

# *Curriculum Vitae*

*of*

*Dr. Rajnish Kumar Chaturvedi*  
*Senior Scientist*  
*Systems Toxicology and Health Risk Assessment Group*



सीएसआईआर-भारतीय विषविज्ञान अनुसंधान संस्थान  
**CSIR-INDIAN INSTITUTE OF TOXICOLOGY RESEARCH**  
विषविज्ञान भवन, 31, महात्मा गाँधी मार्ग, पोस्ट बाक्स नं० 80, लखनऊ-226001, उ.प्र., भारत  
VISHVIGYAN BHAWAN, 31, MAHATMA GANDHI MARG, POST BOX NO 80, LUCKNOW-226001, U.P. INDIA



## **CURRICULUM VITAE**

1.	Name	Dr. Rajnish Kumar Chaturvedi			
2.	Date of Birth	August 1, 1978			
3.	Present designation:	Senior Scientist			
4.	Addresses with Tel/Fax/E-Mail:	Developmental Toxicology Laboratory Systems Toxicology and Health Risk Assessment Group CSIR-Indian Institute of Toxicology Research Vishvigyan Bhawan, 31 MG Marg, P.O. Box 80, Lucknow-226001 (UP) India Voice: 0522- 2627586 Ext: 255; Cell No. 09450418445 FAX: 0522-2628227 Email: <a href="mailto:rajnish@iitr.res.in">rajnish@iitr.res.in</a> , <a href="mailto:itrcrajnish@gmail.com">itrcrajnish@gmail.com</a>			
5.	Academic Qualifications:				
S. No.	Degree	Subject	Class /CGPA	Year	University
1	B.Sc	Botany Chemistry Environmental Science	I <sup>st</sup>	1998	Jiwaji University, Gwalior, M.P
2	M.Sc	Microbiology	I <sup>st</sup>	2000	Cancer Hospital and Research Institute, Jiwaji University, Gwalior, M.P
3	Ph.D*	Microbiology	-	2006	Jiwaji University, Gwalior, M.P and CSIR-IITR, Lucknow

\* Work done at CSIR-Indian Institute of Toxicology Research, Lucknow

### **Positions held (in chronological order):**

<b>S. No.</b>	<b>Period</b>	<b>Place of Employment</b>	<b>Designation</b>	<b>Scale of pay (Rs.)</b>
1.	3 <sup>rd</sup> Oct 2011-till date	CSIR-Indian Institute of Toxicology Research, Lucknow (UP)	Sr. Scientist	Pay band-III (15600-39100) Grade Pay: 7600
2.	3 <sup>rd</sup> Oct 2008-2 <sup>nd</sup> Oct 2011	CSIR-Indian Institute of Toxicology Research, Lucknow	Scientist C <b>(Got merit promotion)</b>	Pay band-III (15600-39100) Grade Pay: 6600
3.	Sept 2006-Sept 2008	Weill Cornell Medical College, Cornell University, New York City, USA	Postdoctoral Fellow	USD 37000
4.	August 2004 - July 2006	CSIR-Indian Institute of Toxicology Research, Lucknow	CSIR-Senior Research Fellow	Rs 8000/+HRA
5.	July 2001-July 2004	CSIR-Indian Institute of Toxicology Research, Lucknow	Project Fellow	Rs 5000/-

### **Field of specialization:**

Molecular Neurotoxicology, Stem Cell Neurobiology and regenerative medicine and Nanomedicine

## R&D Activities

- 1) Normal brain development also referred as neurogenesis, involves a balance between Neural Stem Cell (NSC) proliferation, their migration to different parts of the brain followed by differentiation to neurons, astrocytes and oligodendrocytes. For optimum brain development newly generated neurons move along precise pathways from their points of origin to their assigned locations, establish synapses with each other, and communicate via these synapses. Several environmental toxicants are reported to cause developmental neurotoxicity in both children and adults. We are trying to understand how environmental toxicants (pesticides and xenoestrogen) affect key events of neurogenesis including regulatory cell signaling pathways. Further, we are involved to assess the molecular and/or cellular events that are target(s) for inhibition of neurogenesis.
- 2) Use of human and rodent Neural Stem Cells as an alternate *in vitro* model to assess the neurotoxic potential of environmental contaminants.
- 3) To assess the cellular and molecular mechanism of neurodegenerative disorders specially Parkinson's disease, and how environmental toxicants modulate the disease pathogenesis.
- 4) Identification of novel molecular therapeutic targets in neurodegenerative disorders.
- 5) Identification of molecules which can induce "BRAIN SELF REPAIR" by activating resident Neural Stem Cell Population.

## Impact of contributions

The pioneer studies carried by our group have identified the role of neural stem cells in pathogenesis of Alzheimer's disease, where we found the process of generation of new neurons (neurogenesis) is inhibited in Alzheimer's disease. We found that environmental toxicants not only induce neurodegeneration but also inhibit process of neurogenesis and autophagy in the brain. We have developed a novel method to enhance the "brain self repair mechanism" using curcumin. We have established a novel role of Wnt/ $\beta$ -catenin signalling in curcumin mediated enhancement of neurogenesis in the Alzheimer's disease. Further, we identified three novel molecular target of curcumin viz Wif-1, Dkk and GSK-3 $\beta$ . We have provided conclusive evidence that ethosuximide an epileptic drug increased neuronal regeneration in rodent model of Alzheimer's disease and could be used for drug repurposing in patients of Alzheimer's disease. Similarly, nanoparticle mediated delivery of otherwise blood brain barrier impermeable drug dopamine could be a promising therapeutic approach in Parkinson's disease. Studies carried by us possess clinical relevance and could be useful to develop novel therapeutic strategies, which could enhance brain self repair mechanism by inducing endogenous neural stem cells, and ultimately relief behavioral symptoms in neurodegenerative disorders particularly Alzheimer's disease.

## Title of the PhD thesis

"Functional restoration in 6-hydroxydopamine lesioned rat model of Parkinson's disease using fetal neural transplant and co-graft with neuroprotective agents: Assessment by neurobehavioral, neurochemical and molecular indices".

### Awards/honors received

No.	Award	Agency	Remarks
1	<b>OPPI Young Scientist Award-2016</b>	Organizers of Pharmaceutical Producers of India (OPPI)	The award carries a scroll of honor, Memento, and cash prize of Rs. 1,00,000.
2	<b>Shri Om Prakash Sharma Young Scientist Award</b> in Biomedical Research	Indian Academy of Biomedical Sciences	The award carries a medal, citation and cash prize of Rs. 5,000.
3	<b>NASI-Scopus Young Scientist Award-2015</b> in the area of Medicine.	National Academy of Sciences-India and Elsevier-India	The award carries a scroll of honor, Memento, and cash prize of Rs. 75,000.
4	<b>Lady Tata Memorial Young Scientist Award-2014</b> in the area of Medical Sciences.	Lady Tata Memorial Trust-United Kingdom	The award carries Rs 25 lakhs research grant and Rs 25,000/month cash award for three years.
5	<b>National Academy of Sciences (NASI) Young Scientist Award-2013</b> in the area of Biochemistry, and Bio-Medical Sciences.	National Academy of Sciences, Allahabad-India	The award carries a scroll of honor, Memento, and cash prize of Rs. 25,000.
6	<b>Indian National Science Academy (INSA) Young Scientist Award-2012</b> in the area of Health Sciences.	Indian National Science Academy-New Delhi	The award carries cash prize of Rs. 25,000 and honorarium Rs 7,500/month till 45 years by CSIR.
7	<b>Gauri Ganguly Memorial Young Scientist Award-2012</b> of Biomedical Sciences.	Indian Science Congress Association (ISCA), Kolkata	The award carries cash prize of Rs. 5,000 and Memento.
8	<b>Lucknow Youth Icons Award-2009</b> in the field of Science.	Social Environmental & Educational Development Society	-
9	<b>U.P. Council of Science and Technology Young Scientist Award-2006</b>	U.P. Council of Science and Technology	The award carries a scroll of honor, Memento, and cash prize of Rs. 25,000.
10	<b>First place in “Parkinson’s Disease Quiz Contest</b>	Novartis Pharma	During 16 <sup>th</sup> International Congress on Parkinson’s disease, 5 -9 June 2005, at Berlin-Germany.
11	<b>Best paper award</b>	Federation of Asian-Oceanic Neuroscience Societies (FAONS)	During 2nd FAONS Symposium, 17-19 May, 2004, at Tehran, Iran.
12	<b>Best paper award</b>	National Brain Research Centre (NBRC)	International conference on Theoretical Neurobiology, 24-27 Feb 2003 at NBRC, New Delhi.
13	<b>Best paper award</b>	National Brain Research Centre	INDO-US colloquium on Brain Research, 10-12 Jan 2002 at New Delhi-India.
14	<b>Dr. S.S. Parmar foundation award for the best poster</b>	Indian Academy of Neurosciences (IAN)	During Annual conference of IAN, 21-23, February 2003 at Udaipur.

