

## COMPLETE BIO DATA OF THE APPLICANT

### NAME

**DR. CHINMOY SANKAR DEY**

### CURRENT POSITION

Professor  
School Of Biological Sciences,  
Indian Institute of Technology, Delhi,

### POSTAL ADDRESS

School Of Biological Sciences,  
Indian Institute of Technology, Delhi,  
Hauz Khas, New Delhi 110016.  
website: [www.csdey.org](http://www.csdey.org)

### email

[csdey@bioschool.iitd.ac.in](mailto:csdey@bioschool.iitd.ac.in)

### PHONE

Office number : 011-26597523  
Cell number: 9560279888

### EDUCATION

**Ph.D.** (Science) 1990\*, Jadavpur University,  
India, (\*Thesis submitted in 1988)

### RESEARCH AND TEACHING EXPERIENCE

**Indian Institute of Chemical Biology, Calcutta, India** 1984 -1988  
**Ph.D. Fellow**

**California Institute of Technology, California, USA** 1988 - 1991  
**Postdoctoral Research Fellow**

**Baylor College of Medicine, Texas, USA** 1991 - 1992  
**Postdoctoral Research Associate**

**National Institute of Immunology, New Delhi, India** 1992 - 1994  
**Pool Officer**

**National Institute of Pharmaceutical Education and Research, Punjab, India** 1994 – 1999  
**Assistant Professor**

|   |                |
|---|----------------|
| <b>National Institute of Pharmaceutical Education and Research, Punjab, India</b><br><b>Associate Professor</b>               | 1999 - 2002    |
| <b>National Institute of Pharmaceutical Education and Research, Punjab, India</b><br><b>Professor</b>                         | 2002 - 2010    |
| <b>National Institute of Pharmaceutical Education and Research, Punjab, India</b><br><b>Head, Department of Biotechnology</b> | 2004 - 2010    |
| <b>Indian Institute of Technology-Delhi, New Delhi</b><br><b>Professor</b>  | 2010-till date |

### **RESEARCH INTERESTS**

- **Insulin resistant (Type 2) diabetes : *Molecular mechanism(s)/ target(s) identification, Signal transduction.***
- **Alzheimer disease and Type 3 diabetes**
- **Drug resistance in Leishmania: *Molecular mechanism(s) /target(s) identification. (drug interactions, apoptosis, proteomics)***
- **Leishmanial motility.**

### **AWARDS, HONORS AND RECOGNITIONS:**

- 1. SHANTI SWARUP BHATNAGAR AWARD in Medical Science, 2003** from Council of Scientific and Industrial Research, Govt. of India, New Delhi by the Prime Minister of India Dr. Manmohan Singh.
- 2. NATIONAL BIOSCIENCE AWARD 2003** from the Department of Biotechnology, Ministry of Science and Technology, Govt. of India, New Delhi by Dr. R.Chidambaram, Scientific Adviser, Prime Minister of India.
- 3. Organization of Pharmaceutical Producers of Indai-2005 scientist award in “Pharmaceutical Biotechnology”** by Hon'ble Minister, Mr. Kapil Sibal.
- 4. CDRI Award in “Excellence in Drug Research in Life Sciences, 2008”** from Central Drug Research Institute, Lucknow.

**5. Fellow of the National Academy, (FNA), Indian National Science Academy (INSA), New Delhi., 2007 by Dr. R. Mashelkar, President, INSA and DG, CSIR.**

**6. Fellow of the National Academy of Sciences (FNASc), India, 2007.**

**7. J.C.Bose Fellowship** from the Department of Science and Technology, Govt. of India; 2008

**8. Lecture Award and Visiting Scientist,** Diabetes Research Foundation, Madras.

**9. Adjunct Faculty,** Institute of Life Sciences, Hyderabad.

**10. Citation of paper Neuropharmacology** 2011, 60:910. (Impact factor: 5.273) by **Dr. James Watson (Nobel Laureate)** in his lecture on "60 years of discovery of DNA structure" at University of California, Los Angeles, during March, 2013 followed by publication in *The Lancet*, 2014, 383: 841.

