

## **SANJIT DEY, Ph.D.**

### **Professor**

Department of Physiology, Department of Sports Sciences,  
Centre for Research in Nanosciences and Nanotechnology  
University of Calcutta

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h index: 24

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Scopus

57189350969

**Date of Birth:** 14.08.1969

### **Academic Records**

A Bachelor of Sciences: 1990: University of Calcutta, Human Physiology with Honours.

B Master of Sciences: 1992: University of Calcutta, Human Physiology with Specialization in Biochemistry.

C. Doctor of Philosophy: 1999: University of Calcutta, Molecular Biology and Biophysics,

### **Post Doctoral Experiences:**

School of Medicine, University of California Los Angeles, Los Angeles, CA, USA: 2000-2002.

**Visiting Scientist:** MD Anderson Cancer Centre, Houston, Texas, USA, 2008

**Teaching Experience: More than 22 years (April 1997 onwards): Professor: 2012.**

**RESEARCH: More than 27 years (1993 onwards)**

**PhD Awarded under my Supervision: Nine;** and currently registered: Eight; Enrolled: Four.

**Adjudicator of thesis from other Universities: Nine**

**Funded Projects Completed: 12**

**Currently running funded projects: Three**

**Career and research Interest:** Innovative real life therapeutic research including Human Health Care. Role of subcellular organelle in health and diseases. Innovation and value added teaching.

### **Administrative Responsibilities:**

Head, Department of Physiology: (2013-2015): Accomplished developmental matters of the Department for the students, researchers and faculties.

Chairperson, Board of Post Graduate Studies (2013-15): Performed all academic matters including publication of Results.

Adjudicator of thesis and Moderator of different examinations.

University Nominated Member of AYUSH Council, Government of West Bengal.

Member Secretary for two terms of Animal Ethics Committee,

Member of Ethics Committee of the University

Selection Committee member of different Universities and commissions.

Organizer of major International Conferences and meetings.

Member, Post Graduate Students Admission Committee of University, 2016.

Member, Research Advisory Committee of UGC-UPE2, 2016-18.

Member, Research Advisory Committee, Centre for Research in Nanoscience and Nanotechnology, University of Calcutta.

Judging Panel: Physiological Society, United Kingdom.

Reviewer of Journals and Funding agencies.

### **Publications:**

#### **2020:**

- 1 Shatabdi Ghosh\* , Sanjit Dey & Sujoy Ghosh, Diabetes in the time of COVID-19 pandemic: A knife with two sharp ends: Indian Journal of Biochemistry & Biophysics Vol. 57, October 2020, pp. 512-520.
- 2 Sushobhan Biswas, Hrishita Das, Ujjal Das, Aaveri Sengupta, Rakhi Dey Sharma, Subhas Chandra Biswas & Sanjit Dey (2020) Smokeless tobacco induces toxicity and apoptosis in neuronal cells: a mechanistic evaluation, Free Radical Research, DOI: 10.1080/10715762.2020.1805446
- 3 Arnab Banerjee, et al. Mechanistic study of attenuation of monosodium glutamate mixed high lipid diet induced systemic damage in rats by *Coccinia grandis*"Sept 2020; Just Accepted. Doi:10.1038/s41598-20-72076-6
- 4 Manas Mahapatra, Arnab Dutta, Joy Sankar Deb Roy, Mousumi Deb, Ujjal Das, Snehasis Banerjee, **Sanjit Dey**, Pijush Kanti Chattopadhyay, Dilip K Maiti, Nayan Ranjan Singha. Synthesis of Biocompatible Aliphatic Terpolymers via In Situ Fluorescent Monomers for Three-in-One Applications: Polymerization of Hydrophobic Monomers in Water. Langmuir, 2020 May 26. doi: 10.1021/acs.langmuir.0c00636. Online.
- 5 Koustav Chatterjee, Akash Roy, Rebecca Banerjee, Supriyo Choudhury, Banashree Mondal, Saptak Halder, Purba Basu, Shantanu Shubham, **Sanjit Dey**, Hrishikesh Kumar: Inflammasome and  $\alpha$ -synuclein in Parkinson's disease: A cross-sectional study: Neuroimmunology, 2019

#### **2019:**

- 6 Aaveri Sengupta, Ujjal Das, // Rakhi Dey Sharma and **Sanjit Dey**, An association study of severity of intellectual disability with peripheral biomarkers of disabled children in a rehabilitation home, Kolkata, India"; **Nature Scientific Reports**. 2019 Sep 20;9(1):13652. doi: 10.1038/s41598-019-49728-3.
- 7 Ujjal Das, Krishnendu Manna, Arghya Adhikary, Snehasis Mishra, Krishna Das Saha, Rakhi Dey Sharma, Biswanath Majumder\* and **Sanjit Dey\***; Ferulic acid enhances the radiation sensitivity of lung and liver carcinoma cells by collapsing redox homeostasis:mechanistic involvement of Akt/p38 MAPK signalling pathway, Free Radic Res. 2019 Oct;53(9-10):944-967. doi: 10.1080/10715762.2019.1655559. Taylor and Francis, July 2019.
- 8 Singha NR, Mahapatra M, Dutta A, Deb Roy JS, Das U, Banerjee S, **Dey S**, Chattopadhyay PK, C-C/ C-N Coupled Light-Emitting Aliphatic Terpolymers: N-H Functionalized Fluorophore-Monomers and High-Performance Applications. Chemistry. 2019 Oct 10. doi: 10.1002/chem.201903935. PubMed PMID: 31599070
- 9 Paul D, Manna K, Sengupta A, Mukherjee S, **Dey S**, Bag PK, Dhar P. A novel nanoformulation of  $\alpha$ -eleostearic acid restores molecular pathogenesis of hypersensitivity. Nanomedicine (Lond). 2019 Feb 12. doi: 10.2217/nmm-2018-0450.