## **Fellowships received/Overseas Visits**

S. No	Duration		Institute and the country of visit	Purpose of visit
	From DD/MM/YY	To DD/MM/YY		
1	04 <sup>th</sup> Feb 2013	08 <sup>th</sup> Feb 2013	Columbus, USA	Received Travel Award Fellowship to attend Workshop 3: Disease
2	20 <sup>th</sup> May 2013	24 <sup>th</sup> May 2013	Cancun, Mexico	Young Investigator Travel Award Fellowship to attend ISN-ASN meeting
3	29 <sup>th</sup> May 2011	03 <sup>rd</sup> June 2011	Prague, Czech Republic	To present research work at 10th World Congress of Biological Psychiatry
4	31 <sup>st</sup> August 2006	30 <sup>th</sup> Sept 2008	New York, USA	For Post Doctoral Research Fellowship
5	8 <sup>th</sup> July 2006	12 <sup>th</sup> July 2006	Vienna, Austria	Recipient of “Young Investigator Travel Award Fellowship” of Federation of European Neuroscience Society (FENS) to attend the “5 <sup>th</sup> FENS Forum”
6	2 <sup>nd</sup> July 2006	5 <sup>th</sup> July 2006	Singapore University, Singapore	Received “Travel Award Fellowship” of Asia Pacific Society of Neurochemistry (APSN) to attend the “7th Biennial APSN meeting”
7	21 <sup>st</sup> August 2005	26 <sup>th</sup> August 2005	Innsbruck, Austria	Received “Travel Award Fellowship” of International Society of Neurochemistry (ISN) to attend the “ 20 <sup>th</sup> Biennial ISN-ESN meeting”
8	5 <sup>th</sup> June 2005	9 <sup>th</sup> June 2005	Berlin, Germany	Received “Asian Travel Award Fellowship” to attend the 16 <sup>th</sup> International Congress on Parkinson’s disease and Related Disorders
9	3 <sup>rd</sup> Feb 2004	7 <sup>th</sup> Feb 2004	Avignon, France	Recipient of “Young Investigator Travel Award Fellowship” of ISN to attend the First ISN Special Neurochemistry Conference
10	17 <sup>th</sup> May 2004	19 <sup>th</sup> May 2004	Tehran, Iran	Recipient of “Travel Award Fellowship” of FAONS to attend the “2nd Federation of Asian-Oceanic Neuroscience Societies (FAONS) Symposium”
11	3 <sup>rd</sup> Feb 2004	7 <sup>th</sup> Feb 2004	Hongkong	Received “Travel Award Fellowship” of ISN to attend ISN-APSN 6 <sup>th</sup> Biennial Joint Meeting
12	27 <sup>th</sup> Nov 2002	30 <sup>th</sup> Nov 2002	Bangkok, Thailand	Received “Young Investigator Travel Award Fellowship” of ISN to attend the ISN-APSN joint Neurochemistry workshop

## Selected Publications:

### List of 10 most significant research publications in peer reviewed journals

No	Authors	Title	Journal/Year/Vol/Pages	Impact factor/citation
1.	Agarwal S, Yadav A, Tiwari SK, Seth B, Chauhan LK, Khare P, Ray RS, <b>Chaturvedi RK.</b>	Dynamin-related protein 1 inhibition mitigates Bisphenol-A mediated alterations in mitochondrial dynamics and neural stem cells proliferation and differentiation.	<b>J Biol Chem.</b> 2016 Jul 29;291(31):15923-39. <b>(Corresponding Author)</b>  <b>This article has been selected by F1000 member and is most downloaded and read article in JBC Neurobiology Affinity Group.</b>	I.F=4.57 Citation=1
2.	Tiwari SK, Seth B, Agarwal S, Yadav A, Karmakar M, Gupta SK, Choubey V, Sharma A, <b>Chaturvedi RK</b>	Ethosuximide induces hippocampal neurogenesis and reverses cognitive deficits in amyloid- $\beta$ toxin induced Alzheimer's rat model <i>via</i> PI3K/Akt/Wnt/ $\beta$ -catenin pathway.	<b>J Biol Chem.</b> 2015 Nov 20;290(47):28540-58 <b>(Corresponding Author)</b>	I.F=4.57 Citation=12
3.	Agarwal S, Tiwari SK, Seth B, Yadav A, Singh A, Mudawal A, Chauhan LK, Gupta SK, Choubey V, Tripathi A, Kumar A, Ray RS, Shukla S, Parmar D, <b>Chaturvedi RK</b>	Activation of autophagic flux against xenoestrogen Bisphenol-A induced hippocampal neurodegeneration via AMPK/mTOR pathways.	<b>J Biol Chem.</b> 2015 Aug 21;290(34):21163-84 <b>(Corresponding Author)</b>	I.F=4.57 Citation=10
4.	Tiwari SK, Agarwal S, Tripathi A, <b>Chaturvedi RK</b>	Bisphenol-A Mediated Inhibition of Hippocampal Neurogenesis Attenuated by Curcumin <i>via</i> Canonical Wnt Pathway.	<b>Mol. Neurobiol.</b> 2015 May 12 <b>(Corresponding Author)</b>	I.F =5.4 Citation=10
5.	Pahuja R, Seth K, Shukla A, Shukla RK, Bhatnagar P, Chauhan LK, Saxena PN, Arun J, Patel DK, Singh SP, Shukla R, Khanna VK, Kumar P, <b>Chaturvedi RK, Gupta</b>	Trans-Blood Brain Barrier Delivery of Dopamine Loaded Nanoparticles Reverses Functional Deficits in Parkinsonian Rats.	<b>ACS NANO.</b> 2015, 26;9 (5):4850-71 <b>(Corresponding Author)</b>  <b>This article is selected for ACS Editor's</b>	<b>I.F =13.3</b> Citation=20  6

	KC.		choice and is most downloaded and read article.	
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**This article has been featured and covered at-**

- 1) [http://www.indiamedicaltimes.com/2015/04/23/indian-scientists-develop-new-drug-for-parkinsons/?fb\\_action\\_ids=874400742580480&fb\\_action\\_types=og.comments](http://www.indiamedicaltimes.com/2015/04/23/indian-scientists-develop-new-drug-for-parkinsons/?fb_action_ids=874400742580480&fb_action_types=og.comments)
- 2) <http://www.thehindu.com/todays-paper/tp-in-school/indian-scientists-develop-new-drug-for-parkinsons/article7135370.ece>
- 3) <http://gadgets.ndtv.com/science/news/new-nanoparticle-treatment-aims-to-reverse-parkinsons-disease-symptoms-684686>
- 4) [http://zeenews.india.com/news/health/diseases-conditions/indian-scientists-develop-new-drug-for-parkinsons\\_1583501.html](http://zeenews.india.com/news/health/diseases-conditions/indian-scientists-develop-new-drug-for-parkinsons_1583501.html)
- 5) <http://www.medicalnewstoday.com/articles/292848.php>
- 6) <http://health.economictimes.indiatimes.com/news/industry/indian-scientists-develop-new-drug-for-parkinsons/47024331>
- 7) <http://www.acs.org/content/acs/en/pressroom/presspacs/2015/acs-presspac-april-22-2015/nanoparticle-drug-reverses-parkinsons-like-symptoms-in-rats.html>
- 8) <http://phys.org/news/2015-04-nanoparticle-drug-reverses-parkinson-like-symptoms.html>
- 9) <http://www.sciencedaily.com/releases/2015/04/150422121900.htm>
- 10) <http://www.nanowerk.com/nanotechnology-news/newsid=39845.php>
- 11) <http://www.chemeurope.com/en/news/152595/nanoparticle-drug-reverses-parkinson-s-like-symptoms-in-rats.html>
- 12) <http://www.medindia.net/news/new-drug-for-parkinsons-condition-discovered-by-indian-researchers-148537-1.htm>
- 13) <https://genesisananotech.wordpress.com/tag/nano-drug-therapies/>
- 14) <http://www.azonano.com/news.aspx?newsID=32618>
- 15) [http://www.nanotech-now.com/news.cgi?story\\_id=51354](http://www.nanotech-now.com/news.cgi?story_id=51354)
- 16) <http://www.asianscientist.com/2015/04/in-the-lab/nanoparticle-drug-reverses-parkinsons-like-symptoms-rats/>
- 17) <http://www.prdassociation.org/news/34747/nanoparticles-that-ferry-dopamine-to-the-brain-offer-potential-parkinsons-treatment.html>
- 18) <http://news.list-online.com/new-nanoparticle-treatment-aims-to-reverse-parkinsons-disease-symptoms-ndtv/>
- 19) <http://news.list-online.com/new-nanoparticle-treatment-aims-to-reverse-parkinsons-disease-symptoms-ndtv/>
- 20) <http://canaranews.com/news/health/Indian-scientists-develop-new-drug-for-Parkinsons/>
- 21) [http://ianslive.in/index.php?param=news/Indian\\_scientists\\_develop\\_new\\_drug\\_for\\_Parkinsons-473946/Health%20&%20Travel/35](http://ianslive.in/index.php?param=news/Indian_scientists_develop_new_drug_for_Parkinsons-473946/Health%20&%20Travel/35)
- 22) <https://connect.innovateuk.org/web/healthcare/article-view/-/blogs/nanoparticle-drug-reverses-parkinson-s-like-symptoms-in-rats>
- 23) <http://dailypulse.in/article.php?aid=238>
- 24) [http://app.newsgetter.com/go/?ng\\_uid=2375498A0105201506B88743698&referrer=app&destination=webapp](http://app.newsgetter.com/go/?ng_uid=2375498A0105201506B88743698&referrer=app&destination=webapp)