**11. Cover page:** Trends in Endocrinology and Metabolism, 32, 341, 2021. (**Impact factor: 10.0**)

**12. Press Release in Nature: News India**

**14. Hottest 25 Papers: Science Direct: Molecular and Biochemical Parasitology, 141, 1, 2005**

**15. Cover Page: Molecular and Biochemical Parasitology, 141, 1, 2005**

**16. BMC Cell Biology, 2008, 9: 48: Downloaded 1408 pdf reprints within 3 months of publication**

**A COMPLETE LIST OF PUBLICATIONS: Citations: 2685; h-index:27 (on 04.07.23)**

1.Yadav Y, Sharma M and **Dey CS**: PP1 $\gamma$  regulates neuronal insulin signaling and aggravates insulin resistance leading to AD-like phenotypes. **Cell Commun. Signal.** 2023, 21, 82. IF: 7.525

2.Yadav Y and **Dey CS**: PP2C $\alpha$  aggravates neuronal insulin resistance leading to AD-like phenotype *in vitro*. **Biochem. Biophys. Res. Commun.** 2023, 644, 49. IF: 3.322

3. Mallick A, Sharma M and **Dey CS**: Emerging roles of PHLPP phosphatases in the nervous system. **Mol Cell Neurosci.** 2022, 123, 103789. IF: 4.626

4. Sharma M and **Dey CS**: PHLPP isoforms differentially regulate Akt isoforms and AS160 affecting neuronal insulin signaling and insulin resistance via Scribble. **Cell Commun. Signal.** 2022, 20, 179. IF: 7.525

5. Reddy I, Yadav Y and **Dey CS**: Cellular and Molecular Regulation of Exercise-A Neuronal Perspective. **Cell Mol Neurobiol.** 2022, 43:1551. IF: 4.23
6. Mallick A and **Dey CS**: Diabetes and Alzheimer's Disease: Association or Cause. **Curr. Sci.** 2022, In Press. IF: 1.169.
7. Yadav Y and **Dey CS**: PP2C $\alpha$  positively regulates neuronal insulin signaling and aggravates neuronal insulin resistance being translated by insulin. **FEBS J.** 2022, 289:7561. IF: 5.622
8. Yadav Y and **Dey CS**: Ser/Thr phosphatases: One of the key regulators of insulin signaling. **Rev. Endocr. Metab. Disord.** 2022, 23:905. IF: 9.304
9. Manglani K and **Dey CS**: CDK5 inhibition improves glucose uptake in insulin-resistant neuronal cells via ERK1/2 pathway. **Cell. Biol. Int.** 2021, 46, 488. IF: 4.473
10. Sharma M and **Dey CS**: Role of Akt isoforms in neuronal insulin signaling and -resistance. **Cell. Mol. Life Sci.** 2021, 78, 7873. IF: 9.207
11. Sharma M and **Dey CS**: AKT isoforms-AS160-GLUT4: The defining axis of insulin resistance. **Rev. Endocr. Metab. Disord.** 2021, 22, 973. IF: 9.304
12. Mishra D and **Dey CS**: PKC $\alpha$ : Prospects in Regulating Insulin Resistance and AD. **Trends Endocrinol. Metab.** 2021, 32, 341. IF: 10.586
13. Mishra D and **Dey CS** : Type-2 Diabetes, a Co-morbidity in Covid-19: Does Insulin Signaling Matter? **Biochem. Soc. Trans.** 2021, 49, 987. IF: 4.919
14. Manglani K and **Dey CS**: Tankyrase inhibition augments neuronal insulin sensitivity and glucose uptake via AMPK-AS160 mediated pathway. **Neurochem. Int.** 2020, 141, 104854. IF: 4.297
15. Mishra D and **Dey CS**: Protein Kinase C attenuates insulin signalling cascade in insulin-sensitive and insulin-resistant Neuro2-a cells. **J. Mol. Neurosc.** 2019, 69, 470. IF: 3.0
16. Mukhopadhyay, A. G., & **Dey C. S.** Effect of inhibition of axonemal dynein ATPases on the regulation of flagellar and ciliary waveforms in Leishmania parasites. **Mol. Biochem. Parasitol** 2018, 225, 27-37. IF: 1.845
17. Varshney P and **Dey CS**: Resveratrol regulates neuronal glucose uptake and insulin sensitivity via P21-activated kinase 2 (PAK2). **Biochem. Biophys. Res. Comm.** 2017, 485, 372. IF: 3.322
18. Reddy GS, Mukhopadhyay AG, **Dey CS**: The p38 MAP kinase inhibitor, PD 169316, inhibits flagellar motility in Leishmania donovani. **Biochem. Biophys. Res. Comm.** 2017, 493, 1425. IF: 3.322
19. Mukhopadhyay AG and **Dey CS**: Role of calmodulin and calcineurin in regulating flagellar motility and wave polarity in Leishmania. **Parasitol. Res.** 2017, 116, 3221. IF: 2.383

