	Duration	Role	
Department of Zoology, University of Delhi, Delhi-110007	Professor	Since 11/2011 Till date	Teaching & Research in Immunology, Genetics & Cytogenetics, Epigenetics and Chromatin Biology, Molecular Biology of Parasitism & Immunology * Immunology (Department of Botany, Delhi University)	
Department of Zoology, University of Delhi, Delhi-110007	Reader/Associate Professor	11/2006 – 11/2012	Teaching & Research in Immunology, Genetics, Epigenetics, Physiology,	
Department of Zoology, University of Delhi, Delhi-110007	Lecturer	06/2003 – 11/2006	Teaching & Research in Immunology, Cell biology, Animal physiology	

Baylor College of Medicine, Houston, Texas, USA	Postdoctoral Associate	5/1999 - 5/2001	<u>Research</u> in Cell Signaling (Immunomodulation)
MD Anderson Cancer Centre, Houston, Texas, USA	Postdoctoral Fellow	6/1997 - 5/1999	<u>Research</u> in Cancer Biology and particular TNF α -mediated NF- κ B signalling
St. Columba's College, Hazaribagh, India	Lecturer	11/1996 – 06/2003 <i>(In between 4 years sabbatical for postdoctoral research)</i>	<u>Teaching</u> -Immunology, Genetics & Cell Biology

Research Interests / Specialization

- Basic Research:** Tumor Immunomodulation
Regulation of signaling mechanism in macrophages, neutrophils and tumor cells.
- c-Jun N-terminal Kinase (JNK),
 - NF- κ B signaling,
 - Regulation of apoptosis in tumor cells
- Applied Research:** Phyto-chemical mediated changes in epigenetic regulation of various parameters in cancer progression and immunomodulation.

Teaching Experience (Subjects/Courses Taught)

Teaching experience in Immunology, Genetics, Cell Biology, Developmental Biology and Physiology

Department of Zoology, University of Delhi, Delhi	PG & M.Phil. /Ph.D.- course work	June 2003 till date <u>Subjects:</u> Immunology, Genetics and Cyto-genetics, Epigenetics, Developmental Biology and Comparative Animal Physiology and Molecular Biology of Parasitism & Immunology
Department of Botany, University of Delhi, Delhi	PG	July, 2011 till date (Only III semester) <u>Subjects:</u> BOT- 308- Immunology
M.Tech Nanoscience and Nanotechnology University of Delhi	PG	January, 2010- July 2013 <u>Subjects:</u> Biology Practicals
Department of Zoology, St. Columba's College, Hazaribagh, (Vinoba Bhave University)	PG	Nov. 1996 to June 2003 <u>Subjects:</u> Cell Biology, Genetics & Immunology
Department of Biotechnology, Ranchi University and Vinoba Bhave University (Various colleges) as Guest Lecturer	UG	June 2001 to June 2003 <u>Subjects:</u> Immunology, Animal Cell Culture, Recombinant DNA Tech.

Department of Biotechnology, BHU, Varanasi (Assisted in Practical classes in Immunology, as a Research Scholar)	PG	Sept. 1992 to Nov. 1996 <u>Subjects:</u> Animal Cell Culture, Immunology
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Research Guidance (Since 2003)

Supervision of Doctoral Thesis :

- A. Ph.D. awarded - 05 + 02 (as a Co-Supervisor)
- B. Ph.D. Thesis submitted - 2
- C. Under progress- 07

Supervision of M.Phil. dissertations :

- A. Awarded – 15
- B. Under progress– 01

M.Sc. Zoology (IV- Semester) Students dissertation- on average 4-5/year since 2011

Postgraduate and undergraduate Trainees- from other universities such as BHU, JNCSR, Calcutta University, Amity University, Bundelkhand University, Banasthali, & under graduate students from various colleges of University of Delhi. (*on average 4 students every year since 2004*)

Publications (Recent)