6.	Tiwari SK, Agarwal S, Seth B, Nair S, Yadav A, Bhatnagar P, Karmakar M, Chauhan LKS, Patel DK, Srivastava V, Singh D, Tripathi A, Gupta SK, <b>Chaturvedi RK</b> , Gupta KC	Curcumin Loaded Nanoparticles Potently Induce Adult Neurogenesis and Reverse Cognitive Deficits in Alzheimer's Disease Model <i>via</i> Canonical Wnt/ $\beta$ -catenin Pathway	<b>ACS NANO.</b> 2014 Jan 28;8(1):76-103 <b>(Corresponding Author)</b>	<b>IF =13.3</b> Citation=82
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**This article has been featured and covered by-**

Nature India:

<http://www.nature.com/nindia/2013/131212/full/nindia.2013.167.html>

Chemical and Engineering News, USA (C&EN):

<http://cen.acs.org/articles/91/web/2013/12/Nanoparticles-Loaded-Curcumin-Boost-Memory.html>

Chemistry views, USA, Wiley Publisher

[http://www.chemistryviews.org/details/news/5690481/Curcumin\\_A\\_Spice\\_Against\\_Alzheimers.html](http://www.chemistryviews.org/details/news/5690481/Curcumin_A_Spice_Against_Alzheimers.html)  
[Down to Earth: http://www.downtoearth.org.in/content/nano-carriers](http://www.downtoearth.org.in/content/nano-carriers)  
<http://chemicalpost.com/archive/nanoparticles-loaded-curcumin-boost-memory-alzheimer%E2%80%99s-animal-model>  
<http://dbrilzen.jigsy.com/entries/general/nanoparticles-loaded-with-curcumin-boost-memory-in-alzheimer%E2%80%99s-animal-model>

7.	Tiwari SK, Agarwal S, Seth B, Yadav A, Ray RS, Mishra VN, <b>Chaturvedi RK</b>	Inhibitory Effects of Bisphenol-A on Neural Stem Cells Proliferation and Differentiation in the Rat Brain Are Dependent on Wnt/ $\beta$ -Catenin Pathway	<b>Mol. Neurobiol.</b> 2015 Dec;52(3):1735-57 (Corresponding Author)	I.F =5.4 Citation=14
8.	Tiwari SK, Agarwal S, Chauhan LKS, Mishra VN, and <b>Chaturvedi RK</b>	Bisphenol-A impairs myelination potential during development in the hippocampus of the rat brain.	<b>Mol. Neurobiol.</b> 2015 Jun;51(3):1395-416. (Corresponding Author)	I.F =5.4 Citation=14
9.	Tiwari MN, Agarwal S, Bhatnagar P, Singhal NK, Tiwari SK, Kumar P, Chauhan LKS, <b>Chaturvedi RK</b> , Singh MP, Gupta KC.	Nicotine-encapsulated PLGA nanoparticles improve neuroprotective efficacy over bulk against MPTP-induced cellular and animal models of Parkinsonism.	<b>Free Radic Biol. Med.</b> 2013 Aug 7;65C:704-718. (Corresponding Author)	I.F =5.4 Citation=24
10.	<b>Chaturvedi RK</b> , Hennessey T, Johri A, Tiwari S, Mishra D, Agarwal S, Kim YS, Beal MF	Transducer of regulated CREB-binding proteins (TORCs) transcription and function is impaired in Huntington's disease	<b>Human Molecular Genetics.</b> 21(15):3474-88, 2012 (Corresponding Author)	I.F =8.1 Citation=31
11	Mishra D, Tiwari SK, Agarwal S, Sharma VP and <b>Chaturvedi RK</b>	Prenatal carbofuran exposure inhibits hippocampal neurogenesis and causes learning and memory deficits in offspring.	<b>Toxicological Sciences.</b> 127(1):84-100, 2012. (Corresponding Author)	I.F =5.1 Citation=24
12	Johri A, <b>Chaturvedi RK</b> , Beal MF	Hugging tight in Huntington's disease.	<b>NATURE MEDICINE</b> 17(3):245-6, 2011	I.F =25.7 Citation=15



## List of all peer reviewed international publications

**Total papers published** : 55  
**Total Citations** : 2267  
**H Index** : 25  
**I-10 index** : 36  
**Cumulative impact factor** : 230  
**Average impact factor/paper** : 4.89  
**Corresponding author paper/reviews** : 24

S. No	Authors	Title	Journal/Year/Vol/Pag e	Impact factor/ citation
1.	Agarwal S, Yadav A, Tiwari SK, Seth B, Chauhan LK, Khare P, Ray RS, <b>Chaturvedi RK.</b>	Dynamin-related protein 1 inhibition mitigates Bisphenol-A mediated alterations in mitochondrial dynamics and neural stem cells proliferation and differentiation.	<b>J Biol Chem.</b> 2016 Jul 29;291(31):15923-39. <b>(Corresponding Author)</b>	I.F.=4.57 Citation=1
2.	Chopra D, Ray L, Dwivedi A, Tiwari SK, Singh J, Singh KP, Kushwaha HN, Jahan S, Pandey A, Gupta SK, <b>Chaturvedi RK</b> , Pant AB, Ray RS, Gupta KC	Photoprotective efficiency of PLGA-curcumin nanoparticles versus curcumin through the involvement of ERK/AKT pathway under ambient UV-R exposure in HaCaT cell line.	<b>Biomaterials.</b> 2016, 11;84:25-41.	I.F.=8.387 Citation=5
3.	Goyal S, Amar SK, Dwivedi A, Mujtaba SF, Kushwaha HN, Chopra D, Pal MK, Singh D, <b>Chaturvedi RK</b> , Ray RS	Photosensitized 2-amino-3-hydroxypyridine-induced mitochondrial apoptosis via Smac/DIABLO in human skin cells.	<b>Toxicol Appl Pharmacol.</b> 2016, 2;297:12-21.	I.F.=3.71 Citation=3
4.	Srivastav AK, Mujtaba SF, Dwivedi A, Amar SK, Goyal S, Verma A, Kushwaha HN, <b>Chaturvedi RK</b> , Ray RS	Photosensitized rose Bengal-induced phototoxicity on human melanoma cell line under natural sunlight exposure.	<b>J Photochem Photobiol B.</b> 2016 Mar; 156:87-99	I.F.=3.035
5.	Tiwari SK, Seth B, Agarwal S, Yadav A, Karmakar M, Gupta SK, Choubey V, Sharma A,	Ethosuximide induces hippocampal neurogenesis and reverses cognitive deficits in amyloid- $\beta$ toxin induced Alzheimer's rat	<b>J Biol Chem.</b> 2015 Nov 20;290(47):28540-58 <b>(Corresponding Author)</b>	I.F.=4.57 Citation=10