**2018:**

- 10 Dey TK, Koley H, Ghosh M, **Dey S**, Dhar P. Effects of nano-sizing on lipid bioaccessibility and ex vivo bioavailability from EPA-DHA rich oil in water nanoemulsion, **Food Chem.** 1;275:135-142. doi: 10.1016/j.foodchem.2018.09.084. Epub 2018 Sep 14. PMID: 30724179

**2017:**

- 11 Das U, Sengupta A, Biswas S, Adhikary A, Dey Sharma R, Chakraborty A, **Dey S**. Alteration of murine duodenal morphology and redox signalling events by reactive oxygen species generated after whole body  $\gamma$ -irradiation and its prevention by ferulic acid. **Free Radic Res.** 2017 Dec;51(11-12):886-910. doi: 10.1080/10715762.2017.1388916. Epub 2017 Nov 3. PubMed PMID: 29098899.
- 12 Das U, Biswas S, Chattopadhyay S, Chakraborty A, Dey Sharma R, Banerji A, **Dey S**. Radiosensitizing effect of ellagic acid on growth of Hepatocellular carcinoma cells: an in vitro study. **Scientific Reports**, Springer nature: 2017 Oct 25;7(1):14043. doi:10.1038/s41598-017-14211-4. PubMed PMID: 29070894; PubMed Central PMCID: PMC5656621.
- 13 Suvarna S, Das U, Kc S, Mishra S, Sudarshan M, Saha KD, **Dey S**, Chakraborty A, Narayana Y. Synthesis of a novel glucose capped gold nanoparticle as a better theranostic candidate. **PLoS One.** 2017 Jun 5;12(6):e0178202. doi: 10.1371/journal.pone.0178202. eCollection 2017. PubMed PMID: 28582426; PubMed Central PMCID: PMC5459428.
- 14 Das U, Manna K, Khan A, Sinha M, Biswas S, Sengupta A, Chakraborty A, **Dey S**. Ferulic acid (FA) abrogates  $\gamma$ -radiation induced oxidative stress and DNA damage by up-regulating nuclear translocation of Nrf2 and activation of NHEJ pathway. **Free Radic Res.** 2017 Jan;51(1):47-63. doi: 10.1080/10715762.2016.1267345. Epub 2017 Jan 11. PubMed PMID: 28074659.
- 15 Aaveri Sengupta, Krishnendu Manna, Siddhartha Datta, Ujjal Das, Sushobhan Biswas, Nilkanta Chakrabarti and **Sanjit Dey**: Herbicide exposure induces apoptosis, inflammation, immune modulation and suppression of cell survival mechanism in murine model. **RSC Adv.**, 2017, 7, 13957

**2016:**

- 16 Das, Ujjal; Biswas, Sushobhan; Sengupta, Aaveri; Manna, Krishnendu; Chakraborty, Anindita; **DEY, SANJIT**, Ferulic acid (FA) abrogates ionizing radiation induced oxidative damage in murine spleen, **Int J Radiat Biol.** 92(12):806-818, 2016.
- 17 Krishnendu Manna, Amitava Khan, Sushobhan Biswas, Ujjal Das, Aaveri Sengupta, Dipanwita Mukherjee, Anindita Chakraborty and **Sanjit Dey** Naringin ameliorates radiation-induced hepatic damage through modulation of Nrf2 and NF- $\kappa$ B pathways **RSC Adv.**, 2016, DOI: 10.1039/C6RA01102K

**2015:**

- 18 Das N, Ganguli D, **Dey S**. Moringa oleifera Lam. seed extract prevents fat diet induced oxidative stress in mice and protects liver cell-nuclei from hydroxyl radical mediated damage. **Indian J Exp Biol.** 2015 Dec;53(12):794-802. PubMed PMID: 26742324.
- 19 Biswas S, Manna K, Das U, Khan A, Pradhan A, Sengupta A, Bose S, Ghosh S, **Dey S**. Smokeless tobacco consumption impedes metabolic, cellular, apoptotic and systemic stress pattern: A study on Government employees in Kolkata, India. **Scientific Reports.** 2015 Dec 16;5:18284. doi: 10.1038/srep18284. PubMed PMID: 26669667.
- 20 Mukherjee S, Ghosh S, Das DK, Chakraborty P, Choudhury S, Gupta P, Adhikary A, **Dey S**, Chattopadhyay S. Gold-conjugated green tea nanoparticles for enhanced anti-tumor

activities and hepatoprotection--synthesis, characterization and in vitro evaluation. **J Nutr Biochem.** 2015 Nov;26(11):1283-97. doi: 10.1016/j.jnutbio.2015.06.003. Epub 2015 Jul 26. PubMed PMID: 26310506.

