



Dr G.B. Jena

Associate Professor

Facility for Risk Assessment & Intervention Studies

Department of Pharmacology and Toxicology

National Institute of Pharmaceutical Education and Research (NIPER), SAS Nagar, Mohali, Panjab,

HONOURS/ AWARDS/ ACADEMIC ACHIEVEMENTS:

Recipient of *Samanta Chandra Sekhar Award* by Odisha Vigyan Academy, Dept. of Science and Technology, Govt. of Odisha, Bhubaneswar, in the category of Odia Scientist working outside the state in recognition of outstanding contribution in the field of Science and Technology, 2019.

Raj nibhai V. Patel *PharmInnova Award* for best Research Guide in PhD thesis entitled ‘Studies on the role of zinc in testicular pathophysiology of rat with selected anticancer drugs and in diabetic condition’ (Winner of Best PhD Thesis), Ahmedabad, Gujrat.2019

Award of Appreciation from Director, NIPER on National Technology Day, for significant scientific achievements, May 11, 2018.

Raj nibhai V. Patel *PharmInnova Award* for best Research Guide in PhD thesis entitled ‘Anti-diabetic and anti-fibrotic effects of selected HDAC inhibitors in experimental diabetic rat: Elucidation of molecular mechanisms’ (Winner of Best PhD Thesis), Ahmedabad, Gujrat. 2018

Awarded *Gandhian Young Technological Innovation (GYTI)* Awards-2015 by the Society for Research and Initiatives for sustainable Technologies and Institutions (SRISTI) on the work ‘Valproic acid prevents progression of diabetic nephropathy: Elucidation of molecular mechanisms and proof of concept for promising therapeutic usefulness’ at Festival of Innovation, Rastrapati Bhawan, New Delhi, March 8, 2015

Raj nibhai V. Patel *PharmInnova Award* for in M. Pharm thesis entitled ‘Influence of 3-aminobenzamide, a poly (ADP-robosc) polymerase inhibitor on genotoxicity and cytotoxicity: Study with selected mutagens in mice. (Best Research Guide)in Pharmacology, Ahmedabad, Gujrat. 24th May, 2014

Participated on invitation in the *Global Gallery of Toxicologists* in the 53rd Society of Toxicology Annual Meeting to exchange idea and collaboration in the global arena with time for networking and discussion on invitation by **Professor Herman Autrup, President, IUTOX**, on 24th March, 2014.

Invitation by **Prof. R.M. Santella**, Professor & Dean of Environmental Health Sciences, Mailman School of Public Health, Columbia University, New York, USA to visit her

laboratory and to deliver a lecture on Genotoxicity Testing in Regulatory Toxicology on 28th March, 2014.

Awarded 2014 *SOT/AstraZeneca/SOT Endowment Fund/IUTOX Travel Award* to attend 53rd Annual Meeting of Society of Toxicology at Phoenix, Arizona, March 23 -27, 2014.

Research paper Selected for OECD guidelines on OECD GUIDELINE(TG-489) FOR THE TESTING OF CHEMICALS, IN VIVO MAMMALIAN ALKALINE COMET ASSAY, 26 Sept, 2014, Research paper entitled “**Evaluation of multi-organ DNA damage by single cell gel electrophoresis assay (SCGE) from 28 days repeated dose oral toxicity test: A practical approach for test integration in regulatory toxicity testing**” *Regulatory Toxicology and Pharmacology*, (2010) vol. 58/1, 145-154,

Invited to write an article about the present scenario of *Regulatory Toxicology Status in India* by the **Association of Scientists of Indian Origin (ASIO)**, Society of Toxicology (SOT), United States,2013.

Selected to receive free journal *Environmental and Molecular Mutagenesis* published by US Environmental Mutagen Society for **career advancement of young scientist in Developing country**. (Since 2000)

ISCA Young Scientist Award 86th Indian Science Congress Association,Chennai, 3rd - 7th January,1999

Post Doctoral Fellowship awarded by World Health Organisation/International Agency for Research on Cancer (WHO/IARC), to carryout work on cancer epidemiology under the guidance of Prof R M Santella in Columbia University, New York, USA, 1995.

International Training Course of WHO/IARC on ‘**The Detection of Health Hazards in Human Populations Exposed to Mutagens and Carcinogens**’ *Chulabhorn Research Institute, Bangkok*, 15th-26th, November,1993.

United Nations Environmental Programme (UNEP) full financial support for WHO/IARC training course, Bangkok,1993.

M.Phil., 1st Position 1991; Merit position 2nd in M.Sc., 1989; Second prize in Departmental seminar competition in M.Sc.; State Merit Scholarship M.Sc. (1987-1989); Merit Position 9th in B.Sc.; National Merit Scholarship, Matriculation.