- 20.Reddy GS, Mukhopadhyay AG and **Dey CS**: Characterization of ciliobrevin A mediated dynein ATPase inhibition on flagellar motility of *Leishmania donovani*. **Mol Biochem. Parasitol.** 2017, 214, 75. IF:1.845
- 21.Choudhary AK and **Dey CS**: Nuclear corepressor (NCoR) is required to maintain insulin sensitivity in C<sub>2</sub>C<sub>12</sub> myotubes. **Cell Biol. Int.** 2016, 9999, 1-9. IF:4.473
- 22.Mukhopadhyay AG and **Dey CS**: Reactivation of flagellar motility in demembranated *Leishmania* reveals role of cAMP in flagellar wave reversal to ciliary waveform. **Sci. Rep.** 2016, 6:37308. IF:4.996
- 23.Arora A and **Dey CS**: SIRT2 regulates insulin sensitivity in insulin-resistant neuronal cells. **Biochem. Biophys. Res. Comm.** 2016, 474, 747-752. IF: 3.322
- 24.Varshney P and **Dey CS**: P21-activated kinase 2 (PAK2) regulates glucose uptake and insulin sensitivity in neuronal cells. **Mol. Cell. Endocrinol.** 2016, 429, 50-61. IF: 4.4
- 25.Mukhopadhyay AG and **Dey CS**: Two-headed outer- and inner-arm dyneins of *Leishmania sp* bear conserved IQ-like motifs. **Biochem Biophys Rep.** 2015, 4, 283-290. IF:0.52
- 26.Gupta A and **Dey CS**: PTEN, a widely known negative regulator of insulin/PI3K signaling, positively regulates neuronal insulin resistance. **Mol. Biol. Cell** 2012 23(19):3882-98. IF: 3.612
- 27.Gupta A, Bisht B, **Dey CS**: Focal adhesion kinase negatively regulates neuronal insulin resistance. **Biochim Biophys Acta.-Molecular Basis of Disease.**2012:1822:1030. IF: 6.633
- 28.Patel MI, Gupta A, **Dey CS**: Potentiation of neuronal insulin signaling and glucose uptake by Resveratrol: an involvement of AMPK. **Pharm. Rep.** 2011:63:1162. IF: 3.919
- 29.Shah AK, Gupta A and **Dey CS**: AICAR induced AMPK activation potentiates neuronal insulin signaling and glucose uptake. **Arch. Biochem. Biophys.** 2011, 509: 142. IF: 3.01
- 30.Gupta, A; Bisht, B and **Dey CS**: Peripheral insulin-sensitizer drug Metformin ameliorates neuronal insulin resistance and Alzheimer's-like changes **Neuropharmacology** 2011, 60:910. IF: 5.273
- 31.Kaur A, Singh R, **Dey CS**, Sharma, SS, Bhutani, KK, Singh, IP: Antileishmanial phenyl propanoids from *Alpinia galangal* (Linn.) Willd. **Ind. J. Exp. Biol.** 2010, 48:314. IF:0.944
- 32.Sharma S, Singh GM, Chavan HD and **Dey CS**: Proteomic analysis of wild type and arsenite resistant *Leishmania donovani*. **Exptl. Parasitol.** 2009, 123: 369. IF:2.132
- 33.Gupta A and **Dey CS**: PTEN and SHIP2 regulates PI3K/ Akt pathway through Focal adhesion kinase. **Mol. Cell. Endocrinol.** 2009, 309:55. IF: 4.4
- 34.Singh GM, Thakur M, Chakraborti PK and **Dey CS**: Evidence for the presence of R250G mutation at the ATPase domain of Topoisomerase II in an arsenite-resistant *L. donovani* that exhibits differential drug inhibition profile. **Int. J. Antimicrob. Agents** 2009, 33: 80. IF: 15.441