- 21 Manna K, Ujjal Das, Dipesh Das, Swaraj Kesh, Amitava Khan, Anindita Chakraborty & **Sanjit Dey**, Naringin inhibits gamma radiation-induced oxidative DNA damage and inflammation by modulating p53 and NF- $\kappa$ B signaling pathways in murine splenocytes: **Free Radical Research**, 2015, DOI:10.3109/10715762.2015.1016018.
- 22 Khan A, Manna K, Das DK, Kesh SB, Sinha M, Das U, Biswas S, Sengupta A, Sikder K, Datta S, Ghosh M, Chakrabarty A, Banerji A, **Dey S**; Gossypetin ameliorates ionizing radiation-induced oxidative stress in mice liver--a molecular approach. **Free Radic Res.** 2015 Oct;49(10):1173-86. doi: 10.3109/10715762.2015.1053878. Epub 2015 Aug 14. PMID: 25994373

#### 2014:

- 23 Khan A, Manna K, Chinchubose, Das DK, Sinha M, Kesh SB, Das U, Dey RS, Banerji A, **Dey S**. Seabuckthron (*Hippophae rhamnoides* L.) leaf extract ameliorates the gamma radiation mediated DNA damage and hepatic alterations. **Indian J Exp Biol.** 2014 Oct;52(10):952-64. PubMed PMID: 25345244.
- 24 Das U, Manna K, Sinha M, Datta S, Das DK, Chakraborty A, Ghosh M, Saha KD, **Dey S**. Role of ferulic acid in the amelioration of ionizing radiation induced inflammation: a murine model. **PLoS One.** 2014 May 22;9(5):e97599. doi:10.1371/journal.pone.0097599.
- 25 Manna K, Khan A, Kr Das D, Bandhu Kesh S, Das U, Ghosh S, Sharma Dey R, Das Saha K, Chakraborty A, Chattopadhyay S, **Dey S**, Chattopadhyay D. Protective effect of coconut water concentrate and its active component shikimic acid against hydroperoxide mediated oxidative stress through suppression of NF- $\kappa$ B and activation of Nrf2 pathway. **J Ethnopharmacol.** 2014 May 14. pii: doi: 10.1016/
- 26 Sikder K, Kesh SB, Das N, Manna K, **Dey S**. The high antioxidative power of quercetin (aglycone flavonoid) and its glycone (rutin) avert high cholesterol diet induced hepatotoxicity and inflammation in Swiss albino mice. **Food Funct.** 2014 Jun;5(6):1294-303. doi: 10.1039/c3fo60526d. Epub 2014.

#### 2013

- 27 Kunal Sikder, Nilanjan Das Swaraj Bandhu Kesh & **Sanjit DEY**, Quercetin and  $\beta$ -sitosterol prevent high fat diet induced dyslipidemia and hepatotoxicity in Swiss albino mice; Accepted and in press of **Ind J of Exp Biol. (IJEB)**, 2013.
- 28 Khan, K. Manna, C. Bose, et al., "Gossypetin, a naturally occurring hexahydroxy flavone ameliorates gamma radiation mediated DNA damage", **International Journal of Radiation Biology**, vol. no. pp. 2013.
- 29 A. Banerjee, A. Guha, J. Adhikary, Khan A., Manna K, ... **Dey S**, Das D., et al., "Dinuclear cobalt(II) complexes of Schiff-base compartmental ligands: Syntheses, crystal structure and bio-relevant catalytic activities", **Polyhedron**, vol. 60, no. 0, pp. 102-109, 2013.
- 30 Kesh SB, Sikder K, Manna K, Das DK, Khan A, Das N, **Dey S**, "Promising role of ferulic acid, atorvastatin and their combination in ameliorating high fat diet-induced stress in mice." **Life Sci.** 2013 May 20;92(17-19):938-49. doi: 10.1016/j.lfs.2013.03.015.
- 31 Nilanjan Das, Kunal Sikder, Surajit Bhattacharjee, Suchandra Bhattacharya Majumdar, Santinath Ghosh, Subrata Majumdar and **Sanjit Dey**; Quercetin alleviates inflammation after short term treatment in high fat fed mice Accepted in **Food and function**, 2013. Royal Society of Chemistry.\*
- 32 Sikder K, Sinha M, Das N, Das D.Kr., Datta S, **Dey S**, *Moringa oleifera* LEAF EXTRACT PREVENTS *IN VITRO* OXIDATIVE DNA DAMAGE, Accepted for publication in **Asian J of Pharmaceutical Research**, 2013.

- 33 Das, Dipesh; Chakraborty, Anirban; Sinha, Mahuya; Manna, Krishnendu; Mukherjee, Dipanwita; Chakraborty, Anindita; Bhattacharjee, Sekhar; **DEY, SANJIT**; Modulatory role of quercetin against gamma radiation mediated biochemical and morphological alterations of red blood cell; **Int J of Radiation Biology**. 2013.