Dr G. B. Jena receiving PharmInnova Award from Shri N.R. Narayana Murthy on the occasion of RV Patel Trust PharmInnoVa Award Ceremony, Ahmedabad, Gujrat. , 2018



Dr G.B. Jena receiving the PharmInnova award from Dr T. Ramasami, Secretary, DST, Govt of India, Ahmedabad, Gujrat. 24th May, 2014



SOT/AstraZeneca/SOT Endowment Fund/ IUTOX Travel Award presented to Dr G.B. Jena in the 53rd Annual Meeting of Society of Toxicology at Phoenix, Arizona, March 23 -27, 2014.



Dr G.B. Jena elected as member National Academy of Medical Sciences, New Delhi in recognition of significant contribution for the advancement of Medical Sciences, 2014

PhD Students turned out and current Affiliations



Durga Nand Tripathi

'Studies on Cyclophosphamide-induced oxidative stress, genotoxicity and carcinogenicity: Intervention of Agents'

Assistant Professor

Center for Precision Environmental Health

Department of Molecular & Cellular Biology

Baylor College of Medicine, Houston, TX 77030-3411

United States

durga.tripathi@bcm.edu



Ajit Vikram

'Insulin-resistance associated compensatory hyperinsulinemia and prostatic hyperplasia'

Assistant Professor,

Department of Internal Medicine,

Carver College of Medicine,

University of Iowa, IA, USA



Sapana Kushwaha

'Chemical Susceptibility in Hyperglycemic Condition: Study with Selected Antihypertensive Drugs in Streptozotocin-Induced Diabetic Rat Model'

Assistant Professor

Dept. of Pharmacology & Toxicology,

NIPER, Raebareli



Priyanka P Trivedi

'Elucidation of the molecular mechanisms involved in dextran sulfate sodium-induced ulcerative colitis-associated local and global damage in mice: studies with selected agents'

Senior Scientist-Biomarkers

Drug Safety Research and Development

Pfizer Inc., Cambridge, Massachusetts, USA



Sabbir Khan

Anti-Diabetic and Anti-Fibrotic Effects of Selected HDAC Inhibitors in Experimental Diabetic Rat: Elucidation of Molecular Mechanisms.

Post Doctoral Research Fellow

**The University of Texas,
MD Anderson Cancer Center, Houston, USA**



Krishna Prahlad Maremanda

Studies on the role of zinc in testicular pathophysiology of rat with selected anticancer drugs and in diabetic conditions

Post Doctoral Research Fellow

Renal Division, Brigham and Women's Hospital, Harvard Medical School



Durgesh Kumar Dwivedi

Pharmacological Intervention of glibenclamide and dimethyl fumarate in experimental liver fibrosis, non-alcoholic fatty liver disease and early hepatic carcinogenesis in rodents.

**Assistant Research Officer (Pharmacology),
Regional Ayurveda Research Institute**

Recognitions and Awards by the students from the Laboratory



Sabbir Khan, PhD Student, receiving Gandhian Young Technological Innovation (GYTI) Award-2015 from Dr R A Mashelkar on 8th March, 2015, during the Festival of Innovations (FOIN) in the Rashtrapati Bhavan, New Delhi, India



Sabbir Khan, PhD Student receiving DST-Award in the 65th Lindau Nobel Laureates meeting from Prof. Ashutosh Sharma, Secretary, Ministry of Science and Technology, DST, 28-June to 3-July, 2015, Lindau, Germany.



Sabbir Khan, PhD Student, receiving the Association of Scientists of Indian Origin (ASIO) 2015 International Toxicologist Travel Award in the 54th meeting of Society of Toxicology (SOT), San Diego, California, USA.



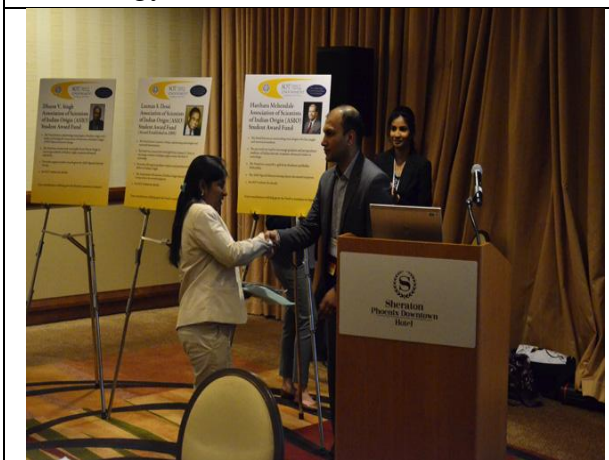
Sabbir Khan, PhD Student, receiving the Toxicologic and Exploratory Pathology Specialty Section Travel Award in the 54th meeting of Society of Toxicology (SOT), San Diego, California, USA.



Priyanka Trivedi, PhD Student, receiving the receiving the Carl C. Smith Graduate Student Award for Meritorious Research-2014 in the 53rd meeting of Society of Toxicology (SOT), Arizona, USA.



Priyanka Trivedi, PhD Student, receiving the Ranbaxy Science Scholar Award-2014 in New Delhi, India






Sapana, PhD student receiving the Association of Scientists of Indian Origin (ASIO) 2014 International Toxicologist Award in the 53rd meeting of Society of Toxicology (SOT), Arizona, USA.