In Indexed/ Peer Reviewed Journals

<u>Year of Publication</u>	<u>Title</u>	<u>Journal</u>	<u>Co-Author</u>
2018	Deletion of Dictyostelium discoideum Sir2A impairs cell proliferation and inhibits autophagy (accepted for publication)	Journal of Biosciences Ref.: Ms. No. JBSC-D-17-00724R1	R. Lohia, P. Jain, M. Jain, H. Mishra, P. Burma and Shweta Saran
2017	Promoter hypermethylation of FHIT and P14 genes in OSCC patients among north Indian population.	Cancer Therapy and Oncology Int. J.,	Meenakshi Jha, Sandesh Kumar Patel, Abhimanyu Kumar Jha
2017	Amelioration of Dalton's lymphoma-induced angiogenesis by melatonin.	Tumor Biology	Kumari R, Rawat K, Kumari A
2017	The immunosuppressive effects of a novel recombinant LipQ (Rv2485c) protein of Mycobacterium tuberculosis on human macrophage cell lines.	Microb Pathog.,	Kumar A, Manisha, Sangha GK, Kaur J.
2017	Emerging roles of calreticulin in cancer: implications for therapy	Current Protein & Peptide Science	Kavya Venkateswaran, Paban K. Agrawala, Virinder S. Parmar, B.S. Dwarakanath

2017	Dictyostelium discoideum Sir2D modulates cell-type specific gene expression and is involved in autophagy.	<i>Int J Dev Biol.,</i>	Lohia R, Jain P, Jain M, Burma PK, Saran S.
2017	Identifying epigenetic endpoints of pesticide exposure can curtail risk to develop cancer: A review.	<i>International journal of Advanced Research</i>	Rituparna Das, Kulbhushan Thakur, Akshita Puri, and Mousumi Mutsuddi.
2016	Promoter hypermethylation of Tumor suppressor genes in lung cancer.	<i>Research J.of Pharm., Biol. and Chem. Sci.</i>	Meenakshi Jha, Sandesh Kumar Patel, Shantanu Gupta, Abhimanyu Kumar Jha
2016	Mitigation of radiation-induced hematopoietic injury by polyphenolacetate 7,8-diacetoxy-4-methylthiocoumarin in mice.	<i>Scientific Reports.</i>	Kavya Venkateswaran, Paban K. Agrawala, and Blikere S. Dwarakanath et al.
2016	Natural Compounds: DNA Methyltransferase Inhibitors in Oral Squamous Cell Carcinoma.	<i>Appl Biochem Biotechnol.</i>	Jha M, Aggarwal R, Jha AK
2016	<i>Dictyostelium discoideum</i> : A model System to Study Autophagy Mediated Life Extension	<i>Topics in Biomedical Gerontology</i>	Jain. P., Shara. P., Saran. S.
2015	Natural Compounds: Role in Reversal of Epigenetic Changes.	<i>Biochemistry (Moscow).</i>	Ruchi Aggarwal, Meenakshi Jha, , and Abhimanyu Kumar Jha
2015	Demethylation of Promoter Region of FHIT Gene in A549 Cell Line by Sweet Potato Leaf Extract	<i>Int. J. Applied Biotechnology and Biochemistry.</i>	Rahul Dev Verma, ManishKatiyar, Urvashi Verma, Gitanjali Sharma, Abhimanyu Kumar Jha
2014	Peptide: N- glycanase is expressed in prestalk cells and plays a role in the differentiation of prespore cells during development of <i>Dictyostelium discoideum</i> .	<i>Indian J Exp Biol.</i>	Gosain A, and Saran S.
2014	Modifications of Cell Signalling and Redox Balance by Targeting Protein Acetylation Using Natural and Engineered Molecules: Implications in Cancer Therapy	<i>Current Topics in Medicinal Chemistry</i>	Kavya Venkateswaran, , Paban K. Agrawala, Shashwat Malhotra, Ashok K. Prasad, Olivier De Wever, Marc E. Bracke, Luciano Saso, Virinder S. Parmar, and B.S. Dwarakanath
2014	Ameliorating ER-stress attenuates <i>Aeromonas hydrophila</i> -induced mitochondrial dysfunctioning and caspase mediated HKM apoptosis in <i>Clarias batrachus</i> .	<i>Nature Scientific Reports</i>	C. Banerjee, A. Singh, T.K. Gosh, R. Raman, Shibnath Majumder
2014	DNA-encapsulated magnesium phosphate nanoparticle elicit both humoral and cellular responses in mice.	<i>Results in Immunology</i>	G. Bhakta, Victor Nurcombe, A. Maitra