## 2012

- 34 Sinha M, Das DK, Manna K, Datta S, Ray T, Sil AK, **Dey S**. Epicatechin ameliorates ionizing radiation-induced oxidative stress in mice liver. **Free Radic Res**. 2012 Apr 13. [Epub ahead of print] PubMed PMID: 22497453. Informa Health care.
- 35 Sinha M, Das DK, Datta S, Ghosh S, **Dey S**. Amelioration of ionizing radiation induced lipid peroxidation in mouse liver by *Moringa oleifera* Lam. leaf extract. **Indian J Exp Biol**. 2012 Mar;50(3):209-15. (2012). CSIR.

## 2011

- 36 Gupta R, Pandey RM, Misra A, Agrawal A, Misra P, **Dey S**, Rao S, Menon VU, Kamalamma N, Vasantha Devi KP, Revathi K, Vikram NK, Sharma V, Guptha S. High prevalence and low awareness, treatment and control of hypertension in Asian Indian women. **J Hum Hypertens**. 2012 Oct;26(10):585-93. doi: 10.1038/jhh.2011.79. Impact F: 2.801 (2011). Nature Publication Group.
- 37 Das, Nilanjan; Sikder, Kunal; Ghosh, Santinath; Fromenty, Bernard; **Dey, Sanjit**; *Moringa oleifera* Lam. leaf extract prevents early liver injury and restores antioxidant status in mice fed with high-fat diet, 404-412 **IJEB Vol.50(06) [June 2012]** Impact Factor: 1.295 (2011). CSIR
- 38 Pali Maiti, Amitava Khan, Tanmay Chattopadhyay, Sudhanshu Das, Krishnendu Manna, Dipayan Bose, **Sanjit Dey**, Ennio Zangrando & Debasis Das, Dinuclear zinc(II) complexes with compartmental ligands: syntheses, structures, and bioactivities as artificial nuclease, **Journal of Coordination Chemistry**, 64:21, 3817-3831,2011. Impact Factor: 1.547 (2011): Taylor and Francis.
- 39 Ganguli D, Das N, Saha I., Chaudhuri D, Ghosh, S., **Dey S**, Predictors of Hypertension in a Population-Based Sample of Postmenopausal Women in Kolkata, West Bengal, India: Accepted for Publication at **Asia Pacific J of Public Health**, (Accepted in 2011, date of publication not obtained). Impact Factor: 1.056 (2011): SAGE
- 40 Kunnumakkara AB, Sung B, Ravindran J, Diagaradjane P, Deorukhkar A, **Dey S**, Koca C, Tong Z, Gelovani JG, Guha S, Krishnan S, Aggarwal BB. Zylflamend suppresses growth and sensitizes human pancreatic tumors to gemcitabine in an orthotopic mouse model through modulation of multiple targets. **Int J Cancer**. 2011 Sep 20. doi: 10.1002/ijc.26442. Impact Factor: 5.444 (Wiley).
- 41 Pandey RM, Gupta R, Misra A, Misra P, Singh V, Agrawal A, **Dey S**, Rao S, Menon VU, Kamalamma N, Devi KP, Revathi K, Sharma, Determinants of urban-rural differences in cardiovascular risk factors in middle-aged women in India: A cross-sectional study. V. **Int J Cardiol**. 2011. Impact Factor: 4.111 (Elsevier).
- 42 Misra A, ..... **Dey S**, .... Bhardwaj S, Consensus dietary guidelines for healthy living and prevention of obesity, the metabolic syndrome, diabetes, and related disorders in Asian Indians. National Dietary Guidelines Consensus Group. **Diabetes Technol Ther**. 2011 Jun;13(6):683-94. Review. Impact Factor: 1.931 (Mary Ann Liebert).
- 43 Dipesh Kr. Das, Anirban Chakraborty, Sekhar Bhattacharjee and **Sanjit Dey**, Biosynthesis of stabilised gold nanoparticle using an aglycone flavonoid quercetin, **Journal of Experimental Nanoscience**, 2011, 1–7. Impact Factor: 1.011 (2011). Tand F.
- 44 Mahuya Sinha, Dipesh Kr. Das, Surajit Bhattacharjee, Subrata Majumdar, and **Sanjit Dey**, Leaf Extract of *Moringa oleifera* Prevents Ionizing Radiation-Induced Oxidative Stress in Mice **J Med Food** 14 (0) 2011, 1–6 DOI: 10.1089/jmf.2010.1506.