Lokesh Yadav, Master Student receiving the Ramanbhai V. Patel PharmInnova Award for best M.Pharm. Thesis-2013-14 in Pharmacology category.

Current PhD Students:

	<p>Chittaranjan Sahu: Enrolled in July, 2016</p> <p>Area of work:</p> <p>Role of zinc and selenium in bisphenol A and diabetes induced germ cell damage.</p>
	<p>Shivani Singla: Enrolled in July, 2018</p> <p>Area of research:</p> <p>Role of PARP-1 inhibitors in colitis, colorectal cancer as well as Diabetes mellitus.</p>
	<p>Archana : Enrolled in July, 2019</p> <p>Area of research :</p> <p>Role of BAIBA in selected chemotherapeutic drugs and diabetes induced DNA damage, Germ cell damage and oxidative stress.</p>

Grants and Funding:

- *Azoxymethane/Dextran sulphate sodium induced colorectal cancer in mice: studies on single and combined exposure of PARP-1 and NLRP3 inflammasome inhibitors. Sponsored by Dept. of Science and Technology, DST, New Delhi.*
- *Intervention of Triphala against azoxymethane dextran sulphate sodium induced colitis associated colorectal cancer in mice: elucidation of molecular mechanisms, Indian Council of Medical Research, (ICMR), New Delhi.*
- *Influence of Nrf2-ARE signaling pathways on the genetic and epigenetic modifications in the germ cells of diabetic rat: Role of Zinc and Selenium. Sponsored by Dept. of Science and Technology, DST, New Delhi.*
- *Influence of Hyperglycemia on the Toxicity of Nicotine: Study with Enalapril in Streptozotocin-Induced Diabetic Rat Model Sponsored by Council of Scientific & Industrial Research, CSIR, New Delhi.*
- *Intervention of Pharmacological agents targeting NRF-2 ARE pathway against diethyl nitrosamine induced hepatocarcinogenesis in SD rat. Sponsored by Council of Scientific & Industrial Research, CSIR, New Delhi*
- *Influence of hyperglycemia (Diabetes mellitus) on the toxicity of selected antihypertensive drugs: Intervention of protective agents. Sponsored by Dept. of Science and Technology, New Delhi*
- *Regulatory Toxicology: Development of GLP Certified facility for Toxicological Screening of New Chemical Entities (NCEs). (Co-Investigator) Dept. of Science and Technology, New Delhi*
- *Azoxymethane/Dextran Sulphate Sodium Induced Colitis associated Colorectal Cancer in mice: Studies on Single and Combined exposure of PARP-1 and NLRP3 Inflammasome Inhibitors, DST-SERB, India*

Publications (*International Peer Reviewed Journals*)

S. No.	Authors	Titles	Journals
105	Ziaur Rahman, Durgesh Kumar Dwivedi, GB Jena	The intervention of tert-butylhydroquinone protects ethanol-induced gastric ulcer in type II diabetic rats: the role of Nrf2 pathway	Canadian Journal of Physiology and Pharmacology. (2021).99, 5, 522-535.
104	Z Rahman, DK Dwivedi, GB Jena	Ethanol-induced gastric ulcer in rats and intervention of tert-butylhydroquinone: involvement of Nrf2/HO-1 signalling pathway	Human & experimental toxicology. 2020, 39, 4, 547-562.
103	Durgesh K Dwivedi, GB Jena , Vinod Kumar	Dimethyl fumarate protects thioacetamide-induced liver damage in rats: Studies on Nrf2, NLRP3, and NF-κB	Journal of biochemical and molecular toxicology. 2020 Jun;34(6):e22476 (PMID: 32060995)
102	Durgesh Kumar Dwivedi, GB Jena	NLRP3 inhibitor glibenclamide attenuates high-fat diet and streptozotocin-induced non-alcoholic fatty liver disease in rat: studies on oxidative stress, inflammation, DNA damage and insulin signalling pathway	Naunyn-Schmiedeberg's archives of pharmacology. 2020,393, 4, 705-716,.
101	Chittaranjan Sahu, Aarzoo Charaya, Shivani Singla, Durgesh K Dwivedi, GB Jena	Zinc deficient diet increases the toxicity of bisphenol A in rat testis	Journal of Biochemical and Molecular Toxicology. 2020.34, 10, e22549, (PMID: 32609952)
100	C Sahu, DK Dwivedi, GB Jena	Zinc and selenium combination treatment protected diabetes-induced testicular and epididymal damage in rat	Human & experimental toxicology. 2020, 39, 9, 1235-1256,
99	Jayant Patwa, Sabbir Khan, GB Jena	Nicotinamide attenuates cyclophosphamide-induced hepatotoxicity in SD rats by reducing oxidative stress and apoptosis	Journal of Biochemical and Molecular Toxicology. 2020, 34, 10, e22558, (PMID: 32609954)
98	K P Maremanda, Sarath Babu, GB Jena	Zinc deficient diet exacerbates the testicular and epididymal damage in type 2 diabetic rat: Studies on oxidative stress-related mechanisms	Reproductive biology. 2020, 20, 2. 191-201.
97	Durgesh Kumar Dwivedi, GB Jena	Diethylnitrosamine and thioacetamide-induced hepatic damage and early carcinogenesis in rats: role of Nrf2 activator dimethyl fumarate and NLRP3 inhibitor glibenclamide	Biochemical and biophysical research communications, 2020 522, 381-387, .
96	IP Singh, S. Jachak, GB Jena	Therapeutic potential of seabuckthorn: a patent review (2000-2018)	Expert opinion on therapeutic patents. 2019 29, 9, 733-744,.
95	Durgesh Dwivedi, GB Jena	THU-074-Anti-fibrotic effect of dimethyl fumarate on rat liver fibrosis induced by thioacetamide: Role of NF-kappa B, NLRP3, Nrf2 and autophagy	Journal of Hepatology, 2019,70, 1, e191-e192,
94	Chander K Negi and GB Jena	Nrf2, a novel molecular target to reduce type 1 diabetes associated secondary complications: the basic considerations	European Journal of Pharmacology, 2019 843, 12-26
93	Durgesh K Dwivedi and	Glibenclamide protects against thioacetamide-induced hepatic damage in Wistar rat:	Naunyn-Schmiedeberg's