	<b>Chaturvedi RK</b>	model <i>via</i> PI3K/Akt/Wnt/ $\beta$ -catenin pathway.		
6.	Agarwal S, Tiwari SK, Seth B, Yadav A, Singh A, Mudawal A, Chauhan LK, Choubey V, Tripathi A, Kumar A, Ray RS, Shukla S, Parmar D, <b>Chaturvedi RK</b>	Activation of autophagic flux against xenoestrogen Bisphenol-A induced hippocampal neurodegeneration <i>via</i> AMPK/mTOR pathways.	<b>J Biol Chem.</b> 2015 Aug 21;290(34):21163-84 <b>(Corresponding Author)</b>	I.F=4.57 Citation=7
7.	Singhal NK, Agarwal S, Bhatnagar P, Tiwari MN, Tiwari SK, Srivastava G, Kumar P, Seth B, Patel DK, Chaturvedi RK, Singh MP and Gupta KC.	Mechanism of Nanotization-Mediated Improvement in the Efficacy of Caffeine Against 1-Methyl-4-Phenyl-1,2,3,6-Tetrahydropyridine-Induced Parkinsonism.	<b>J Biomed Nanotechnol.</b> 2015 Dec;11(12): 2211-22. <b>(Corresponding Author)</b>	<b>I.F=3.929</b> Citation=4
8.	Tiwari SK, Agarwal S, Tripathi A, <b>Chaturvedi RK.</b>	Bisphenol-A Mediated Inhibition of Hippocampal Neurogenesis Attenuated by Curcumin <i>via</i> Canonical Wnt Pathway.	<b>Mol Neurobiol.</b> 2016 Jul;53(5):3010-29 <b>(Corresponding Author)</b>	I.F=5.4 Citation=10
9.	Amar SK, Goyal S, Dubey D, Srivastav AK, Chopra D, Singh J, Shankar J, <b>Chaturvedi RK</b> , Ray RS.	Benzophenone 1 induced photogenotoxicity and apoptosis <i>via</i> release of cytochrome c and Smac/DIABLO at environmental UV radiation.	<b>Toxicol Lett.</b> 2015 Dec 15;239(3):182-93.	I.F=3.522 Citation=6
10	Pahuja R, Seth K, Shukla A, Shukla RK, Bhatnagar P, Chauhan LK, Saxena PN, Arun J, Chaudhari BP, Patel DK, Singh SP, Shukla R, Khanna VK, Kumar P, <b>Chaturvedi RK</b> , Gupta KC	Trans-Blood Brain Barrier Delivery of Dopamine Loaded Nanoparticles Reverses Functional Deficits in Parkinsonian Rats.	<b>ACS NANO.</b> 2015, 26;9 (5):4850-71 <b>(Corresponding Author)</b>	<b>I.F =13.3</b> Citation=18
11	Tiwari SK, Agarwal S, Seth B, Nair S, Yadav A, Bhatnagar P, Karmakar M, Chauhan LKS, Patel DK, Srivastava V, Singh D, Tripathi A, Gupta SK, <b>Chaturvedi RK</b> , Gupta KC	Curcumin Loaded Nanoparticles Potently Induce Adult Neurogenesis and Reverse Cognitive Deficits in Alzheimer's Disease Model <i>via</i> Canonical Wnt/ $\beta$ -catenin Pathway	<b>ACS NANO.</b> 2014 Jan 28;8(1):76-103 <b>(Corresponding Author)</b>	<b>I.F =13.3</b> Citation=82
12	Singh A, Mudawal A, Maurya P, Jain R, Nair S, Shukla RK, Yadav	Prenatal Exposure of Cypermethrin Induces Similar Alterations in	<b>Mol Neurobiol.</b> 2016 Aug;53(6):3670-89.	I.F =5.4 Citation=4

	S, Singh D, Khanna VK, <b>Chaturvedi RK</b> , Mudiam MK, Sethumadhavan R, Siddiqi MI, Parmar D.	Xenobiotic-Metabolizing Cytochrome P450s and Rate-Limiting Enzymes of Neurotransmitter Synthesis in Brain Regions of Rat Offsprings During Postnatal Development.		
13	Amar SK, Goyal S, Mujtaba SF, Dwivedi A, Kushwaha HN, Verma A, Chopra D, <b>Chaturvedi RK</b> , Ray RS.	Role of type I & type II reactions in DNA damage and activation of Caspase 3 via mitochondrial pathway induced by photosensitized benzophenone.	<b>Toxicol Lett.</b> 2015 Mar 20;235(2):84-95.	I.F =3.522 Citation=10
14	Tewari P, Roy R, Mishra S, Mandal P, Yadav A, Chaudhari BP, <b>Chaturvedi RK</b> , Dwivedi PD, Tripathi A, Das M.	Benzanthrone induced immunotoxicity via oxidative stress and inflammatory mediators in Balb/c mice.	<b>Immunobiology.</b> 2015 Mar;220(3):369-81.	I.F =2.781 Citation=6
15	Tiwari SK, Agarwal S, Seth B, Yadav A, Ray RS, Mishra VN, <b>Chaturvedi RK</b> .	Inhibitory Effects of Bisphenol-A on Neural Stem Cells Proliferation and Differentiation in the Rat Brain Are Dependent on Wnt/ $\beta$ -Catenin Pathway	<b>Mol. Neurobiol.</b> 2015 Dec;52(3): 1735-57 <b>(Corresponding Author)</b>	I.F =5.4 Citation=9
16	Sinha A, Tamboli RS, Seth B, Kanhed AM, Tiwari SK, Agarwal S, Nair S, Giridhar R, <b>Chaturvedi RK</b> , Yadav MR.	Neuroprotective Role of Novel Triazine Derivatives by Activating Wnt/ $\beta$ Catenin Signaling Pathway in Rodent Models of Alzheimer's Disease.	<b>Mol. Neurobiol.</b> 2015 Aug;52(1):638-52. <b>(Corresponding Author)</b>	I.F =5.4 Citation=9
17	Tiwari SK, Agarwal S, Chauhan LKS, Mishra VN, and <b>Chaturvedi RK</b> .	Bisphenol-A impairs myelination potential during development in the hippocampus of the rat brain.	<b>Mol. Neurobiol.</b> 2015 Jun;51(3):1395-416. <b>(Corresponding Author)</b>	I.F =5.4 Citation=14
18	Yadav N, Dwivedi A, Mujtaba SF, Verma A, <b>Chaturvedi RK</b> , Ray RS, Singh G.	Photosensitized mefloquine induces ROS-mediated DNA damage and apoptosis in keratinocytes under ambient UVB and sunlight exposure.	<b>Cell Biol Toxicol.</b> 2014 Oct;30(5): 253-68.	I.F =2.842 Citation=6
19	Yadav A, Agrawal S, Tiwari SK, <b>Chaturvedi RK</b> .	Mitochondria: Prospective Targets for Neuroprotection in Parkinson's Disease.	<b>Curr Pharm Des.</b> 2014;20(35):5558-73. <b>(Corresponding Author)</b>	I.F =3.052 Citation=11
20	Tiwari SK, <b>Chaturvedi RK</b> .	Peptide therapeutics in neurodegenerative disorders.	<b>Curr Pharm Des.</b> 2014;20(35):5558-73. <b>(Corresponding Author)</b>	I.F =3.052 Citation=11