35. Bisht B and Dey CS: Focal Adhesion Kinase contributes to insulin-induced actin reorganization into a mesh harboring Glucose transporter-4 in insulin resistant skeletal muscle cells. **BMC Cell Biology** 2008, 9: 48. IF: 3.15
36. Bisht B, Srinivasan K and Dey CS. *In vivo* inhibition of Focal Adhesion Kinase causes insulin resistance. **J. Physiology**, 2008, 586/16: 3825. IF: 6.228
37. Singh GM , Chavan HD and Dey CS: Proteomic analysis of miltefosine resistant *Leishmania* reveals the possible involvement of eukaryotic initiation factor 4A, eIF4A. **Int. J. Antimicrob. Agents** 2008, 31: 581. IF:15.441
38. Badiwala, HS, Singh G, Singh, R, Dey CS, Sharma, SS, Bhutani, KK and Singh IP: Antileishmanial amides and lignans from *Piper cubeba* and *Piper retrofractum*. **J. Nat. Med.** 2007, 61: 418. IF:4.803
39. Singh, G, and Dey CS. Induction of apoptosis-like cell death by pentamidine and doxorubicin through differential inhibition of topoisomerase II in arsenite-resistant *L. donovani*. **Acta Tropica**, 2007, 103: 172. IF:3.222
40. Chavan, HD, Singh, G and Dey CS. Confocal microscopic investigation of tubulin distribution and effect of paclitaxel on post-translationally modified tubulins in sodium arsenite resistant *Leishmania donovani*. **Exptl. Parasitol.** 2007, 116 ; 320. IF:2.132
41. Bisht, B, Goel, HL and Dey, CS. Focal Adhesion Kinase regulates insulin resistance in skeletal muscle. **Diabetologia**, 2007, 50:1058. IF: 10.46
42. Verma, NK, Singh, G and Dey, CS. Miltefosine induces apoptosis in arsenite-resistant *Leishmania donovani* promastigotes through mitochondrial dysfunction. **Exptl. Parasitol.**, 2006, 116: 1. IF: 2.132
43. Singh, J, Verma, NK, Kansagra Sejal M, Kate, B and Dey, CS. Altered PPAR $\gamma$  expression inhibits myogenic differentiation in C2C12 skeletal muscle cells. **Mol. Cell. Biochem.** 2007, 294: 163. IF:3.842
44. Panchagnula, R, Bindra, P, Pillai, O, Kumar, N and Dey, CS. Stability of insulin under iontophoretic conditions. **Pharmazie** 2006, 61: 1014. IF:1.515
45. Verma, NK and Dey, CS. Anti-leishmanial drug miltefosine causes insulin resistance in skeletal muscle cells *in vitro*. **Diabetologia**, 2006, 49:1656. IF: 10.46
46. Jayanarayan, KG and Dey, CS. Altered tubulin dynamics, localization and post-translational modifications in sodium arsenite resistant *Leishmania donovani* in response to paclitaxel, trifluralin treatment and a combination of both and induction of apoptosis-like cell death. **Parasitology**, 2005, 131: 215. IF:3.243
47. Khurana, A and Dey, CS. Involvement of c-jun n-terminal kinase activities in skeletal muscle differentiation. **J. Muscle Res. Cell Motil.**, 2004, 25: 645. IF:3.352