	G B Jena	investigation on NLRP3, MMP-2 and stellate cell activation	archives of pharmacology 2018, 391, 1257-1274,
92	V. G. Sheth, U. Navik, K, Maremanda KP, Jena GB	Effect of diethyldithiocarbamate in cyclophosphamide-induced nephrotoxicity: immunohistochemical study of SOD1 in rat	Indian J Pharmacology , 2018, 50, 4-11,
91	Khan S, Komarya SK, Jena GB	Phenylbutyrate and β -cell function: contribution of histone deacetylases and ER stress inhibition.	Epigenomics . 2017 May;9(5):711-720 .
90	Tikoo K, Vikram A, Shrivastava S, Jena GB , Shah H, Chhabra R	Parental High-Fat Diet Promotes Inflammatory and Senescence-Related Changes in Prostate	Oxid Med Cell Longev . 2017;2017:4962950
89	G.B. Jena and Sapana Chavan	Implementation of Good Laboratory Practices (GLP) in Scientific Research: Translating the Concept beyond Regulatory Compliance	Regulatory Toxicology and Pharmacology . 2017 Oct;89:20-25
88	Maremanda KP, Jena GB	Methotrexate-induced germ cell toxicity and the important role of zinc and SOD1: Investigation of molecular mechanisms.	Biochem Biophys Res Commun . 2017 Jan 29;483(1):596-601
87	Santo K Anto, Naresh Koyada, S. Khan and G.B. Jena	Alpha-lipoic acid attenuates transplacental nicotine-induced germ cell and oxidative DNA damage in adult mice.	J Basic Clin Physiol Pharmacol . 2016;27(6):585-593
86	K.P. Maremanda, S. Khan and G.B. Jena	Role of zinc supplementation in testicular and epididymal damages in diabetic rat: Involvement of Nrf2, SOD1, and GPX5.	Biol Trace Elem Res . 2016, 173(2):452-464.
85	S. Khan, K. Ahirwar and G. B. Jena	Anti-fibrotic effects of valproic acid: role of HDAC inhibition and associated mechanisms.	Epigenomics . 2016, 8(8):1087-101
84	S. Khan, S. Kumar and G. B. Jena	Valproic acid reduces insulin-resistance, fat deposition and FOXO1-mediated gluconeogenesis in type-2 diabetic rat.	Biochimie , (2016): 125, 42-52.
83	S. Khan and G. B. Jena	Sodium butyrate reduces insulin-resistance, fat accumulation and dyslipidemia in type-2 diabetic rat: A comparative study with metformin.	Chemico-Biological Interactions , (2016): 254, 124-134.
82	S. Khan and G. B. Jena	Valproic acid improves glucose homeostasis by increasing beta-cell proliferation, function and reducing its apoptosis through HDAC inhibition in juvenile diabetic rat.	J Biochem Mol Toxicol . 2016 30(9):438-446.
81	S. Khan, Z. R. Bhat and G. B. Jena	Role of autophagy and histone deacetylases in diabetic nephropathy: Current status and future perspectives.	Genes and Diseases , 2016,3,211-219
80	Khan S, Jena GB	The role of butyrate, a histone deacetylase inhibitor in diabetes mellitus: experimental evidence for therapeutic intervention.	Epigenomics . 2015;7(4):669-80
79	Kanika G, Khan S, Jena GB	Sodium Butyrate Ameliorates l-Arginine-Induced Pancreatitis and Associated Fibrosis in Wistar Rat: Role of Inflammation and Nitrosative Stress	J Biochem Mol Toxicol , 2015, PMID: 25774002
78	P.P. Trivedi G.B. Jena , K.B. Tikoo and V. Kumar	Melatonin Modulated Autophagy and Nrf2 Signaling Pathways in Mice With Colitis-Associated Colon Carcinogenesis	Molecular Carcinogenesis , 2015, doi: 10.1002/mc.22274