21	Panigrahi GK, Yadav A, Yadav A, Ansari KM, <b>Chaturvedi RK</b> , Vashistha VM, Raisuddin S, Das M.	Hepatic transcriptional analysis in rats treated with cassia occidentalis seed: Involvement of oxidative stress and impairment in xenobiotic metabolism as a putative mechanism of toxicity.	<b>Toxicol Lett.</b> 2014 Aug 17; 229(1):273-83.	I.F =3.522 Citation=6
22	Panigrahi G, Tiwari S, Ansari KM, <b>Chaturvedi RK</b> , Khanna VK, Chaudhari BP, Vashistha VM, Raisuddin S, Das M.	Association between children death and consumption of Cassia occidentalis seeds: clinical and experimental investigations	<b>Food Chem Toxicol.</b> 2014 May;67:236-48.	I.F =3.584 Citation=10
23	Tiwari MN, Agarwal S, Bhatnagar P, Singhal NK, Tiwari SK, Kumar P, Chauhan LKS, <b>Chaturvedi RK</b> , Singh MP, Gupta KC.	Nicotine-encapsulated PLGA nanoparticles improve neuroprotective efficacy over bulk against MPTP-induced cellular and animal models of Parkinsonism.	<b>Free Radic. Biol Med.</b> 2013 Aug 7;65C:704-718. <b>(Corresponding Author)</b>	I.F =5.784 Citation=22
24	<b>Chaturvedi RK</b> , Hennessey T, Johri A, Tiwari S, Mishra D, Agarwal S, Kim YS, Beal MF	Transducer of regulated CREB-binding proteins (TORCs) transcription and function is impaired in Huntington's disease	<b>Human Molecular Genetics.</b> 21(15):3474-88, 2012 <b>(Corresponding Author)</b>	I.F =7.692 Citation=32
25	Johri A, <b>Chaturvedi RK</b> , Beal MF	Hugging tight in Huntington's disease.	<b>NATURE MEDICINE</b> 17(3):245-6, 2011	<b>I.F =25.1</b> Citation=15
26	Mishra D, Tiwari SK, Agarwal S, Sharma VP and <b>Chaturvedi RK</b>	Prenatal carbofuran exposure inhibits hippocampal neurogenesis and causes learning and memory deficits in offspring.	<b>Toxicological Sciences.</b> 127(1):84-100, 2012. <b>(Corresponding Author)</b>	I.F =3.880 Citation=24
27	Dwivedi SK, Singh N, Kumari R, Mishra JS, Tripathi S, Banerjee P, Shah P, Kukshal V, Tyagi AM, Gaikwad AN, <b>Chaturvedi RK</b> , Trivedi AK, Sanyal S, Ramachandran R, Siddiqi MI, Arora A, Lundâsen T, Anakk SP, Moore DD, Sanyal S.	Bile acid receptor agonist GW4064 regulates PPAR $\gamma$ coactivator-1 $\alpha$ expression through estrogen receptor-related receptor $\alpha$ .	<b>Mol. Endocrinol.</b> 25(6):922-32, 2011.	I.F =5.7 Citation=24
28	Tiwari SK, Mishra D, <b>Chaturvedi RK</b> .	Neural Stem Cells: Methods and Protocols.	<b>Journal of Chemical Neuroanatomy,</b>	I.F =2.2

			42(3),218, 2011. <b>(Corresponding Author)</b>	
29	Mishra D, Tiwari SK, <b>Chaturvedi RK.</b>	Gene Therapy for Neurological Disorders.	<b>Journal of Chemical Neuroanatomy</b> , 42(3),219, 2011. <b>(Corresponding Author)</b>	I.F =2.2
30	<b>Chaturvedi RK</b> , Calingasan NY, Yang L, Hennessey T, Johri A, Beal MF.	Impairment of PGC-1alpha expression, Neuropathology and Hepatic Steatosis in a transgenic mouse model of Huntington's disease following chronic energy deprivation.	<b>Human Molecular Genetics</b> . 2010. 19(16):3190-205. <b>(Corresponding Author)</b>	I.F =7.692 Citation=88
31	McConoughey SJ, Basso M, Niatetskaya ZV, Sleiman SF, Smirnova NA, Langley BC, Cooper AJ, Li B, Starkov A, <b>Chaturvedi RK</b> , Beal MF, Coppola G, Geschwind DH, Ryu H, Xia L, Iismaa SE, Pallos J, Pasternack R, Hils M, Fan J, Raymond LA, Marsh JL, Thompson LM, Ratan RR.	Inhibition of transglutaminase 2 mitigates transcriptional dysregulation in models of Huntington disease.	<b>EMBO Mol Med</b> . 2010, 2(9):349-70.	I.F =8.9 Citation=85
32	<b>Chaturvedi RK</b> , Adihetty PJ, Shukla S, Calingasan NY, Yang L, Starkov A , Hennessy T, Kiaei M, Cannella M, Sassone J, Ciammola A, Squitieri F, and Beal MF.	Impaired PGC-1 alpha function in muscle in Huntington's disease.	<b>Human Molecular Genetics</b> . 18(16):3048- 65. 2009. <b>(Corresponding Author)</b>	I.F =7.692 Citation= 170
33	Yang L, Calingasan NY, Thomas B, <b>Chaturvedi RK</b> , Kiaei M, Wille EJ, Liby KT, Williams C, Royce D, Risingsong R, Musiek ES, Morrow JD, Sporn M, Beal MF.	Neuroprotective Effects of the Triterpenoid, CDDO Methyl Amide, a Potent Inducer of Nrf2-Mediated Transcription.	<b>PLoS ONE</b> . 2009, 4, 6; e5757.	I.F =5.0 Citation= 110
34	Rasheed N, Ahmad A, Pandey CP,	Differential response of central dopaminergic system	<b>Neurochemical Research</b> . 2010,	I.F =2.8 Citation=44

	<b>Chaturvedi RK,</b> Lohani M, and Palit G.	in acute and chronic unpredictable stress models in rats.	35(1):22-32.	
35	Shukla S, <b>Chaturvedi RK,</b> Seth PK, Agrawal AK.	Enhanced Survival and function of neural stem cell's derived dopaminergic neurons under influence of olfactory ensheathing cells in parkinsonian rats.	<b>Journal of Neurochemistry.</b> 2009, 109(2):436-51.	I.F =4.96 Citation=42
36	<b>Chaturvedi RK,</b> Shukla S, Seth K and Agrawal AK.	Zuckerlandl's organ improves survival and function of neural stem cell's derived dopaminergic neurons in parkinsonian rats.	<b>Experimental Neurology.</b> 2007, 210, 608-623.	I.F =4.7 Citation=24
37	<b>Chaturvedi RK,</b> Shukla S, Seth K, Chauhan S, Sinha C, Shukla Y, Agrawal AK.	Neuroprotective and neurorescue effect of black tea extract in 6-hydroxydopamine lesioned rat model of Parkinson's disease.	<b>Neurobiology of Disease.</b> 2006, 5, 421-34.	I.F =5.12 Citation=76
38	<b>Chaturvedi RK,</b> Shukla S, Seth K, Agrawal AK.	Nerve growth factor increases survival of dopaminergic graft, rescue nigral dopaminergic neurons and restores functional deficits in rat model of Parkinson's disease.	<b>Neuroscience Letter.</b> 2006, 398, 44-49.	I.F =2.3 Citation=63
39	<b>Chaturvedi RK,</b> Shukla S, Seth K and Agrawal AK.	Glial Cell Line Derived Neurotrophic Factor (GDNF) increases the survival and function of hibernated fetal dopaminergic cells transplanted in rat model of Parkinson's disease.	<b>Annals of Neuroscience.</b> 2006, (13), 56-64.	Citation=7
40	Sinha C, Seth K, Islam F, <b>Chaturvedi RK,</b> Shukla S, Mathur N, Srivastava N, Agrawal AK.	Behavioral and neurochemical effects induced by pyrethroid-based mosquito repellent exposure in rat off springs during prenatal and early postnatal period.	<b>Neurotoxicology and Teratology.</b> 2006, 28, 472-481.	I.F =2.0 Citation=34
41	Ahmad M, Saleem S, Ahmad AS, Yousuf S, Ansari MA, Khan MB, Ishrat T, <b>Chaturvedi RK,</b> Agrawal AK, Islam F.	Ginkgo biloba affords dose-dependent protection against 6-hydroxydopamine-induced parkinsonism in rats: neurobehavioral, neurochemical and immunohistochemical	<b>J Neurochemistry.</b> 2005, 93, 94-104.	I.F =4.96 Citation=120

		evidences.		
42	Singh S, Das T, Ravindran A, <b>Chaturvedi RK</b> , Shukla Y, Agrawal AK, Dixit M.	Involvement of nitric oxide in neurodegeneration: a study on the experimental models of Parkinson's disease.	<b>Redox Report.</b> 2005, 10, 103-9.	I.F =2.1 Citation=65
43	Sinha C, Agrawal AK, Islam F, Seth K, <b>Chaturvedi RK</b> , Shukla S, and Seth PK.	Mosquito repellent (pyrethroid-based) induced dysfunction of Blood-Brain Barrier permeability in developing brain.	<b>Int. J. Devl. Neurosci.</b> 2004, 22, 31-37.	I.F =3.7 Citation=60
44	Shukla S, Agrawal AK, <b>Chaturvedi RK</b> , Khanna VK, Sinha C. Srivastava N and Seth PK.	Co-transplantation of carotid body (CB) and ventral mesencephalic cells (VMC) as an alternative approach towards functional restoration in 6-OHDA lesioned rats: implications for Parkinson's Disease.	<b>Journal of Neurochemistry.</b> 2004, 91, 274-284.	I.F =4.96 Citation=25
45	Agrawal AK, <b>Chaturvedi RK</b> , Seth PK.	Co-transplantation of fetal ventral mesencephalic cells with antioxidants (Ascorbic acid & Glutathione) ameliorates functional deficits in rat model of Parkinson's disease.	<b>Annals of Neuroscience.</b> 2004, (11), 9-16.	
46	Agrawal AK, <b>Chaturvedi RK</b> , Shukla S, Seth K, Chauhan S, Ahmad A and Seth PK.	Restorative potential of dopaminergic grafts in presence of antioxidants in rat model of Parkinson's disease.	<b>Journal of Chemical Neuroanatomy.</b> 2004, 28, 253-264.	I.F =2.7 Citation=28
47	<b>Chaturvedi RK</b> , Agrawal AK, Seth K, Shukla S, Chauhan S, Shukla Y, Sinha C and Seth PK.	Effect of glial cell line-derived neurotrophic factor (GDNF) co-transplantation with fetal ventral mesencephalic cells (VMC) on long term functional restoration in 6-hydroxy dopamine (6-OHDA) lesioned rat model of Parkinson's disease: Neurobehavioral, neurochemical and immunohistochemical studies.	<b>Int. J. Devl. Neurosciences.</b> 2003, 21 (7), 391-400.	I.F =3.7 Citation=31