- 48.Singh, G, Jayanarayan, KG and **Dey, CS**. Novobiocin induces apoptosis-like cell death in topoisomerase II over-expressing arsenite resistant *Leishmania donovani*. **Mol. Biochem. Parasitol.**, 2005, 141: 57. IF: 2.95
- 49.Verma, NK, Singh, J and **Dey, CS**. PPAR- $\gamma$  expression modulates insulin sensitivity in C2C12 skeletal muscle cells. **Brit. J. Pharmacol.**, 2004, 143: 1006. IF: 9.473
- 50.Verma, NK and **Dey, CS**. Possible mechanism of miltefosine mediated death of *Leishmania donovani*. **Antimicrob. Agents Chemother.**, 2004, 48: 3010. IF: 5.938
- 51.Jayanarayan, KG and **Dey, CS**. Altered expression, polymerization and cellular distribution of  $\alpha/\beta$ -tubulins and apoptotic-like cell death in arsenite resistant *Leishmania donovani* promastigotes. **Int. J. Parasitol.**, 2004, 34: 915. IF: 4.33
- 52.Miranda, ER and **Dey, CS**. Effect of chromium and zinc on insulin signaling in skeletal muscle. **Biol. Trace Elemt. Res.**, 2004, 101,19. IF:4.081
- 53.Kumar, N, Kaul, CL. Ishrath, A and **Dey, CS**. Combination of metformin and thiazolidindiones restore insulin signalling in insulin-resistant cultured myotubes. **Life Sci.**, 2004, 74: 1877. IF: 2.58
- 54.Kumar, N and **Dey, CS**. Restoration of impaired p38 activation by insulin in insulin resistant skeletal muscle cells treated with thiazolidinediones. **Mol. Cell. Biochem.**, 2004, 260: 55. IF:3.842
- 55.Pillai, O, Kumar, N, **Dey, CS**, Sivaprasad, SN and Panchagnula, R. Transdermal iontophoresis of insulin: III. Influence of electronic parameters. **Meth. Find. Exptl. Clin. Pharmacol.**, 2004, 26: 399.
- 56.Verma NK and **Dey, CS** : RNAi-mediated gene silencing: mechanisms and its therapeutic applications. **J. Clin. Pharm. Therap.**, 2004, 29: 395. IF: 2.145
- 57.Pillai, O, Kumar, N, **Dey, CS**, Borkute, S, Nagalingam, S & Panchagnula, R: Transdermal iontophoresis of insulin. Part 1: A Study on the issues associated with the use of platinum electrodes on rat skin. **J. Pharm. Pharmacol.**, 2003, 55: 1505. IF: 4.81
- 58.Kumar, N and **Dey, CS**. Development of insulin resistance and reversal by thiazolidinediones in C2C12 skeletal muscle cells. **Biochem. Pharmacol.**, 2003, 65: 249. IF: 6.1
- 59.Khurana, AK and **Dey, CS**. p38 MAPK interacts with actin and modulates filament assembly during skeletal muscle differentiation. **Differentiation**, 2003, 71: 42. IF: 3.533
- 60.Jayanarayan KG and **Dey, CS**. Overexpression and increased DNA topoisomerase like enzyme activity in arsenite resistant *Leishmania donovani*. **Microbiol. Res.**, 2003, 158: 55.
- 61.Gargi, A, Kumar, N and **Dey, CS**. Differential regulation of MAP kinase isoforms by H<sub>2</sub>O<sub>2</sub> in neuronal cells. **Neuro. Res. Comm.**, 2003, 33: 17.
- 62.Verma, MVS, Ashokrai, Y, **Dey, CS** and Panchagnula, R: P-glycoprotein inhibitors and

their screening: a perspective from bioavailability enhancement. **Pharm. Res.**, 2003, 48: 347. IF: 4.0

63.Kumar, N and **Dey, CS**. Metformin enhances insulin signaling in insulin –dependent and –independent pathways in insulin resistant muscle cells. **Brit. J. Pharmacol.**, 2002, 137: 329. IF: 9.473

64.Kumar, N and **Dey, CS**. Gliclazide increases IR tyrosine phosphorylation but not p38 activation in insulin-resistant myotubes. **J. Exptl. Biol.**, 2002, 205: 3739. IF: 3.308

65.Goel, HL and **Dey, CS**. Insulin stimulates spreading of skeletal muscle cells involving the activation of focal adhesion kinase, phosphatidyl inositol 3-kinase and extracellular signal regulated kinase. **J. Cell. Physiol.**, 2002, 193: 187. IF: 6.228

66.Goel, HL and **Dey, CS**. Role of protein kinase C during insulin mediated skeletal muscle cell spreading. **J. Muscle Res. Cell Motil.**, 2002, 23: 269. IF:3.352, IF:3.842