77	Khan S, Jena GB , Tikoo K	Sodium valproate ameliorates diabetes-induced fibrosis and renal damage by the inhibition of histone deacetylases in diabetic rat.	Experimental and Molecular Pathology , 2015,98(2):230-239.
76	Khan S, Jena GB , Tikoo K, Kumar V	Valproate attenuates the proteinuria, podocyte and renal injury by facilitating autophagy and inactivation of NF- κ B/iNOS signaling in diabetic rat.	Biochimie 2015, 110:1-16.
75	Aher J, Khan S, Jain S, Tikoo K, Jena G.	Valproate ameliorates thioacetamide-induced fibrosis by hepatic stellate cell inactivation.	Human Experimental Toxicology . 2015, 34(1):44-55.
74	Namoju RC, Khan S, Patel R, Shera F, Trivedi PP, Kushwaha, S, Jena GB	Prepubertal exposure of cytarabine-induced testicular atrophy, impaired spermatogenesis and germ cell DNA damage in SD rats	Toxicology Mechanisms and Methods , 2014, 24(9):703-712.
73	P. Trivedi and G.B. Jena	Mechanistic insight into beta-carotene-mediated protection against ulcerative colitis-associated local and systemic damage in mice	European Journal of Nutrition 2015,54:639-652.
72	Khan S. and G.B. Jena	Sodium butyrate, a HDAC inhibitor ameliorates eNOS, iNOS and TGF-beta1-induced fibrogenesis, apoptosis and DNA damage in the kidney of juvenile diabetic rats	Food and Chemical Toxicology 2014, 73:127-139.
71	Parmar AR , PP Trivedi, GB Jena	Dextran sulfate sodium-induced ulcerative colitis leads to testicular toxicity in mice: Role of inflammation, oxidative stress and DNA damage	Reproductive Toxicology 2014, 49,171-184.
70	Yadav L, S.Khan, GB Jena	Influence of 3-Aminobenzamide, a PARP inhibitor in the genotoxicity evaluation of selected candidates.	Mutation Research , 2014, 770:6-15.
69	Shekh K, Khan S, Jena GB , Kansara B, Kushwaha S.	3-aminobenzamide, a PARP inhibitor enhances the sensitivity of peripheral blood micronucleus and comet assays in mice.	Toxicol Mech Methods . 2014,24(5):332-341.
68	Maremanda KP, Khan S, Jena GB	Zinc protects cyclophosphamide-induced testicular damage in rat: involvement of metallothionein, tesmin and Nrf2.	Biochem Biophys Research Commun. (2014) 445(3):591-6.
67	Khan S, Jena GB.	Protective role of sodium butyrate, a HDAC inhibitor on beta-cell proliferation, function and glucose homeostasis through modulation of p38/ERK MAPK and apoptotic pathways: Study in juvenile diabetic rat.	Chemico Biological Interaction. (2014) 213:1-12
66	Khan S, Jena GB	Sodium valproate, a histone deacetylase inhibitor ameliorates cyclophosphamide-induced genotoxicity and cytotoxicity in the colon of mice.	J Basic Clinical Physiology and Pharmacology. (2014) 27:1-11
65	Jena GB , PP Trivedi	A review of the use of melatonin in ulcerative colitis: Experimental evidence and new approaches	Inflammatory Bowel Disease , (2014) (20) 3:553-63.