2014	Identification and characterization of peptide: N glycanase from <i>Dictyostelium discoideum</i> .	BMC Biochemistry	Anuradha Gosain, Rakhee Lohia, Shweta Saran
2012	Silica Nanoparticles Co-Encapsulating Gadolinium Oxide and Horse Radish Peroxidase for Imaging and Therapeutic Applications	International J. of Nanomedicine	Nikesh Gupta, Rakesh Sharma
2012	Reversal of Hypermethylation and Reactivation of the <i>RARβ2</i> Gene by Natural Compounds in Cervical Cancer Cell Lines	Folia Biologica	A.K. Jha, M. Nikbakht, G. Parashar, N. Capalash, J.
2010	Cisplatin primes murine peritoneal macrophages for enhanced expression of nitric oxide, proinflammatory cytokines, TLRs, transcription factors and activation of MAP kinases upon co-incubation with L929 cells	Immunobiology	Chauhan, Ajit Sodhi,
2009	Magnesium Phosphate Nanoparticles can be Efficiently Used In Vitro and In Vivo as Non-Viral Vectors for Targeted Gene Delivery	Journal Biomedical Nanotechnology	Bhakta G., and A. N. Maitra
2007	Activation of Macrophages with N-formyl-methionyl-leucyl-phenylalanine: Involvement of Protein Kinase C and Tyrosine Kinase.	Indian Journal of Experimental Biology	-
2007	Inhibition of lipopolysaccharide-inducible nitric oxide synthase and IL-1 β through suppression of NFκB activation by 3-(1'-1'-dimethyl-allyl)-6-hydroxy-7-methoxy-coumarin isolated from <i>Ruta graveolens</i> L.	European Journal of Pharmacology	Sunil K Raghav, Bhawna Gupta, Hasi R. Das,

Conference Presentations

1. **Anju Shrivastava** (2018) Resource person in a two-day seminar/workshop on "Immunology at a Glance" scheduled on 01.03.2018 to 03.03.2018 at the department of Zoology under MHRD's scheme of teaching and learning center of S. P. Pune University, Pune.
2. **Anju Shrivastava** (2018) "Crosstalk between cancer and immune system: a link with great potential" at National Conference on "Diseases and Drugs: Emerging Trends and Challenges" Department of Zoology, Zakir Husain Delhi College (University of Delhi) J.L.N. Marg, New Delhi from 31st January to 1st February, 2018.
3. **Rani Kumari**, Kavita Rawat and **Anju Shrivastava** (2018) "Melatonin attenuates parameters involved in cancer progression including angiogenesis: a study in murine model" at National Conference on "Diseases and Drugs: Emerging Trends and Challenges" Department of Zoology, Zakir Husain Delhi College (University of Delhi) J.L.N. Marg, New Delhi from 31st January to 1st February, 2018.
4. **Kavita Rawat**, Rani Kumari and **Anju Shrivastava** (2018) "Taming cancer with *Tinospora*-mediated

immunomodulation: potential role of neutrophils" at National Conference on "Diseases and Drugs: Emerging Trends and Challenges" Department of Zoology, Zakir Husain Delhi College (University of Delhi) J.L.N. Marg, New Delhi from 31st January to 1st February, 2018.