- 45 Debdutta Ganguli, Nilanjan Das, Indranil Saha, Piyali Biswas, Srinwanti Datta, Basudeb Mukhopadhyay, Debnath Chaudhuri, Saurabh Ghosh and **Sanjit Dey** Major dietary patterns and their associations with cardiovascular risk factors among women in West Bengal, India. **Br J Nutr.** 2011 May;105(10):1520-9. Epub 2011 Jan 28.
- 46 Gupta R, Gupta R, Agrawal A, Misra A, Guptha S, Pandey RM, Misra P, Vikram NK, **Dey S**, Rao S, Menon VU, Kamalamma N, Revathi K, Mathur B, Sharma V. Migrating husbands and hanging cardiovascular risk factors in the wife: a cross sectional study in Asian Indian women. **J Epidemiol Community Health.** 2011 Dec 6. **Impact Factor: 3.192 (2011): British Medical Journal.**
- 47 Ganguly DG, Das N, Saha I, Sanapala KR, Chaudhuri D, Ghosh S., **Dey S.**, Association between inflammatory and cardiovascular risk factors in women of Kolkata, India, *Arquivos Brasileiros de Cardiologia*, **Arq Bras Cardiol.** 2011 Jan;96(1):38-46.

## 2010

- 48 Kunnumakkara AB, Sung B, Ravindran J, Diagaradjane P, Deorukhkar A, **Dey S**, Koca C, Yadav VR, Tong Z, Gelovani JG, Guha S, Krishnan S, Aggarwal BB. {Gamma}-tocotrienol inhibits pancreatic tumors and sensitizes them to gemcitabine treatment by modulating the inflammatory microenvironment. **Cancer Res.** 2010 Nov 1;70(21):8695-705. Epub 2010 Sep 23.

## 2009

- 49 Kunnumakkara AB, Kocha C, Chung JG, **Dey S.** The mint (Menthol). in Molecular targets and therapeutic uses of spices. Published by World Scientific Publications. 2009,
- 50 Aggarwal BB, Kunnumakara BA, Harikumar KB, Thakaran, ST, Cemile K, **Dey S**, Sung B, Targeting signal-transducer-and-activator-of-transcription-3 for prevention and therapy of cancer: modern target but ancient solution. **Ann N Y Acad Sci.** Aug;1171:59-76. Review. 2009
- 51 Kunnumakkara AB, Kocha C, Sung B, Supachai, **Dey S**, Aggarwal BB. Traditional uses of spices- an overview. in Molecular targets and therapeutic uses of spices. Published by World Scientific Publications. 2009
- 52 Prevention and Treatment of Neurodegenerative Diseases by Spice-Derived Phytochemicals: Bharat B. Aggarwal, Hari Kumar, and **Sanjit Dey: Invited Review for Micronutrients and Brain Health** edited by Lester Packer, Helmut Sies, Manfred Eggersdorfer and Enrique Cadenas: published by CRC Press; 30 chapters in the book. 2009.

## 1999-2007

- 53 Amit Roy, Benu Brata Das, Agneyo Ganguly, Somdeb BoseDasgupta, Neeta V.M. Khalkho, Churala Pal, Sumit Dey, Venkatachalam Sessa Giri, Parasuraman Jaisankar, **Sanjit Dey** and Hemanta K. Majumder, **Biochem. J.** (2007) An insight into the mechanism of inhibition of unusual bi-subunit topoisomerase I from *Leishmania donovani* by 3,3'-diindolylmethane, a novel DNA topoisomerase I poison with a strong binding affinity to enzyme; doi:10.1042/BJ20071286.
- 54 Rubin SA, **Dey S**, Reidling JC(2005), Functional analysis of two regulatory regions of the human Na(+)-dependent vitamin C transporter 2, SLC23A2, in human vascular smooth muscle cells. **Biochim Biophys Acta.**, 1732, Dec 7, 76-81.
- 55 Das. D, Saha, A, Das, S., Mazumder N., Palchaudhuri S., Mazumder S. and **Dey S.**(2005), Danger of Lead toxicity.
- 56 **Sanjit Dey** (2004) Why stem cell research, Published in Physiology: Emerging issues, Published by Department of Physiology, Hooghly Mohsin College, University of Burdwan.
- 57 **Sanjit Dey** (2003) Buoyancy of Stem Cell Research, Science and Culture, Vol 69, No. 3-4, 99- 103.

- 58 **Sanjit Dey**, Veendamali S. Subramanian, Nabendu Chatterjee, Stanley Rubin, and Hamid. M. Said (2002), Characterization of the 5' regulatory region of the human sodium-dependent multivitamin transporter, hSMVT. **Biochim Biophys Acta**. 2002 Mar 19; 1574(2): 187-92.
- 59 Peter H Park, **Sanjit Dey** and Stanley A Rubin, (2001). Isoform specific expression of the Na<sup>+</sup>-dependent Vitamin C transporter and regulation of its expression by platelet-derived growth factor in rat vascular smooth muscle, **Circulation** 254,17(supplement II) 345,P. II-71.
- 60 Chatterjee, N., **Dey S**, Rubin S.A., Said H.M., (2001) Molecular characterization of the 5' regulatory region of the human sodium-dependent multivitamin transporter, SMVT. **Gastroenterology**. Apr: 120 (5 Suppl 1): 3665, A768.
- 61 Rubin SA, Iacoviello M, Smith S, **Dey S**, Chatterjee N, Said HM. Characterization and Cloning of a Specific, Carrier-Mediated System for Pantothenic Acid Uptake by Vascular Smooth Muscle. **Circulation** 102 (Supplement) II: 19, 2000.
- 62 **S. Dey**, S.Roychaudhuri, A. Sarma., and A.R.Thakur (1999), Effects of ionizing radiation induced damage and protection in normal and denatured supercoiled DNA and their minichromatins formed on them. Indian Journal of Physics, Vol 73 B: 795-804.