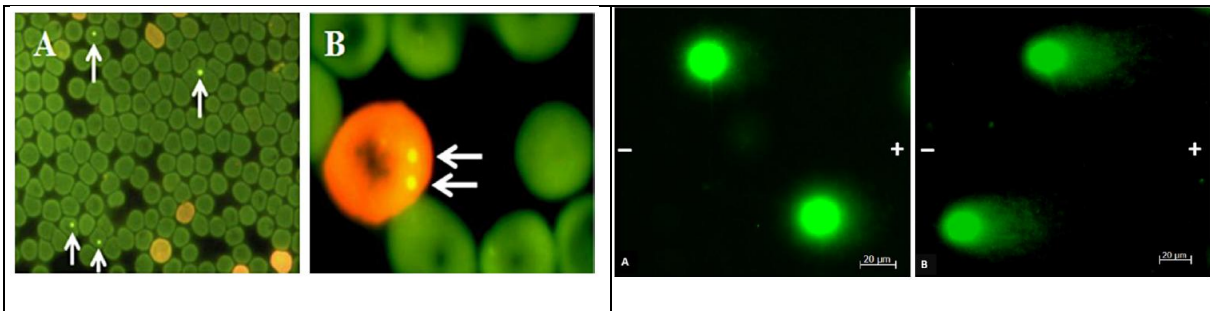
64	Trivedi PP, Jena GB.	Melatonin reduces ulcerative colitis-associated local and systemic damage in mice: Investigation on possible mechanisms.	Digestive Diseases and Sciences (2013), 58(12):3460-74.
63	Trivedi PP, Jena GB.	Role of α -lipoic acid in dextran sulfate sodium-induced ulcerative colitis in mice: Studies on inflammation, oxidative stress, DNA damage and fibrosis.	Food and Chemical Toxicology (2013) 59C:339-355.
62	Kushwaha S, Jena GB.	Effects of nicotine on the testicular toxicity of STZ-induced diabetic rat: Intervention of enalapril	Human and Experimental Toxicology (2013), PMID: 24044905
61	Kushwaha S, Jena GB.	Telmisartan ameliorates germ cell toxicity in the STZ-induced diabetic rat: Studies on possible molecular mechanisms.	Mutation Research (2013) 755(1):11-23.
60	Khan S, Jena GB.	Effect of sodium valproate on the toxicity of cyclophosphamide in the testes of mice: influence of pre- and post-treatment schedule.	Toxicology International (2013) 20(1):68-76.
59	Ramanjaneyulu SVVS, Trivedi PP, Kushwaha S, Vikram A, Jena GB.	Protective role of atorvastatin against doxorubicin-induced cardiotoxicity and testicular toxicity in mice.	Journal of Physiology and Biochemistry (2013), in press.
58	Trivedi PP, Jena GB.	Ulcerative colitis-induced hepatic damage in mice: studies on inflammation, fibrosis, oxidative DNA damage and GST-P expression.	Chemico-Biological Interactions (2013) 201(1-3):19-30.
57	Ahmad T, Shekh K, Khan S, Vikram A, Yadav L, Parekh CV, Jena GB.	Pretreatment with valproic acid, a histone deacetylase inhibitor, enhances the sensitivity of the peripheral blood micronucleus assay in rodents.	Mutation Research (2013) 751(1):19-26.
56	Jena GB, Trivedi PP, Sandala B.	Oxidative stress in ulcerative colitis: an old concept but a new concern.	Free Radical Research (2012) 46(11):1339-45.
55	Trivedi PP, Jena GB.	Dextran sulfate sodium-induced ulcerative colitis leads to increased hematopoiesis and induces both local as well as systemic genotoxicity in mice.	Mutation Research (2012) 15;744(2):172-83.
54	R. S. Patel, M. Rachamalla, N. R. Chary, F. Y. Shera, K. Tikoo, and G. B. Jena	Cytarabine induced cerebellar neuronal damage in juvenile rat: Correlating neurobehavioral performance with cellular and genetic alterations.	Toxicology (2012) 11;293 (1-3):41-52.
53	S. Mondal, D. N. Tripathi, A. Vikram, P. Ramarao and G. B. Jena	Furosemide-induced oxidative stress, genotoxicity and cytotoxicity in mice hepatocytes but weak genotoxicity in the bone marrow cells	Fundamental and clinical Pharmacology (2012) 26(3):383-92
52	S. Kushwaha and GB Jena	Enalapril Reduces Germ Cell Toxicity in Streptozotocin-Induced Diabetic Rat: Investigation on Possible Mechanisms	Nauyn Schiemdberg Archive of pharmacology (2012) 385(2):111-24.
51	A. Vikram and G.B. Jena	Diet-induced hyperinsulinemia accelerates growth of human androgen independent PC-3 cells	Nutrition and Cancer (2012) 64(1):121-7.
50	Kushwaha S, Vikram A, Trivedi PP, Jena	Alkaline, Endo III and FPG modified Comet assay as biomarkers for the detection of oxidative DNA damage in rats with	Mutation Research (2011) 24;726 (2):242-50.