5. **Anju Shrivastava** (2017) "Nanoparticle and cancer therapy: Enzyme caged in hollow gold nanoparticles has potential application in enzyme-prodrug therapy" National Symposium on Frontiers in Biotechnology held on 21st March, 2017 Department of Biotechnology, Panjab University, Chandigarh.
6. **Anju Shrivastava** (2017) 'Re-establish antitumor immunity by resetting the cross-talk between cancerous and immune cells: a potential therapeutic strategy' at Symposium on Gene-Environment interaction in Disease, Development and Evolution held in Department of Zoology, BHU Varanasi from 5th – 6th March, 2017.
7. Rani Kumari, Kavita Rawat and **Anju Shrivastava** (2017)" Melatonin ameliorates tumor-induced angiogenesis" at International workshop and Symposium on Biological Timing and Health Issues in the 21st Century at Department of Zoology, DU from 21-02-2017 to 24-02-2017.
8. Zoha Ahmed, Anupma Kumari, Saima Syeda, Anand Swaroop Shukla and **Anju Shrivastava** (2017) "Melatonin: A Potent Immuno-modulator Of Tumor Associated Macrophages" at International workshop and Symposium on Biological Timing and Health Issues in the 21st Century at Department of Zoology, DU from 21-02-2017 to 24-02-2017.
9. **Anju Shrivastava** (2016) "Phytochemicals re-establish antitumor immunity by resetting the cross-talk between cancerous and immune cells" at INCD-2016 Cochin, Kerala from 9-9-2016 to 11-9-2016.
10. Kavita Rawat, Rani Kumari and **Anju Shrivastava** (2016)" Effect of *Tinospora cordifolia* on Neutrophils Infiltration in Major Organs of Tumor Bearing Mice : an Immunomodulatory and Anti-Tumor Role" at INCD-2016 Cochin , Kerala from 9-9-2016 to 11-9-2016.
11. Rani Kumari, Kavita Rawat, and **Anju Shrivastava** (2016)" Effect of *Tinospora cardifolia* on Dalton's lymphoma –induced Angiogenesis: an in vivo study" at INCD-2016 Cochin, Kerala from 9-9-2016 to 11-9-2016. (Adjudged best poster presentation)
12. **Anju Shrivastava** (2016) "Phytochemicals and cancer prevention: Involvement of NF-κB Signalling, Epigenetics, and Cell Death Mechanisms" at Department of Biotechnology, Panjab University, Chandigarh
13. Kavita Rawat, Rani Kumari, and **Anju Shrivastava** (2016) "Effect of *Tinospora cardifolia* on progression of Dalton's lymphoma in Balb/c mice : a biochemical, hematological and histological study" at National Conference on "Biotechnological Perspectives in Healthcare" scheduled to be held on 16.07.16.
14. Rani Kumari, Kavita Rawat, and **Anju Shrivastava** (2016) Effect of *Tinospora cardifolia* on DL-induced angiogenesis in mouse mesentery: A good in vivo model to study tumor-induced angiogenesis at National Conference on "Biotechnological Perspectives in Healthcare" scheduled to be held on 16.07.16. (Adjudged best poster presentation)
15. Anand Swaroop Shukla, Zoha Ahmed and **Anju Shrivastava** (2016) High Hydrogen sulphide levels in Dalton's lymphoma: Role of tumor-associated macrophages at National Conference on "Biotechnological Perspectives in Healthcare" scheduled to be held on 16.07.16.
16. **Anju Shrivastava** (2016) Resetting immune system to beat disorders at CPDHE, Jawaharlal Nehru University, Delhi on 10-10-2016.

17. **Anju Shrivastava** (2015) A Cross-Talk between Tumor Cells and Macrophages: Implications for new anti-cancer therapy. Held at Department of Zoology, Pune University, Pune from 24-25 March, 2015.
18. **Anju Shrivastava** (2015) Tumor and Immunomodulation: A Cross-Talk between Tumor Cells and Macrophages, held at Department of Biotechnology, Panjab University, Chandigarh on 10 February, 2015.
19. **Anju Shrivastava** (2014) Tumor and Immunomodulation. Refresher Course, Department of Botany, University of Delhi on 12-12-2014
20. Ms. Neetu Bharti and **Anju Shrivastava** (2013) *Aerva Sanguinolenta* and cancer prevention: Involvement of NF- κ B Signalling, Epigenetics, and Cell Death Mechanisms. STRAM held at BHU, Varanasi from 19-20 October, 2013.
21. Anupma Kumari and **Anju Shrivastava** (2013) Regulation of L-arginine metabolism in tumor-associated macrophages: a possible therapeutic approach. *40th Indian Immunology Society meeting held at University of Delhi from November 15-17, 2013. (Adjudged Best Poster Award)*
22. **Anju Shrivastava** and Anupama Kumari (2013) A cross-talk between tumor cells and macrophages: evidence and therapeutic opportunity. Molecular Immunology Forum 2013, JNCASR, Bangalore from January 17-19, 2013.
23. **Anju Shrivastava**, Nikesh Gupta, Rakesh Sharma and A.N. Maitra (2011) Enzyme loaded Hollow gold nanoparticles have potential application in Cancer Nanotechnology. *38th Annual Meeting and Exposition of Control Release Society at National Harbor, Maryland held from July30 –August 3, 2011.*
24. Gurdyal Singh, Anupma kumari, Jagdeep Kaur, and **Anju Shrivastava** (2011) *Micobacterium* lipases Lip Q and Lip D downregulates microbicidal response by inhibiting nitric oxide production by macrophages. *37th Indian Immunology Society meeting held at Jammu University from February 4-7, 2011.*
25. Nisha Misra_and **Anju Shrivastava** (2011) Anti- inflammatory and Anti- arthritic property of the plant *Crinum asiaticum*. *37th Indian Immunology Society meeting held at Jammu University from February 4-7, 2011.*
26. Gurdyal Singh, **Anju Shrivastava** and Jagdeep Kaur (2010) Functional Characterization of Putative Carboxylesterase (Rv2485c) from *Micobacterium tuberculosis* H37Rv. International Symposium on 'Tuberculosis Diagnostics: Innovating to Make an Impact', held at ICGB New Delhi, India from Dec 16-17, 2010,. (Poster Presentation)
27. Abhimanyu K. Jha, Gaurav Parashar, Mohsen Nikbakht, **Anju Shrivastava**, Neena Capalash, Jagdeep Kaur. Abstract for poster presentation entitled 'Effect of plant extracts and EGCG on promoter hypermethylation of RAR β 2 in HeLa cell line' published in Biotechnica Chandigarh-2010 at Chandigarh, India. (Poster Presentation)
28. *33rd All India Cell Biology Conference and Symposium*, held at University of Hyderabad, Hyderabad from 4th to 6th Dec., 2009.
29. Nikesh Gupta, Rakesh Kumar Sharma, **Anju Shrivastava** and Amarnath Maitra, (2009) Enzyme loaded hollow gold nanoparticles have potential applications in cancer nanotechnology. Proceedings of *Indo- US Symposium on Cancer Nanotechnology* held at INSA Delhi from 4th - 6th Feb., 2009. (Adjudged 2nd best presentation)
30. Abhimanyu K. Jha, Mohsen Nikbakht, **Anju Shrivastava**, Neena Capalash, Jagdeep Kaur. Abstract for poster presentation entitled 'Effect of natural compounds on reversal of epigenetic changes in cervical carcinoma' published in international symposium on "Epigenetic modifications of the genome: Mechanisms and