67.Goel, HL and **Dey, CS**. PKC regulated myogenesis is associated with activation of FAK, Cas, paxillin and formation of Cas-Crk complex leading to JNK activation. **Differentiation**, 2002, 70: 257. IF: 3.533

68.Goel, HL and **Dey, CS**. Focal adhesion kinase tyrosine phosphorylation is associated with myogenesis and modulated by insulin. **Cell Prolif.**, 2002, 35: 13. IF: 2.42

69.Khurana, AK and **Dey, CS**. Involvement of Elk-1 transcription factor in L6E9 skeletal muscle differentiation. **FEBS Lett.**, 2002, 527:119. IF: 5.622

70.Khurana, AK and **Dey, CS**. Subtype specific roles of mitogen activated protein kinases in L6E9 rat skeletal muscle cell differentiation. **Mol. Cell. Biochem.**, 2002, 238: 27. IF:3.842

71.Ishrath, A, Kumar, N and **Dey, CS**. Differential activation of ERK and JNK by arsenite in mouse muscle cells. **Comp. Biochem. Physiol.**, 2002, 132: 375. IF: 4.52

72.Jayanarayan, KG and **Dey, CS** : Resistance to arsenite modulates expression of  $\beta$ - and  $\gamma$ -tubulin and sensitivity to paclitaxel during differentiation of *Leishmania donovani*. **Parasitol. Res.**, 2002, 88: 754. IF: 2.383

73.Goel, HL and **Dey, CS**. Insulin mediated tyrosine phosphorylation of myosin heavy chain and concomitant enhanced association of C- terminal src kinase during skeletal muscle differentiation. **Cell Biol. Int.**, 2002, 26: 557. IF:4.473

74.Nemmani, KVS, Jena, GB, **Dey, CS**, Kaul, CL and RamaRao, P. Cell proliferation and natural killer cell activity by polyherbal formulation, Immu-21 in mice. **Ind. J. Exptl. Biol.**, 2002, 40: 282.

75.Jayanarayan, KG and **Dey, CS**. Microtubules: Dynamics, drug interaction and drug resistance in *Leishmania*. **J. Clin. Pharm. Therap.**, 2002, 27: 313. IF:2.145

76.Singh DD, **Dey CS** and Bhutani, KK. Down regulation of p34cdc2 by an aqueous fraction of *Withania somnifera*. **Phytomed.**, 2001, 8: 492. IF: 2.33



- 77.Kaur, J and **Dey, CS**. Putative P-glycoprotein expression in arsenite resistant *Leishmania donovani* down-regulated by verapamil. **Biochem. Biophys. Res. Commun.**, 2000, 271: 615. IF: 3.322
- 78.Prasad, V, Kumar, SS and **Dey, CS**. Resistance to arsenite modulates levels of  $\alpha$ -tubulin and sensitivity to Paclitaxel in *Leishmania donovani*. **Parasitol. Res.**, 2000, 86, 838. IF:2.383
- 79.Prasad, V and **Dey, CS**. Tubulin is hyperphosphorylated on serine and tyrosine residues in arsenite resistant *Leishmania donovani*. **Parasitol. Res.**, 2000, 86: 876. IF:2.383
- 80.Prasad, V, Kaur, J and **Dey, CS**. Arsenite resistant *Leishmania donovani* promastigotes express an enhanced membrane P-type ATPase activity sensitive to verapamil treatment. **Parasitol. Res.**, 2000, 86: 661. IF:2.383
- 81.Panchagnula, R and **Dey, CS**: Monoclonal antibodies in drug targeting. **J. Clin. Pharm. Therap.**, 1997, 22: 7. IF: 2.145
- 82.Gopalakrishnan, A, **Dey, CS**, Totey, SM, Pawshe, CH, Salunke,D, and Shaha, C. A testicular protein important for fertility has glutathione-S-transferase activity and is localised extracellularly in the seminiferous tubule. **J. Biol. Chem.**, 1995, 270: 15675. IF:5.52
- 83.**Dey, CS**, Deitiker, PR and Epstein, HF. Assembly-dependent phosphorylation of myosin and paramyosin of native thick filaments in *Caenorhabditis elegans*. **Biochem. Biophys. Res. Commun.**, 1992, 186: 1528. IF: 3.322
84. **Dey, CS**, and Brokaw, CJ. Activation of Ciona sperm motility: Phosphorylation of dynein polypeptides and effects of inhibition of tyrosine kinase activity. **J. Cell Sci.**, 1991, 100: 815. IF: 6.24
85. Haldar, S, **Dey, CS**, and Majumder, GC. A ficoll gradient method for isolation of immature spermatozoa of high purity and intactness from goat caput epididymis. **Arch. Androl.**, 1990, 24: 125.
86. **Dey, CS**, and Majumder, GC. Maturation specific type II cAMP-dependent protein kinase in goat sperm plasma membrane. **Biochem. Int.**, 1990, 21: 656.
87. **Dey, CS**, and Majumder, GC. Type I and Type II cAMP-dependent protein kinase in goat epididymal spermatozoa and their enriched activities in forward motile spermatozoa. **Biochem. Cell Biol.** 1990, 68: 459. IF: 2.47
88. Majumder, GC, **Dey, CS**, Haldar, S and Barua, M : Biochemical parameters of initiation and regulation of sperm motility. **Arch. Androl.**, 1990, 24: 287.
89. **Dey, CS**, and Majumder, GC. A simple quantitative method of estimation of cell intactness based on ethidium bromide fluorescence. **Biochem. Int.**, 1988, 17: 2, 367.
90. Majumder, GC, Haldar, S, **Dey, CS**, Barua, M and N. Roy. Occurrence of several ecto-proteins on goat spermatozoal surface that may regulate flagellar motility. **Ind. J. Biochem. Biophys.**, 1988, 25: 215. IF:1.476