### Book Chapter

S.No.	Title with page nos.	Type of Book & Authorship	Publisher & ISSN / ISBN No.
1	Prevention and Treatment of Neurodegenerative Diseases by Spice-Derived Phytochemicals: Pg 281-308.	Bharat B. Aggarwal, Hari Kumar, and <b>Sanjit Dey</b> , 2010	CRC Press
2.	Traditional uses of spices- an overview, Pg 1-24 in Molecular targets and therapeutic uses of spices, 2011	Kunnumakkara AB, Kocha C, Sung B, Supachai, <b>Dey Sanjit</b> , Aggarwal BB, 2011	World Scientific Publications.
3.	“The mint (Menthol) and its constituents” in Molecular targets and therapeutic uses of spices; Pg 373-401. 2011	Kunnumakkara AB, Kocha C, Chung JG, <b>Dey S</b> . 2011	World Scientific Publications
4	Nanoparticle Using Phytochemicals: Phytocompounds as building blocks for biocompatible gold nanoparticles development Pg 126-133	Recent trends in research of Nutrition Science, 2012	Department of Food and Nutrition, BRSC; ISBN: 978-81-921808-5-4
5.	Quercetin and Beta sitosterol, two structurally dissimilar phytochemicals of Moringa oleifera leaf extract (MoIE) ameliorate high fat diet induced steatohepatitis	Recent trends in research of Nutrition Science, 2012	Department of Food and Nutrition, BRSC; ISBN: 978-81-921808-5-4
6.	Phytochemicals safe Guard Genome: Tiny molecules, big role. 2014	Anticancer Properties of Fruits and Vegetables A Scientific Review	World Scientific ISBN: 978-981-4508-88-9

### Extramural research grant (Running)

SI	Title of the Project	Funding Agency	Type of Projects
1	Detection and Management of Pain: Pain to Pleasure by neuromodulation: 2020-23	DRDO, GOI: 61 lakhs (Approved))	Fundamental and mechanistic research for novel pain detection and management
2	Investigation and Management of Pain by Novel Mechanisms of Neuromodulation 2020-21	WBDSTB, GoWB: 8.94 lakhs	Fundamental Research for development of Novel analgesics
3	Augmentation of radiation induced oxidative stress in radiosensitive and radioresistant tumour cells by Anthocyanins from coloured Phytochemicals. 2019-2022.	UGC-Department of Atomic Energy: 7.8 lakhs	To investigate and promote radiation therapy using selective grape extracts

### Extramural research grant (Completed)

SI	Title of the Project	Funding Agency: Fund in INR:	Type of Projects
1	Detection and management of Pain signal: Validation of Pain Score: 2018-2020.	UGC-UPE, 6 Lakhs	Development of pain sensor and its Neurophysiological validation
2.	A. Improvement and intervention of Mental Efficiency in Mentally Challenged individuals by effective nutrition and other supportive care. B. Intervention strategies for Neuro degenerative disorders (Parkinson's disease and Alzheimer's disease) by Nutrition and other supportive care.	UGC, CPEPA scheme awarded to University of Calcutta: 10 Lakhs for consumables	Identification and of disease biomarker and association of progression
3.	The radiation sensitization of tumour cells effects using Tea Polyphenols	UGC-Department of Atomic Energy: 9 Lakhs	To investigate and promote radiation therapy using selective tea polyphenols



4.	“Molecular action of <i>Cocos nucifera</i> water on $\gamma$ radiation induced oxidative damage and cellular signalling”.	Coconut Development Board: 18 Lakhs	Identification of hepatoprotective elements from coconut water
5.	“Beneficial effect of Tea Extract against Smokeless Tobacco induced oral mucosal damage: Toxicological Assessment”	National Tea research foundation: 19 Lakhs	Preventive element for oral mucosal lesion after Smokeless tobacco chewing: Anti cancer element development
6.	“Molecular action of <i>Moringa olifera</i> leaf extract and its active components on radiation protection: Assessment of Low and High LET Radiation effectivity”	IUAC-UGC: 6.5 Lakhs	Functional Food development
7.	“Ferulic acid as a radio protector against challenges and threats from ionizing radiation: Validation of molecular mechanism involving NF- $\kappa$ B and Nrf2 cross-talking system”.	LSRB-DRDO: 9.82 Lakhs	Radiation Protection and functional food development
8.	“Enhancement of Radiation Induced Oxidative Stress in Human Hepatocellular Carcinoma Cells by Ellagic Acid”	UGC: 14 Lakhs	Radiation sensitization element identification.
9.	“Management of Radiation hazard by active compounds of <i>Moringa olifera</i> : Assessment of Cellular Impact”	CSIR: 18 Lakhs	Radiation protection element identification and effective validation against as radiation effects mitigation
10	“Radioprotection Activity of <i>Moringa olifera</i> (Sajne) and its active components: Assessment of Nrf2 and NF- $\kappa$ B Transcription Factor Cross Talking System”.	WB-DBT: 14 Lakhs	Identification of specific phytochemicals as effective radiation hazard countermeasure
11	“Anti Dyslipidemic effect of <i>Moringa oleifera</i> (Sajina) leaf and seed extract”.	DBT, GOI: 21.12 Lakhs	Identification of bioactive element from Leaf and Development functional food against Metabolic Syndrome.
12	“Radiation Protection using <i>Moringa olifera</i> principles”	UGC-DAE: 5.6 Lakhs	Development of Radioprotective food.
13	Radiation Protection using Nanocompounds of <i>Moringa oleifera</i> principles	CRNN, University of Calcutta: 2 Lakhs	Development of Nanofood and Nano devices.
14	Development of Appropriate Prevention and Intervention Strategies for Non communicable nutrition related disorders among women in Post reproductive Period	DST, SERB, SS division, 9.65 Lakhs	Identification of food groups and association of CVD markers.