implications" held from 23-24th Feb 2009 at CCMB, Hyderabad, India.

31. Abhimanyu Kumar Jha, M. Nikbakht, **Anju Shrivastava**, Neena Kaplash and Jagdeep Kaur (2008) Effect of natural compounds on reversal of epigenetic changes in cervical carcinoma. Proceedings of *International Symposium on Novel Strategies for targeted prevention and treatment of cancer*, held at JNU from 19th to 20th Dec., 2008.
32. *32nd All India Cell Biology Conference and Symposium*, held at University of Pune , Pune from 4th to 6th Dec., 2008.
33. Jha Abhimanyu Kumar, **Shrivastava Anju**, Capalash Neena, Kaur Jagdeep. Abstract for poster presentation entitled 'Reversal of promoter hypermethylation by natural compounds in SiHa cell line' published in the "9th ICCB (International Congress on Cell Biology) 2008 " held from 7-10th October 2008 at Seoul, South Korea.
34. Abhimanyu K. Jha, Mohsen Nikbakht, **Anju Shrivastava**, Neena Capalash, Jagdeep Kaur. Abstract for poster presentation entitled 'Reversal of promoter hypermethylation in HeLa cell line with curcumin' published in CHASCON(Chandigarh Science Congress) 2008.
35. Jha Abhimanyu Kumar, Nikbakht Mohsen, **Shrivastava Anju**, Capalash Neena and Kaur Jagdeep. Abstract for poster presentation entitled 'Effect of natural compounds on reversal of epigenetic changes in cervical cancer' published in International Symposium on 'Novel Strategies For Targeted Prevention and Treatment of Cancer' held at JNU, Delhi (2008).
36. Nisha Misra and **Anju Shrivastava** (2007) Effect of different non-steroidal anti-inflammatory drugs on immunomodulation of murine macrophage functions. *31st All India Cell Biology Conference and Symposium*, held at Banaras Hindu University , Varanasi from December 14-16, 2007.
37. Abhimanyu Jha, Neetu Bharti, **Anju Shrivastava**, Neena Caplash and Jagdeep Kaur (2007) Epigenetic reversal in cervical cancer cell lines with natural compounds. *31st All India Cell Biology Conference and Symposium*, held at Banaras Hindu University , Varanasi from December 14-16, 2007.
38. **Anju Shrivastava** (2007) Tumor and Immunomodulation: A Cross-Talk between Tumor Cells and Macrophages. *National Symposium on Comparative Endocrinology and Reproductive Physiology*, held at Department of Zoology, Vishwa Bharti, Shantiniketan, November 25-27, 2007.
39. Neetu Bharti and **Anju Shrivastava** (2007) Evaluation of anti-tumor activity in crude extract of Kagbooti (A medicinal Plant) Against Daltons Lymphoma. *30th All India Cell Biology Conference and Symposium*, held at University of Delhi, Delhi from February 2-4, 2007.
40. Gajadhar Bhakta, Ankur Maheshwari, Amarnath Maitra and **Anju Shrivastava** (2007) Efficient presentation of Nanoparticle Encapsulated DNA Vaccine by Macrophages. *30th All India Cell Biology Conference and Symposium*, held at University of Delhi, Delhi from February 2-4, 2007.
41. Ankur Maheshwari, Suman Kumar, and **Anju Shrivastava** (2007) Activation of Macrophages with N-formyl-methionyl-leucyl-phenylalanine: Involvement of Protein Kinase C and Tyrosine Kinase. *30th All India Cell Biology Conference and Symposium*, held at University of Delhi, Delhi from February 2-4, 2007.
42. Bhakta G., **Shrivastava, A.**, and A. N. Maitra (2006) 'Magnesium Phosphate Nanoparticle as Potent Carrier and Adjuvant for DNA Vaccines'. *Proceedings of 33rd Annual Meeting and Exposition of Controlled Release Society*, at Austria Center, Vienna, Austria form 22nd-26th July, 2006.
43. **Shrivastava, A.** (2005) Innate Immunity. Refresher Course, *Organized by CPDHE, University of Delhi, Delhi* from Dec. 20, 2005 to Jan. 9, 2006.