	GB.	experimentally induced diabetes	
49	S. Khan,T. Ahmad, CV Parekh, PP Trivedi, S. Kushwaha and GB Jena	Investigation on Sodium valproate induced germ cell damage, oxidative stress and genotoxicity in male Swiss mice	Reproductive Toxicology (2011) 32(4):385-94.
48	A. Vikram and G.B. Jena	Acute inhibition of insulin receptor signaling in brain causes hyperglycemia and glucose intolerance.	Nature Proceedings , < http://hdl.handle.net/10101/nprc.2011.5701.1 >
47	Trivedi PP, Kushwaha S, Tripathi DN, Jena GB.	Cardioprotective effects of hesperetin against doxorubicin-induced oxidative stress and DNA damage in rat.	Cardiovascular Toxicology (2011) 11(3):215-25.
46	Trivedi PP, Tripathi DN, Jena GB	Hesperetin protects testicular toxicity of doxorubicin in rat: Role of NFκB, p38.	Food and Chemical Toxicology (2011) 49(4):838-47
45	Mughal A, Vikram A, Kushwaha S, Jena GB	Simultaneous use of erythropoietin and prior bleeding enhances the sensitivity of the peripheral blood micronucleus assay.	Mutagenesis (2011) 26(2):331-8
44	Mughal A, Vikram A, Ramarao P, Jena GB.	Micronucleus and comet assay in the peripheral blood of juvenile rat: establishment of assay feasibility, time of sampling and the induction of DNA damage	Mutation Research (2010) 700(1-2):86-94.
43	Trivedi PP, Kushwaha S, Tripathi DN, Jena GB.	Evaluation of male germ cell toxicity in rats: correlation between sperm head morphology and sperm comet assay.	Mutation Research (2010) 21;703(2):115-21
42	S. Kushwaha, A. Vikram, G.B. Jena	Protective effects of enalapril in streptozotocin-induced diabetic rat: Studies with DNA damage, apoptosis and expression of CCN2 in the heart, kidney and liver.	Journal of Applied Toxicology (2012) 32(9):662-72.
41	A.Vikram, G.B. Jena and P. Ramarao	Insulin-resistance and benign prostatic hyperplasia: the connection	European Journal of Pharmacology (2010) 641, 75-81.
40	A. Vikram, S. kushwaha and G. B. Jena	Relative influence of testosterone and insulin in the prostatic cell proliferation and growth	Steroids (2011) 76(4):416-23
39	A. Vikram, G. B. Jena and P. Ramarao	Insulin resistance reduces botulinum neurotoxin type-A induced prostatic atrophy and apoptosis in rats	European Journal of Pharmacology (2011) 650, 356-363.
38	A. Vikram and G. B. Jena	Role of insulin and testosterone in prostatic growth: Who is doing what?	Medical Hypothesis (2011), 7:474-478.
37	A. Vikram, G. B. Jena and P. Ramarao	Pioglitazone attenuates prostatic enlargement in diet induced insulin-resistant rats by altering lipid distribution and reversing hyperinsulinemia.	British Journal of Pharmacology (2010) 161, 1708-1721.
36	A. Vikram and G. B. Jena	S961, an insulin receptor antagonist causes hyperglycemia, hyperinsulinemia, insulin-resistance and depletion of energy stores in rats.	Biochemical Biophysical Research Communications (2010)

			398, 260-265.
35	G. B. Jena, A. Vikram, D. N. Tripathi, and P. Ramarao	Use of chemoprotectants in chemotherapy and radiation therapy: The Challenges of Selecting an Appropriate Agent	Integrative Cancer Therapies (2010) 9, 253-258.
34	D.N. Tripathi and G.B. Jena	Effect of melatonin on the expression of Nrf2 and NF- κ B during cyclophosphamide induced urinary bladder injury in rat.	Journal of Pineal Research (2010) 48, 324-331.
33	Sapana, D.N. Tripathi, A. Vikram, P. Ramarao and G. B. Jena	Evaluation of multiorgan DNA damage by single cell gel electrophoresis assay (SCGE) from 28 days repeated dose oral toxicity test: A practical approach for test integration in regulatory toxicity testing	Regulatory Toxicology and Pharmacology , (2010) 58, 145-154.
32	D. N. Tripathi and G. B. Jena	Astaxanthin intervention ameliorates cyclophosphamide-induced oxidative stress, DNA damage and early hepatocarcinogenesis in rat: Role of Nrf2, p53, p38 and phase-II enzymes	Mutation Research (2010)696(1): 69-80.
31	V. P. Dadhania, D. N. tripathi, A. Vikram, P. Ramarao and G. B. Jena.	Intervention of α -lipoic acid ameliorates methotrexate induced oxidative stress and genotoxicity: A study in rat intestine.	Chemico-Biological Interactions (2010) 183(1): 85-97.
30	C. Gupta, D. N. tripathi, A. Vikram, P. Ramarao and G. B. Jena.	Quercetin inhibits induction of DEN initiated and γ -BHC promoted pre-neoplastic lesions in the liver of rat.	Nutrition and Cancer (2011) 63(2):234-41.
29	A. Vikram, G. B. Jena and P. Ramarao	Increased cell proliferation and enhanced contractility of prostate in insulin resistant rats: linking hyperinsulinemia with benign prostatic hyperplasia	The Prostate (2010)70(1):79 to 89.
28	D. N. Tripathi and G.B. Jena	Intervention of astaxanthin against cyclophosphamide-induced oxidative stress and DNA damage: a study in mice.	Chemico-Biological Interactions (2009) 180: 398-406.
27	K. Saandeep, A. Vikram, D. N. Tripathi, P. Ramarao, G. B. Jena	Influence of Hyperglycaemia on Chemical-Induced Toxicity: Study with Cyclophosphamide in Rat	Basic and Clinical Pharmacology and Toxicology (2009) 105(4): 236-242.
26	C. Gupta, A. Vikram, D. N. Tripathi, P. Ramarao and G. B. Jena	Quercetin Modulates Diethylnitrosamine Induced Hepatotoxicity in Rats	Phytotherapy Research (2010) 24:119-128.
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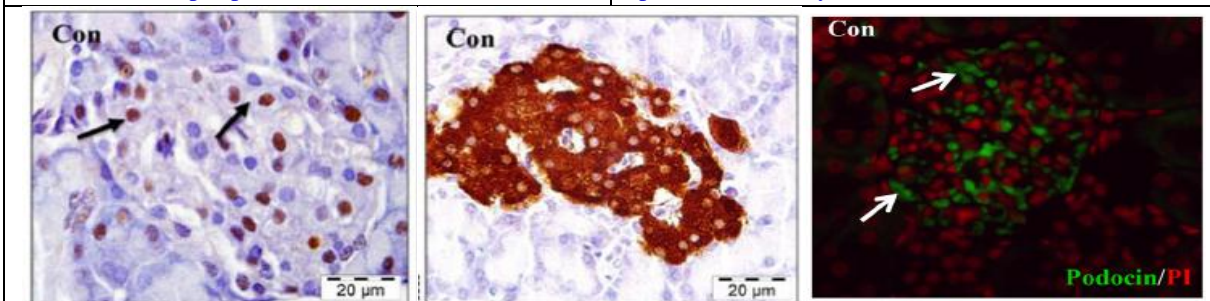
	Jena		
23	D. N. Tripathi and G. B. Jena	Ebselen attenuates cyclophosphamide-induced oxidative stress and DNA damage in mice	Free Radical Research (2008) 42: 966-977
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21	A. Vikram, D. N. Tripathi, A. A. Pawar, P. Ramarao, G.B. Jena	Pre-Bled-Young-Rats in Genotoxicity Testing: A Model for Peripheral Blood Micronucleus Assay	Regulatory Toxicology and Pharmacology (2008)52(2):147-157.
20	D. N. Tripathi and G. B. Jena	Astaxanthin Inhibits Cytotoxic and Genotoxic Effects of Cyclophosphamide in Mice Germ Cells	Toxicology (2008) 208(2-3):96-103
19	D. N. Tripathi, A. A. Pawar, A. Vikram, P. Ramarao, G. B. Jena	Use of the Alkaline Comet Assay for the Detection of Transplacental Genotoxins in Newborn Mice	Mutation Research (2008) 653(1-2):134-139
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Micronuclei in peripheral blood (stained with AO)