**Patents (if any):** None: Processing for 4 formulations and products

### **List of Honours/Awards**

- **Nominated as member of advisory board of NASI Local Chapter, Kolkata, 2019.**
- Elected Member of the National Academy of Sciences, India, Allahabad, 2016
- **Selected Member of Physiological Society, United Kingdom, 2020**
- Received overseas fellowship from DBT, Government of India to attend Visiting Scientist Position at MD Anderson Cancer Center, Houston, USA.
- Selected for Postdoctoral research UCLA School of Medicine, Los Angeles, USA 2000-2002.
- Selected member of governing body member in Council, College or organizations.
- Selection committee member of University, Commission.
- Member of Syllabus and other administrative committees.
- Member of Board of studies of Departments of Universities (CU, RKMVERI, RKM Vidyamandir, KU).
- Served as Head of The Department, Physiology, University of Calcutta (2013-2015).
- Selected as observer at the ICMR capacity building meeting at North East for Nutrition Research. (February 2005).
- Selected reviewer of project proposals by ICMR and DST, GOI (2005-Onwards).
- Key note lecturers, Plenary and Invited talks at several International meetings.
- Submission to NLM GenBank: Sanjit Dey, et al (GenBank # AF 442738, Gen Bank #AF 442149 and Gen Bank #AF 442150,DQ011867, AF442738 and Gen Bank #: AF288781).
- Cold Spring Harbor Symposium on Physiological Genomics and Rat Models (December 5-9, 2001); Dey S., et al., Chatterjee N., Iacoviello M., Said HM, Rubin SA, Platelet-derived Growth Factor upregulates pantothenic acid uptake and gene expression of its transporter in rat vascular smooth muscle cells.
- Poster selected with distinction at American Gastroenterology Association meeting-2001, Atlanta, Georgia.
- Poster selected for IUPS world congress:2002
- First prize in Inter -University essay competition on "Nutrition and Health" 1991.
- National Merit Scholar, Government of India.
- Recipient of National Science Talent Search Award, 1984

### **Foreign visit**

- Visited and worked for two years at UCLA, School of Medicine, Los Angeles, CA USA as post doctoral Fellow 2000-2002.
- Visiting Scientist at MD Anderson Cancer Centre, Houston, USA at DBT Overseas Fellow, 2008.
- Visited Wellington, New Zealand as Invited speaker to attend 3<sup>rd</sup> Food Structure and Health meeting. 2015.

### **Editor/or Editorial Board Member etc.**

Editorial Board Member of American J of Experimental Biology, Columbia International Press

### **Membership in scientific bodies**

**Member:**

- Selected member of Physiological Society, UK 2020
- Member of American Physiological Society, USA, 2020
- Member of advisory board of NASI Local Chapter, Kolkata, 2019.
- Member of National Academy of Sciences, India, Allahabad.
- Executive Member of Society of Free radical Research (I).
- University Nominated Member of AYUSH council, Government of West Bengal.
- Member Secretary of the departmental Animal Ethics committee of CPCSEA, New Delhi,
- Group Leader for harmonization of standards by “Food Safety and Standard Authority of India (FSSAI)”, Government of India.
- Editorial Board Member of American J of Experimental Biology, Columbia International Press
- Invited Honorary Affiliate Member of Royal Society of Chemistry, London
- Administration: Serving as Head of the Department, Coordinator of Special Paper, Ethics Committee Chairman. Chairman of PG Board of Studies,
- Expert member of different Selection Committee.

### **Professional Responsibilities and Administrative Experiences:**

A Reviewer for at least 20 peer reviewed journal ( ~90 articles reviewed)

B Selection committee member of Service Commission and Universities.

C Member of PG Board of Studies, Department of Physiology, University of Calcutta.

D Member of Board of Studies, Department of Microbiology, RK Mission Vidyamandir, Belur Math, Howrah.

E Member of Board of Studies, Department of Sports Sciences, RKMVERI, (University) Belur Math, Howrah.

F Performed as Vice Chancellor’s nominee of University of Calcutta to review the selection process of Promotion in service, 2012.

G Acted as Chairman, PG Board of Studies, University of Calcutta. December 2013 onwards.

H Acted as Chairman of Institutional Animal Ethics Committee. December 2013 onwards.