44. **Shrivastava, A.** (2005) Nitric Oxide. Refresher Course, *Organized by CPDHE, University of Delhi, Delhi* from Dec. 20, 2005 to Jan. 9, 2006.
45. **Shrivastava, A.,** Bhakta, G. Bist, S. and A. N. Maitra (2005) Inorganic Phosphate Nanoparticle-encapsulated DNA: A potential DNA Vaccine. *National Conference on Nanomaterials & Applications (NANO-2005) organized by Amity Institute of Nanotechnology, Noida, 27-28 May, 2005.*

Updated list of Publication

In Indexed/ Peer Reviewed Journals

Full length research papers: (48)

1. R. Lohia, P. Jain, M. Jain, H. Mishra, P. Burma, A. Shrivastava and Shweta Saran (2018) Deletion of Dictyostelium discoideum Sir2A impairs cell proliferation and inhibits autophagy. **Journal of Biosciences** Ref.: Ms. No. JBSC-D-17-00724R1 (accepted for publication)
1. Meenakshi Jha, Sandesh Kumar Patel, Abhimanyu Kumar Jha and **Anju Shrivastava** (2017) Promoter hypermethylation of FHIT and P14 genes in OSCC patients among north Indian population. **Cancer Therapy and Oncology International Journal**, 5 (2) doi: 10.19080/CTOIJ.2017.05.555660.
2. Kumari R, Rawat K, Kumari A, **Shrivastava A.** (2017) Amelioration of Dalton's lymphoma-induced angiogenesis by melatonin. **Tumor Biology**, 39(6):1010428317705758. doi: 10.1177/1010428317705758.
3. Kumar A, Manisha, Sangha GK, **Shrivastava A**, Kaur J. (2017) The immunosuppressive effects of a novel recombinant LipQ (Rv2485c) protein of Mycobacterium tuberculosis on human macrophage cell lines. **Microb Pathog.**, 107:361-367. doi: 10.1016/j.micpath.2017.04.015.
4. Venkateswaran K, Verma A, Bhatt AN, **Shrivastava A**, Manda K, Raj HG, Prasad A, Len C, Parmar VS, Dwarakanath B. (2017) Emerging roles of calreticulin in cancer: implications for therapy". **Current Protein & Peptide Science**, 14: 2495-2507. PMID:28079009.
5. Lohia R, Jain P, Jain M, Burma PK, **Shrivastava A**, Saran S. (2017) Dictyosteliumdiscoideum Sir2D modulates cell-type specific gene expression and is involved in autophagy. **Int J Dev Biol.**, 61(1-2):95-104. doi: 10.1387/ijdb.160038ss.
6. Rituparna Das, Kulbhushan Thakur, **Anju Shrivastava**, Akshita Puri, and Mousumi Mutsuddi. (2017) Identifying epigenetic endpoints of pesticide exposure can curtail risk to develop cancer: A review. **International journal of Advanced Research**, 5(1), 1093-1097. doi: 10.2147/IJAR01/2857.
7. Kavya Venkateswaran, **Anju Shrivastava**, Paban K. Agrawala, Ashok K. Prasad, Namita Kalra, Parvat R Pandey, Kailash Manda, Hanumantharao G. Raj, Virinder S. Parmar, and Blikere S. Dwarakanath. (2016) Mitigation of radiation-induced hematopoietic injury by polyphenolicaetate7,8-diacetoxy-4-methylthiocoumarin in mice. **Scientific Reports**, doi: 10.1038/srep37305.
8. Meenakshi Jha, Sandesh Kumar Patel, Shantanu Gupta, Abhimanyu Kumar Jha and **Anju Shrivastava** (2016) Promoter hypermethylation of Tumor suppressor genes in lung cancer. **Research Journal of Pharmaceutical, Biological and Chemical Sciences**, 7(5) 2016.
9. Jain. P., Shara. P., **Shrivastava. A.**, Saran. S. (2016). *Dictiyostelium discoideum*: A model System to Study Autophagy Mediated Life Extension. **Topics in Biomedical Gerontology** edited by Rath.