## List of books/ reviews: 15

1. Agarwal S, Yadav A, **Chaturvedi RK**. Peroxisome proliferator-activated receptors (PPARs) as therapeutic target in neurodegenerative disorders. *Biochem Biophys Res Commun*. 2016 Aug 8. doi: 10.1016/j.bbrc.2016.08.043.
2. Tiwari SK, **Chaturvedi RK**. Peptide Therapeutics in Neurodegenerative Disorders. *Curr Med Chem*. 2014;21(23):2610-31. **I.F 4.07 (Corresponding Author)**.
3. Yadav A, Agrawal S, Tiwari SK, **Chaturvedi RK**. Mitochondria: Prospective Targets for Neuroprotection in Parkinson's Disease. *Curr Pharm Des*. 2014;20(35):5558-73. **I.F 3.311 (Corresponding Author)**.
4. \***Chaturvedi RK**, Beal MF. Mitochondrial Diseases of the Brain. *Free Radic Biol Med*. 63C:1-29. 2013. **I.F 5.4. (Corresponding Author)**
5. \***Chaturvedi RK**, Beal MF. Mitochondria targeted therapeutic approaches in Parkinson's and Huntington's diseases. *Mol Cell Neurosci*. 55:101-14. 2013. **I.F 3.9. (Corresponding Author)**
6. Johri A, **Chaturvedi RK**, Beal MF. Hugging tight in Huntington's disease. *NATURE MEDICINE* 17(3):245-6, 2011. **I.F 27.2**
7. Tiwari SK, Mishra D, \***Chaturvedi RK**. Neural Stem Cells: Methods and Protocols. *Journal of Chemical Neuroanatomy*, 42(3),218, 2011. **IF 2.2 (Corresponding Author)**
8. Mishra D, Tiwari SK, \***Chaturvedi RK**. Gene Therapy for Neurological Disorders. *Journal of Chemical Neuroanatomy*, 42(3),219, 2011. **IF 2.2 (Corresponding Author)**
9. \***Chaturvedi RK** and Beal MF. Mitochondrial approaches for neuroprotection. *Annals of New York Academy of Sciences*. 2008, 1147, 395-412. **I.F 2.3 (Corresponding Author)**
10. \***Chaturvedi RK** and Beal MF. PPAR: A therapeutic target in Parkinson's disease. *Journal of Neurochemistry*. 2008, 106, 506-18. **I.F 4.96 (Corresponding Author)**
11. Shukla S, Mishra VN and \***Chaturvedi RK**. Israel Hanin, Ramon Cacabelos and Abraham Fisher. (Eds), Recent Progress in Alzheimer's and Parkinson's Disease. *Journal of Chemical Neuroanatomy*. 2008, 35 (1) 178. **I.F 2.7 (Corresponding Author)**
12. \***Chaturvedi RK**, Shukla S and Mishra VN. IM.S Rao (Ed.), Neural Development and Stem Cells. Book review. *Journal of Chemical Neuroanatomy*. 2007, 34, 65-66. **I.F 2.7**
13. **Chaturvedi RK** and Agrawal AK In: J.A. Miyan, M. Thorndyke, P.W. Beesley and C. Bannister, Editors, Brain Stem Cells, Book review. *Journal of Chemical Neuroanatomy* 2005, 29 (3), 228-229. **I.F 2.7**
14. **Chaturvedi RK** and Agrawal AK. Charles A. Nelson, Monica Luciana (Eds.), Handbook of Developmental Cognitive Neuroscience, Book review. *Journal of Chemical Neuroanatomy*. 2005, 29, (4), 296. **I.F 2.7**
15. **Chaturvedi RK** and Agrawal AK. Mathias Bahr (Ed.), Neuroprotection; Models, Mechanisms and Therapies. Book review. *Journal of Chemical Neuroanatomy*. 2005, 30 (2-3) 159-160. **I.F 2.7**

## Abstracts Published in International Journals:

- 1) Mishra D., Tiwari SK., Agarwal S., Tripathi D. and **Chaturvedi RK**. Effect of pesticide carbofuran on regulatory dynamics of neurogenesis. *Journal of Neurochemistry*, 2011, 118 (S1), 117.
- 2) Tiwari SK, Mishra D, **Chaturvedi RK**. Bis-phenol A decreases the neuronal differentiation through inhibition of Wnt pathway. *Journal of Neurochemistry*. 2010, 115 (S1) 43.
- 3) Tiwari SK, Mishra D, Agarwal S, Tripathi D and **Chaturvedi RK**. Effects of xenoestrogen on hippocampal neural stem /progenitor cells proliferation and differentiation in in vitro. *Journal of Neurochemistry*, 2011, 118(S1), 121.



- 4) Tiwari SK, Seth B, Agarwal S, Nair S, Yadav A, and **Chaturvedi RK**. Ethosuximide enhances neural stem cells proliferation and neuronal differentiation, and reverses learning and memory deficits in Kainic acid rat model of cognitive dysfunction (STOX-2012).
- 5) Tiwari SK, Swati Agarwal, Brashket Seth, Saumya Nair, Anuradha Yadav, **Chaturvedi RK**. Xenoestrogen exposure leads to reduction of cognitive ability, neurogenesis and synaptogenesis in hippocampal region of rat brain (SFRR-STAR-2013).
- 6) Agarwal S, Tiwari SK, Seth B, Nair S, Yadav A, Chauhan LKS, Srivastava V and **Chaturvedi RK**, Xenoestrogen Bisphenol-A induces Autophagy in rat brain via AMPK/MTOR pathway (SFRR-STAR-2013).
- 7) Brashket Seth, SK Tiwari, Swati Agarwal, Saumya Nair, Anuradha Yadav, **Chaturvedi RK**. Prenatal Carbofuran exposure leads to inhibition of hippocampal neurogenesis in Rat brain (SFRR-STAR-2013).
- 8) Seth K, Shukla A, Ansari RW, **Chaturvedi RK**, Agrawal AK. Restore neurotrophin signaling to enhance functional restoration following neural stem cell transplantation in Parkinson's disease. *Movement Disorders*. 2010, 25(7), S268-S269.
- 9) **Chaturvedi RK**, Shukla S, Seth K and Agrawal AK. Neuroprotective and neurorescue effect of black tea extract in 6-hydroxydopamine lesioned rat model of Parkinson's disease. **Journal of Neurochemistry**, 2006, 98 (S 1), 8. **(I.F 4.96) (Presented in "Young Investigator Colloquium 03" -Singapore)**
- 10) **Chaturvedi RK**, Shukla S, Seth K and Agrawal AK. Co-transplantation of Zuckerkandl's organ cells with ventral mesencephalic cells (VMC) in rat model of Parkinson's disease: Assessment of functional restoration. **Journal of Neurochemistry**, 2005, 94 (S 2), 116. **(I.F 4.96)**
- 11) Shukla S, **Chaturvedi RK**, Seth K, Agrawal AK. Co-transplantation of neural progenitor cell with olfactory ensheathing cell restores functional deficits in rat model of Parkinson's disease. **Journal of Neurochemistry**, 2006; 98 (S1): 44. **(I.F 4.96)**
- 12) Seth K, **Chaturvedi RK**, Shukla S and Agrawal AK. Role of glial impairment in rotenone induced neuronal dysfunctioning. **Journal of Neurochemistry**, 2005; 98 (S1): 60. **(I.F 4.96)**
- 13) Shukla S, **Chaturvedi RK**, Seth K and Agrawal AK. Co-transplantation of carotid body and ventral mesencephalic cells as an alternative approach towards functional restoration in rat model of Parkinson's disease. **Journal of Neurochemistry**, 2005; 94 (S2): 119. **(I.F 4.96)**
- 14) Seth K, Sinha C, **Chaturvedi RK**, Shukla S and Agrawal AK. Role of glial cells in 6-OHDA induced neuronal dysfunctioning. **Journal of Neurochemistry**, 2005; 94 (S2): 100. **(I.F 4.96)**
- 15) Seth K, **Chaturvedi RK**, Shukla S and Agrawal AK. Glial activation in 6-OHDA induced neuronal impairment. **Neuroscience Research**, 2006, S113. **(I.F 2.4)**
- 16) **Chaturvedi RK**, Shukla S, Seth K, Agrawal AK. Role of Zuckerkandl's organ in functional restoration in rat model of Parkinson's disease: Co-transplantation with fetal ventral mesencephalic cells. **Parkinsonism and related disorders**. 2005, 11 (S2), 138. **(I.F 1.6)**
- 17) Shukla S, **Chaturvedi RK**, Seth K, Agrawal AK. Co-transplantation of fetal ventral mesencephalic cell (VMC) with olfactory ensheathing cell (OEC) restores functional deficits in rat model of Parkinson's disease. **Parkinsonism and related disorders**. 2005, 11 (S2), 138. **(I.F 1.6)**
- 18) **Chaturvedi RK**, Agrawal AK and Seth PK. Restorative potential of dopaminergic grafts in presence of antioxidants in 6-OHDA lesioned rat model of Parkinson's disease. **Annals of Neuroscience**. 2004, 11 (1), 9-16.
- 19) **Chaturvedi RK**, Agrawal AK, Seth K, Shukla Y, Shukla S and Seth PK. Co-transplantation with GDNF and VMC: A better approach in restoration of neurobehavioral function in 6-OHDA lesioned rat model of Parkinson's disease. **Journal of Neurochemistry**. 2003, Vol. 87 (S1), 107. **(I.F 4.96)**