I Acted as Chairman of Human Ethics Committee of The Department. December 2013 onwards.

J Acted as Research Advisory Committee of The Centre for Research of Nanoscience and nanotechnology (CRNN), University of Calcutta; February, 2009 onwards. Since 2010.

K Acted as member of Institutional Animal Ethics Committee of The Department.

L Acted as the board of jury in the Paschim Banga Bagla Vigyan Congress, Held at Narendrapur Ramkrishna Mission,

M Member of the syllabus Committee and subject expert of the Public Service Commission, West Bengal for WBCS examination. 2012.

N Acted as Organizing Committee member as Treasurer of The COG-RIHAB, an international Conference on Cognitive Neuroscience and Rehabilitation, organized by the CPEPA, a centre funded by UGC to University of Calcutta. 2013.

O Selected as Vice Chancellors Nominee, UG Board of Studies, University of Kalyani, Nadia, since 2011

**P Organizing Secretary of the Tripartite International Conference on Neurodegenerative Disorders: Current and Future Perspective, 2017; organized by CPEPA, University of Calcutta, Institute of Neurosciences, Kolkata, and Institute of Neurosciences, New Castle University, UK.**

### **Recent Awards earned by Students**

<b>Name of the Student/Name of the Team</b>	<b>Name of the Award</b>	<b>Name of International Institution/Organisation from where the award</b>	<b>Address of the Institution/Organization giving award *</b>
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		<b>has been received *</b>	
UJJAL DAS	Outstanding Paper Award	26 <sup>th</sup> West Bengal state Science & Technology Congress	Department of Higher Education, Science and Technology and Biotechnology, Government of West Bengal BikashBhavan (4th Floor), Salt Lake, Kolkata 700091
UJJAL DAS	Best Poster Award	26 <sup>th</sup> West Bengal state Science & Technology Congress	Department of Higher Education, Science and Technology and Biotechnology, Government of West Bengal BikashBhavan (4th Floor), Salt Lake, Kolkata 700091
SASWATA CHAKRABORTY (MSC student); UJJAL DAS	GYAN Scholarship Winner	SGRF NGBT, Conference	<b>SciGenom Research Foundation, Taj Mumbai.</b>
UJJAL DAS	Vidyasagar University Research Memorial Young Scientist Award	XXXth annual international conference of the Physiological Society of India (PSI)	92, Acharya Prafulla Chandra Road, Rajabazar, Machuabazar, Kolkata, West Bengal 700009
UJJAL DAS	Best Oral Presentation	XXXth annual international conference of the Physiological Society of India (PSI)	92, Acharya Prafulla Chandra Road, Rajabazar, Machuabazar, Kolkata, West Bengal 700009
UJJAL DAS	Best Poster Award	Cancer Biology-Still a challenge in 21st century and SINP school on epigenetics	SINP. Sector 1, AF Block, Bidhan Nagar, Bidhannagar, Kolkata, West Bengal 700064
UJJAL DAS	Best Poster Award	Advances on Neuroscience Research & Management	Bose Institute
SUSHOBHAN BISWAS	IAN 2018: Ravindra and Lalita Nath Travel Fellowship Award	Indian Academy of Neuroscience (IAN) XXXVI Annual Conference of Indian Academy of Neurosciences	Organizing Secretary: Prof. S. Prasad Indian Academy of Neurosciences 2018 Conference at Banaras Hindu University
SUSHOBHAN BISWAS	Physicon2018: Best Poster Award (3 <sup>rd</sup> )	PHYSICON 2018	Dibyendu Ray Organizing Secretary Organizing Committee, PHYSICON 2018
TUHIN	2 <sup>nd</sup> Best oral	Federation of Indian	ESIC Medical College &

BHATTACHARYA	presentation at 8 <sup>th</sup> FIPS CONGRESS 2019	Physiological Societies (FIPS)	Hospital, Faridabad.
AKASH ROY	Indian Academy of Neurology Best Research Poster Award, 2018	Indian Academy of Neurology	Research & Development Centre, Dayanand Medical College & Hospital, Civil Lines, Ludhiana-141001, Punjab, India.
AKASH ROY	MDS International Congress Travel Grant Award, 2018	International Parkinson and Movement Disorder Society	International Parkinson and Movement Disorder Society 555 E. Wells Street, Suite 1100, Milwaukee, WI 53202-3823 USA
MADHURIMA ROY	Nutrition Society of India Best Oral presentation award	Nutrition Society of India	National Institute of Nutrition, ICMR, Hyderabad
SAMRAT SAHA	Second in Best Poster	Physiological Society of India	92, A.P.C Road, kol-9, Dept. of Physiology, University of Calcutta
INDRANEEL CHATTERJEE	Best poster (5 <sup>th</sup> place)	Physiological Society of India	92, A.P.C Road, kol-9, Dept. of Physiology, University of Calcutta
Ujjal Das	Overall best Poster Award – Selected as Second best in oral 2017	Society of Free Radical Research	BARC Mumbai,
Aaveri Sengupta	Best Poster Award for Travel Grant at SFRR 2017	Society of Free Radical Research	BARC, Mumbai