P.C., Sharma. R, Prasad. S. 35-55.

10. Jha M, Aggarwal R, Jha A K, Shrivastava A. (2015) Natural Compounds: DNA Methyltransferase Inhibitors in Oral Squamous Cell Carcinoma. **Appl Biochem Biotechnol.**, 177(3):577-94. doi: 10.1007/s12010-015-1768-y.
11. Ruchi Aggarwal, Meenakshi Jha, **Anju Shrivastava**, and Abhimanyu Kumar Jha (2015) Natural Compounds: Role in Reversal of Epigenetic Changes. **Biochemistry (Moscow)**, 80(8):972-89. doi: 10.1134/S000629791508002?.
12. Rahul Dev Verma, Manish Katiyar, Urvashi Verma, Gitanjali Sharma, **Anju Shrivastava**, Abhimanyu Kumar Jha (2014) Demethylation of Promoter Region of FHIT Gene in A549 Cell Line by Sweet Potato Leaf Extract. **International Journal of Applied Biotechnology and Biochemistry**. Vol.4:2 pp. 125-131.
13. Gosain A, Shrivastava, A. and Saran S. (2014) Peptide: N- glycanase is expressed in prestalk cells and plays a role in the differentiation of prespore cells during development of Dictyostelium discoideum. **Indian J Exp Biol**. 2014 Mar;52 (3):197-206.
14. Kavya Venkateswaran, Amit Verma, Anant N. Bhatt, Paban K. Agrawala, Hanumantharao G. Raj, Shashwat Malhotra, Ashok K. Prasad, Olivier De Wever, Marc E. Bracke, Luciano Saso, Virinder S. Parmar, **Anju Shrivastava** and B.S. Dwarakanath (2014) Modifications of Cell Signalling and Redox Balance by Targeting Protein Acetylation Using Natural and Engineered Molecules: Implications in Cancer Therapy. **Current Topics in Medicinal Chemistry**, Vol: 14: 22 Pages 2495-2507 (13) DOI: 10.2174/ 15680266 14666 1412031 22005.
15. Banergee C., Singh A., Gosh T.A., Raman R., **Shrivastava A.** and Majumder S. (2014) Ameliorating ER-stress attenuates *Aeromonas hydrophila*-induced mitochondrial dysfunctioning and caspase mediated HKM apoptosis in *Clarias batrachus* **Scientific Reports**, 4: 5820.
16. Bhakta G., Nurcombe V., Maitra A. and **Shrivastava A.**, (2014) DNA-encapsulated magnesium phosphate nanoparticle elicit both humoral and cellular responses in mice. **Results in Immunology** 4: 46–53.
17. Nikesh Gupta, **Anju Shrivastava** and Rakesh Sharma (2012) Silica Nanoparticles Co-Encapsulating Gadolinium Oxide and Horse Radish Peroxidase for Imaging and Therapeutic Applications. **International J. of Nanomedicine**, Volume 2012:7 Pages 5491 – 5500 DOI: <http://dx.doi.org/10.2147/IJN.S33295>
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19. A.K. Jha, M. Nikbakht, G. Parashar, **A. Shrivastava**, N. Capalash, J. Kaur (2010) Reversal of Hypermethylation and Reactivation of the *RARβ2* Gene by Natural Compounds in Cervical Cancer Cell Lines. **Folia Biologica (Praha)** 56, 195-200.
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Public Service / University Service / Consulting Activity