- 20) Shukla S, Agrawal AK, Seth K, **Chaturvedi RK** and Seth PK. Supplemental role of antioxidants in fetal ventral mesencephalic cell (VMC) and olfactory ensheathing cell (OEC) transplantation. **Journal of Neurochemistry**. 2003, Vol. 87 (S1), 107. **(I.F 4.96)**
- 21) Sinha C, Agrawal AK, Ali MM, Seth K, Shukla S, **Chaturvedi RK** and Seth PK. Developmental neurotoxicity by pyrethroid-based mosquito repellents during early postnatal day (PND): assessment by neurobehavioral, neurochemical and immunohistochemical indices. **Journal of Neurochemistry**. 2003, Vol. 87 (S1), 107. **(I.F 4.96)**
- 22) Shukla S, Agrawal AK, **Chaturvedi RK**, Seth K, and Seth PK. Co-transplantation with OEC and VMC: Long-term functional restoration in 6-OHDA lesioned rat model of Parkinson's disease. **J. Neurochemistry**. 2004, 88 (S1),P35-3, p 88. **(I.F 4.96)**
- 23) **Chaturvedi RK**, Agrawal AK, Shukla S, Seth K, Chauhan S and Seth PK. NGF and VMC co-transplantation: Functional restoration in 6-OHDA lesioned rat model of Parkinson's disease. **J. Neurochemistry**. 2004, 88 (S1), P35-2, p88. **(I.F 4.96)**
- 24) Sinha C, Agrawal AK, Seth K, **Chaturvedi RK**, Shukla S, and Seth PK. Effect of pyrethroid based mosquito repellent on free radical generation: studies in discrete brain regions of developing rats. **J. Neurochemistry**. 2004, 88 (S1), P26-14, p67. **(I.F 4.96)**
- 25) Seth K, Agrawal AK, Aziz MH, Shukla Y, **Chaturvedi RK**, Shukla S, Sinha C and Seth PK. Cypermethrin-induced oxidative injury and expression of immediate early response genes in rat pheochromocytoma (PC12) cells. **J. Neurochemistry**. 2004, 88 (S1), P26-13, p67. **(I.F 4.96)**
- 26) Seth K, Agrawal AK, Sinha C, Shukla S, **Chaturvedi RK**, Shukla Y and Seth PK. Endosulfan induced expression of early response genes/oxidative injury in PC12 cell line. **Iranian Journal of Pharmaceutical Research**, 2004. Vol. 3, S1, Pg.120.
- 27) Shukla S, Agrawal AK, **Chaturvedi RK**, Srivastava N, Seth K, Sinha C and Seth PK. Protective effect of adult olfactory ensheathing cells against 6-OHDA toxicity in PC12 cells. **Iranian Journal of Pharmaceutical Research**, 2004. Vol. 3,S1, Pg 123.
- 28) **Chaturvedi RK**. Protective and restorative potential of Zuckerkandl's organ in rat model of Parkinson's disease. **Iranian Journal of Pharmaceutical Research**, 2004. Vol. 3, S1. Pg 126.
- 29) **Chaturvedi RK**, Agrawal AK, Seth K, Shukla S, Sinha C and. Seth PK. Co-transplantation of fetal neural cell with GDNF and BDNF ameliorates cellular and behavioral deficits in 6-OHDA lesioned rat model of Parkinson's disease. **Annals of Neuroscience**. 2003. Vol 10, 32.
- 30) Shukla S, Agrawal AK, Seth K., **Chaturvedi RK**, Sinha C. and Seth P.K. Role of Antioxidants supplementation in fetal ventral mesencephalic cell (VMC) and carotid body induced functional deficits in rat model of Parkinson's disease. **Annals of Neuroscience**. 2003. Vol 10, 33.
- 31) Sinha C, Agrawal AK, Ali MM, Seth K, **Chaturvedi RK** Shukla S., and Seth PK. Allethrin neurotoxicity in rat pups exposed during early postnatal day (PND) 1-30 and subsequent withdrawal for 7 days. **Annals of Neuroscience**, 2003. Vol 10, 32.
- 32) Ahmad M, Salim S, Ahmad AS, Yousuf S, Khan BZ, Ishrat T, **Chaturvedi RK**, Agrawal AK, and Islam F. *Nardostachys jatamansi* protects against Parkinson's disease: A study using 6-hydroxydopamine rat model. **Annals of Neuroscience**, 2003, Vol 10, 32.

## **Invited lecture(s) delivered in India / abroad and chaired scientific International Conference Symposium**

1. Invited guest speaker in “8<sup>th</sup> NIPER (RBL)-CSIR-CDRI Symposium” on “Current Trends in Medicinal Chemistry and Pharmaceutical Sciences in Drug Discovery” during 18-19 March, 2016 at National Institute of Pharmaceutical Education and Research (NIPER), Raebareli.
2. Keynote speaker at the one day symposium "Emerging Trends in Biomedical Sciences" on 27<sup>th</sup> January, 2016, organized by Symbiosis School of Biomedical Sciences (SSBS), at Symbiosis International University (SIU), Pune.
3. Invited key note speaker in “Current Trends in Life Sciences” Lecture Series sponsored by DBT-BU-IPLS Programme during 6<sup>th</sup> April 2015 at Department of Microbiology, Barkattulah University, Bhopal.
4. Invited lecture in National Conference on Ethnopharmacology and Biotechnology in Drug Development: Prospects and challenges 14-15 Nov 2014 at Bundelkhand University, Jhansi.
5. Invited lecture in 6<sup>th</sup> NIPER (RBL)-CSIR-CDRI Symposium on Current Scenario in Drug Discovery & Development during 20-22 Feb 2014 at CSIR-Central Drug Research Institute, Lucknow.
6. Invited Lecture in International Conference on Advances in Free Radicals, Redox Signaling and Translational Antioxidants Research & XII Annual Meeting of the Society for Free Radical Research-India during 30<sup>th</sup> Jan-1<sup>st</sup> Feb 2013 at CSIR-IITR, Lucknow.
7. Invited guest speaker in “SNCI-CON, 2014” & 28<sup>th</sup> Annual Meeting of the Society for Neurochemistry, India, at Sri Ramachandra University, Chennai.
8. Young Investigator Travel Award Lecture in Young Investigator Colloquia of International Society of Neurochemistry ISN-ASN Biennial Meeting, Cancun, Mexico-2013.
9. Invited Lecture in 83<sup>rd</sup> Annual Session of the National Academy of Sciences, India and Symposium on Space for Human Welfare during 5-7 Dec at Goa University, Goa.
10. Invited Lecture in Indian Science Congress, Gauri Ganguly Memorial Young Scientist Session during 5-8 January 2013 at Kolkata.
11. Invited Lecture in XXXII Annual Conference of Society of Toxicology (STOX), India & International Symposium on New Frontiers in Toxicology during 5-7 December 2012 at CSIR-IITR, Lucknow.
12. Invited Speaker in CSIR-Foundation day celebrations, Young Scientist Session during 26<sup>th</sup> Sept 2010 at CSIR-CIMAP, Lucknow.
13. Young Investigator Travel Award lecture in 10th World Congress of Biological Psychiatry, during 29 May-03 Jun 2011 at Prague, Czech Republic.
14. Invited speaker in Second National Conference on Emerging Areas in Biomedical Sciences, 27 March 2010 at Institute of Biomedical Sciences, Bundelkhand University, Jhansi.
15. Session Chair in Second National Conference on Emerging Areas in Biomedical Sciences, 27 March 2010 at Institute of Biomedical Sciences, Bundelkhand University, Jhansi.
16. Invited speaker in National Seminar on Biotechnology & Health during 19-20 March 2010 at ITM University, Gwalior.