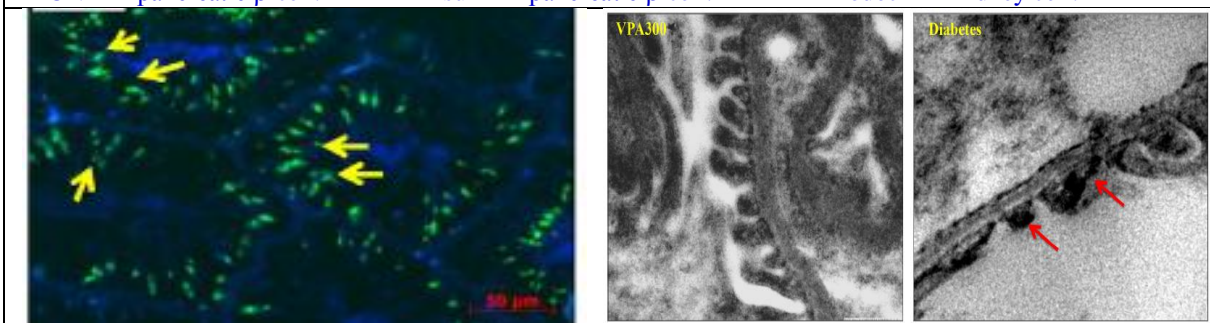
Sperm comet assay stained with SYBR Green-I.



PCNA in pancreatic β-cell.

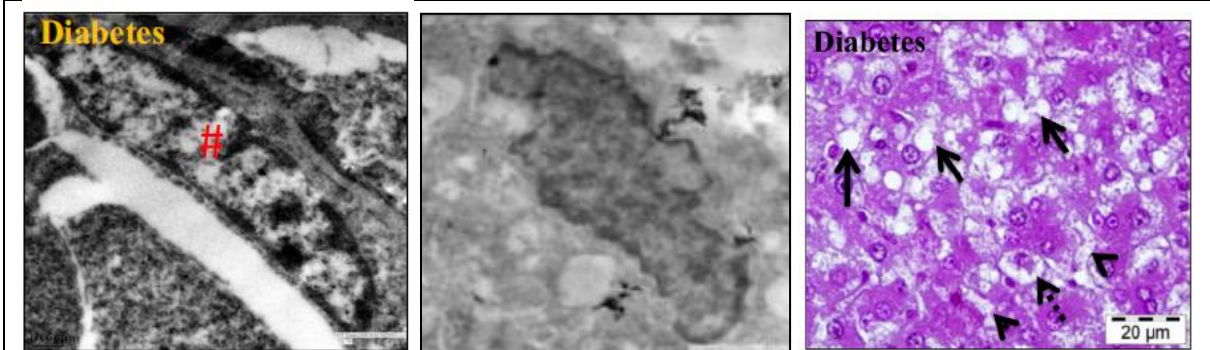
Insulin in pancreatic β-cell.

Podocin in kidney cell.



TUNEL-positive (apoptotic) cells in rat testes.

TEM image of podocyte effacement in diabetic kidney.



TEM image showing activated fibroblast in kidney and liver of rat.

Macro-vesicular steatosis in liver.