- **Joint Secretary**, Indian Society of Cell Biology (Currently)
- **Staff Secretary**, Department of Zoology since Nov. 2011-Nov. 2016.
- **Convener/ member of Departmental committees**: (at different times)
 - Contingency and Stationary Committee (currently),
 - Academic Committee,
 - Seminar, Travel & Excursion Committee,
 - Repair Committee,
 - CIF committee
- **Member BRS, Faculty of Science, University of Delhi** (till 2016)

- **Member Special Categories Admission Enabling Committee** for academic session 2013-2014
- **Treasurer**-DUWA since January 2015 till date.
- **Joint Treasurer** Delhi University Women's Association (DUWA) since January 2013 till 2015.
- **Organized IIIrd Training Workshop in Drosophila Genetics for College Teachers** on 'Teaching Genetic with *Drosophila*' at Department of Zoology, University of Delhi, Delhi from 2013.
- **EC Member** Delhi University Women's Association since January 2013 till date.
- **Organized National Workshop** on 'Techniques in Endocrinology' at Department of Zoology, University of Delhi, Delhi from December 20- 28, 2012.
- **Organized IInd Training Workshop in Drosophila Genetics for College Teachers** on 'Teaching Genetic with *Drosophila*' at Department of Zoology, University of Delhi, Delhi from January 28-29, 2012.
- **Member of Managing Committee** EOC, University of Delhi, Delhi since October 2011.
- **Organized Basic Training Workshop for College Teachers** on '*Drosophila* Genetics' at Department of Zoology, University of Delhi, Delhi from November 13- 14, 2010.
- **Resident Tutor**, University Hostel for Women, University of Delhi, Delhi Since May 2004 till 10-08-2010.
- **Organized 30th All India Cell Biology Conference and Symposium** on Molecules to Compartments: Cross-Talks and Networks, at Department of Zoology, University of Delhi, Delhi from February 2-4, 2007

Professional Societies Memberships

- Life Member, **Indian Immunology Society**
- Life Member, **Indian society of Cell Biology**
- Life Member, **Indian National Science Congress**

Projects (/ Minor grant/ Major Grants / Collaborations)

1. Minor:

R&D Research Grant, University of Delhi, since 2007 every year

- | | |
|-------|---|
| I. | 2007: Ref. no. Dean(R) / R&D/2007/Ph-II/TR no. 134 (2.5 Lakh) |
| II. | 2008: Ref. no. Dean(R) / R&D/2008/ TR no. 180 (2.5 Lakh) |
| III. | 2009: Ref. no. Dean(R) / R&D/2009/ TR no. 487 (2.5 Lakh) |
| IV. | 2010: Ref. no. Dean(R) / R&D/2010/ TR no. 489 (2.5 Lakh) |
| V. | 2011: Ref. no. Dean(R) / R&D/2011/TR no. 423 (2.5 Lakh) |
| VI. | 2012: Ref. no. Dean(R) / R&D/2012/TR no. 917 (2.5 Lakh) |
| VII. | 2013: Ref. no. Dean(R) / R&D/2013/TR no. 4155 (2.8 Lakh) |
| VIII. | 2014: Ref. no. Dean(R) / R&D/2014/ (3.0 Lakh) |
| IX. | 2015: Ref. no. RC/2015/ 9677/D-1813(3.0 Lakh) |

2. Major Research Projects:

- i. Synthesis, Physico-chemical characterization and biological applications of enzyme loaded hollow gold nanoparticles. DST, India (Ref. No. SR/SI/PC-23/ 2009) for three years starting from June 2010.(45 lakh)
- ii. Cloning expression and Characterization of the selected Lipase genes (Lip D & Lip Q) of Mycobacterium tuberculosis H37 Rv and its possible role in virulence” (Ref. No. BT/PR-11349/MED/30/136/2008) for three years from February 2010.(16.70 lakh)
- iii. Evaluation of Potential Applications of Inorganic Nanoparticles in Nanomedicine {Ref. No. DU/DST-PURSE GRANT (DeanR/2009/868; dated December 11, 2009)} for three years from January 2010.(49.5 lakh)
- iv. Regulation of c-Jun N-terminal Kinase Signaling in Breast Cancer progression, **DST, India** (Ref. No. SR/SO/BB-46/ 2004).(24 lakh)
- v. Identification and Characterization of c-Jun N-terminal Kinase (JNK)-interacting Proteins in Breast Cancer, **UGC, India.** (Ref. No. F31-247/2005(SR). (11 lakh)

(Signature of Faculty Member)

(Signature & Stamp)
(Head of the Department)