## **Editorial Board Member:**

- 1) Research and Reviews: Journal of Toxicology
- 2) International Journal of Neuropathology
- 3) Advances in Parkinson's Disease
- 4) BioMed Research International (I.F 2.8)
- 5) Evidence Based Complementary and Alternative Medicine (I.F 4.78)

- 6) Neural Plasticity (I.F 2.864)
- 7) Journal of Chemical Neuroanatomy (I.F 2.9)

### **Member of review committee of International journals:**

1. Nutritional Neuroscience- An International Journal on Nutrition, Diet and Nervous system.
2. Progress in Neuro-Psychopharmacology and Biological Psychiatry
3. Neurodegeneration
4. Neuroscience Letters
5. Stem Cells
6. Neurobiology of Disease
7. Neurobiology of Aging
8. Human Experimental Toxicology
9. Toxicology Letters
10. Molecular and Cellular Medicine

### **Member of International/National Societies & Academies:**

- ❖ **Elected member of National Academy of Sciences, Allahabad, India (NASI)-MNASc**
- ❖ Society for Neuroscience (SFN)-USA
- ❖ New York Academy of Sciences (NYAS)-USA
- ❖ International Society of Neurochemistry (ISN)
- ❖ International Society of Developmental Neuroscience (ISDN)
- ❖ International Neurotoxicology association (INA)
- ❖ International Society of Autonomic Nervous System (ISAN)
- ❖ International Brain Research Organization (IBRO)
- ❖ Indian Academy of Neurosciences (IAN)
- ❖ Life member of Society of Immunology and Immunopathology –INDIA
- ❖ Molecular and Cellular Cognition Society (MCCS)
- ❖ Asian Pacific Society of Neurochemistry (APSN)

### **Other information:**

Research paper Published	: 52
Papers presented conferences/symposia	: 24
Invited Lectures in Workshops and Symposia	: 10
Students supervised:	
<b>M Sc</b>	: 24
<b>M Tech.</b>	: 2
<b>M.Pharma</b>	: 2
<b>PhD</b>	: Two (Awarded)
	: Six are currently working for PhD

### **Research Fellows presently working:**

SRF (CSIR)	: Two
SRF (DBT)	: One
SRF (ICMR)	: One
JRF (UGC)	: One
Project Fellow	: Three

### **Extramural Grants/CSIR Network Projects completed/ongoing:**

<b>S No</b>	<b>Title of Project</b>	<b>Project Category</b>	<b>Participating Agencies</b>	<b>Status</b>	<b>Your Role as defined</b>
1	PGC-1 $\alpha$ /SIRT mediated regulation of neural stem cells differentiation (Neurogenesis) in Alzheimer's disease: Prospects for "Brain Self Repair"	Young Scientist Grant	Lady Tata Memorial Trust-UK	Ongoing	Principal Investigator
2	Investigative toxicology-New paradigms" (SIP-08) activity:- "Cypermethrin mediated effects on the regulatory dynamics of neurogenesis in the brain: Cellular and molecular mechanism"	Supra-Institutional, SIP-08	CSIR-IITR and other CSIR labs	Completed	Principal Investigator
3	DST FAST Track Project Grant:- "Cellular and molecular mechanism (s) of pesticide mediated alterations in the regulatory dynamics of neurogenesis (neural stem cell proliferation, migration and differentiation) in the rat brain."	DST- Grant-in-Aid Project, Young Scientist Grant	CSIR-IITR	Completed	Principal Investigator
4	CSIR-Network Project:- "Establishment of neural stem cells as an <i>in vitro</i> tool to study neurotoxic potential"	CSIR-Network project NWP-17	CSIR-IITR and other CSIR labs	Completed	Principal Investigator
5	ICMR Project Grant:- "Effects of xenoestrogen Bisphenol-A on the neural stem cell proliferation, migration and differentiation (neurogenesis): Cellular and molecular mechanism"	ICMR-Grant Aided Project	CSIR-IITR	Completed	Principal Investigator
6	DBT Project Grant:- "Studies on Alterations in Molecular events involved in developmental neurotoxicity of cypermethrin"	DBT-Grant-in-Aid Project	CSIR-IITR	Completed	Co-PI
7	Department of Environment and Forests (DoEF) Grant:- "Assessment of stabilizer Bisphenol A in plastic baby feeding bottles leachates"	DoEF- Grant-in-Aid Project	CSIR-IITR	Completed	Co-PI
8	CSIR-Network Project:-	CSIR-	CSIR-IITR	Completed	Principal

	“Assessment of neuroprotective potential of novel drug candidates in models of neurodegenerative disorders”	Network project	and other CSIR labs		Investigator
9	CSIR-Network Project:- “Role of Omi/HtrA2 protease family proteins in pathogenesis of environmental toxins induced Parkinson’s disease”	CSIR-Network project – MiND	CSIR-IITR and other CSIR labs	Ongoing (Till March 2017)	Principal Investigator
10	CSIR-Network Project:- “Cellular and molecular mechanisms of Xenoestrogen Bisphenol-A mediated effects on autophagy and mitochondrial dynamics in the rat brain”	CSIR-Network project – InDEPTH	CSIR-IITR and other CSIR labs	Completed	Principal Investigator
11	CSIR-Network Project:- “Role of Small Molecules / natural products in the restoration of endogenous neurogenesis”	CSIR-Network project – MedCHEM	CSIR-IITR and other CSIR labs	Completed	Principal Investigator and IITR Co-ordinator

Certified that above information is correct.

Date:

Place:



सीएसआईआर-भारतीय विषविज्ञान अनुसंधान संस्थान  
CSIR-INDIAN INSTITUTE OF TOXICOLOGY RESEARCH



वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद्  
COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH  
mail: director@iitr.res.in

CSIR-IITR, Lucknow is the only multidisciplinary research institute in the field of toxicology in South East Asia with the motto:

***"Safety to environment & health and service to industry".***

#### R&D Areas

- Food, Drug & Chemical Toxicology
- Environmental Toxicology
- Regulatory Toxicology
- Nanotherapeutics & Nanomaterial Toxicology
- Systems Toxicology & Health Risk Assessment

#### Services Available

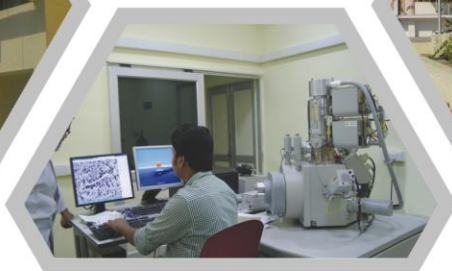
- GLP certified pre-clinical toxicity studies
- Safety / toxicity evaluation of New Chemical Entities
- Air, Soil & water quality monitoring and assessment
- Analytical services
- Information on chemicals / products
- Consultancy
- Collaborative & Contract Research

#### Recognitions

- Scientific & Industrial Research Organizations (SIROs)
- UP Pollution Control Board (Water & Air)
- Indian Factories Act (Drinking Water)
- Bureau of Indian Standards (Synthetic Detergents)
- Food Safety & Standards Authority of India (FSSAI)

#### Technologies Developed / Available

- Water Analysis Kit
- Mobile Laboratory Van for on spot water quality analysis
- Argemone Detection Kit for rapid screening of Argemone in mustard oil
- CD-Strip for detection of butter yellow, an adulterant in edible oils
- Arsenic Detection Kit



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Accredited by **NABL** for chemical and biological testing



Toxicity Testing: **GLP** Test Facility