91. **Dey, CS**, and Majumder, GC. Phosphatidyl inositol inhibition of a sperm cyclic AMP-independent protein kinase. **Biochem. Biophys. Res. Commun.**, 1987, 146: 422. IF: 3.322
92. **Dey, CS**, and Majumder, GC. Ecto-cyclic AMP receptor in goat epididymal spermatozoa and its change in activity during forward motility. **J. Cell. Biochem.**, 1987, 35: 259. IF: 3.54
93. Haldar, S, **Dey, CS**, and Majumder, GC. An ecto-cyclic AMP-independent protein kinase on goat spermatozoa and its change of activity during forward motility. **Biochem. Int.**, 1986, 13: 809.

#### **Patents:**

- 1) Kumar, N and **Dey, CS**. Skeletal cell model to screen anti-diabetic compounds. Accepted for grant of patent issue by the **USPTO (2006)** App. No. 09/984018(US), **Patent No. 7052910 B2(US)/2006**.

#### **Book chapters:**

- 1) **C. S. Dey** and N. Kumar: Development of insulin resistance in cultured skeletal muscle cells and reversal by thiazolidinedione. **Non-alcoholic fatty liver disease (NAFLD)** 10th Annual Symposium, Ranbaxy Science Foundation. **2004**
- 2) G. Singh, K.G. Jayanarayan and **C. S. Dey**: Arsenite Resistance in Leishmania and Possible Drug Targets. Online at Eureka.com, December, 2006 and in the book “**Drug Targets in Kinetoplastid Parasites**” in the Advances in Experimental Medicine and Biology, Edt: Dr. H.K. Majumder, Landes Bioscience, Vol. 625, page 1, **2007**.
- 3) G.C. Majumder, S. Saha, K. Das, D. Nath, A. Maiti, S. Dey, D. Roy, C. S. Dey, S. Mitra, A. Rana, J. Chakrabarty, S. Das, A. Bhoomik, S. Banerjee, M. Mandal, B. S. Jaiswal, P. Ghosh, A. Das, D. Bhattacharyya and S. R. Dungdung: Role of Sperm Surface Molecules in Motility Regulation. **Mammalian Endocrinology and Male Reproductive Biology**, Chapter 8, Edt. S. K. Singh. CRC Press, 197-243. **2015**, ebook isbn: 978-1-4987-2736-5.
- 4) Kaul, CL and Dey, CS: Future drug discovery-new techniques, new targets. World Market Research Centre; Business Briefing : **Future Drug Discovery**, **2002**, 44.