

# Curriculum Vitae

## Dr. Sujit Kumar Bhutia (PhD)

Assistant Professor

### Contact Details:

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### Research Interest

Our group is focusing to understand the role of autophagy and autophagy dependent cell death in cancer for development of novel therapeutics. We are identifying the crucial factors governing the crosstalk between autophagy and apoptosis to describe the mechanisms controlling cell survival and death.

### Professional Experience

06<sup>th</sup> Aug 2008 -Till date: *Assistant Professor*  
Department of Life Science,  
National Institute of Technology Rourkela,  
Odisha, India

2008 – 2010: *Postdoctoral Fellow*  
Virginia Commonwealth University,  
USA

### Administrative Experience:

01<sup>st</sup> Jul 2014 -30<sup>th</sup> Jun 2017: *Head of the Department*  
Department of Life Science,  
National Institute of Technology Rourkela,  
Odisha, India

### Courses Taught at NIT Rourkela

#### *Theory courses*

1. Cancer biology (PhD and PG level)
2. Cell signaling (PhD level)
3. Cell Biology (PG level)
4. Enzyme and metabolism (PG level)
5. Genetics (PG level)
6. Cell and Molecular Biology (UG level)
7. Biology (UG level)

#### *Laboratory*

1. Cell Biology laboratory (PG level)
2. Cell and Molecular Biology laboratory (UG level)

**Education** (Graduation onwards & Professional Career)

2004-2008:	<b><i>Doctor in Philosophy</i></b> Cell biology and Cancer Indian Institute of Technology, Kharagpur
July 2001- May 2003:	<b><i>Masters in Science</i></b> Botany with Biochemistry specialization Department of Botany, Utkal University, Odisha
July 1998- May 2001	<b><i>Bachelors in Science</i></b> Botany Honours with Zoology and Chemistry Utkal University, Odisha

**Honors/Awards*****International:***

1. The best oral scientific presentation award in international conference on scientific frontiers in natural products based drugs (SFNPBD-2017), National University of Singapore
2. BD Biosciences winner for the research grant program 2013
3. Postdoctoral fellowship, Virginia Commonwealth University, USA, 2008-2010

***National:***

1. Odisha Bigyan Academy Young Scientist Award 2015
2. ICMR International Fellowship for Young Indian Biomedical Scientist 2015-16
3. National Doctoral Fellow-2005, All Indian Council of Technical Education, India
4. Junior Research Fellow-2004, Council for Scientific and Industrial Research, India
5. Qualified GATE- 2004 with 99.25 percentile

**Editor/Reviewer in International Journal*****Academic Editor-***

- PlosOne

***Reviewer***

- International Journal of Cancer
- International Journal of Radiation Oncology
- Biology
- Physics
- Oral Oncology
- Phytomedicine
- Cellular Oncology
- Tumor Biology
- Canadian J physiology and pharmacy
- Cell Proliferation

**Membership of Professional Bodies, Societies**

- American Association in cancer research
- Indian Association in cancer research
- Odisha Bigyan Academy
- Society of Biological chemists
- Indian Society of Cell Biology

**Sponsor Projects:**

1. Title: "Stonin-2 regulated Beclin-1 dependent autophagy and autophagic lysosome reformation."  
Funding Agency: SERB, DST, Govt of India  
Approved Cost: 45,72,200INR  
Duration: 29/03/2017 to 28/03/2020  
Role: Principal Invigilator  
No. of scientists involved: 1  
Current Status: On going
2. Title: "Protective autophagy by secretory clusterin associated with cell survival and chemoresistance in oral cancer."  
Funding Agency: BRNS, Govt of India  
Approved Cost: 3,33,8400 INR  
Duration: 33/03/2017 to 29/03/2020  
Role: Principal Invigilator  
No. of scientists involved: 1  
Current Status: On going
3. Title: "Autophagy induced by Cellular Stress switches to apoptosis"  
Funding Agency: DBT  
Approved Cost: 36,60,000 INR  
Duration: 07/01/2016 to 06/30/2018  
Role: Principal Invigilator  
No. of scientists involved: 1  
Current Status: On going
4. Title: "Molecular profiling of apoptotic pathway in cancer stem cells of oral squamous cell carcinoma and its modulating by plant lectins for potential cancer therapeutics"  
Funding Agency: DST, Odisha  
Approved Cost: 9,09,000 INR  
Duration: 04/01/2016 to 03/31/2019  
Role: Principal Invigilator  
No. of scientists involved: 1  
Current Status: On going
5. Title: "Deciphering role of cancer stem cells to therapy resistance in oral cancer"  
Funding Agency: SERB, DST  
Approved Cost: 41,10,000 INR  
Duration: 12/08/2013 to 11/08/2016  
Role: Principal Invigilator  
No. of scientists involved: 1  
Current Status: Completed
6. Title: "DNA damage-induced p73 mediated apoptosis with Abrus agglutinin in oral cancer"  
Funding Agency: CSIR  
Approved Cost: 35,60,000 INR  
Duration: 10/07/2013 to 10/06/2016

Role: Principal Invigilator

No. of scientists involved: 1

Current Status: Completed

7. Title: "Autophagic cell death with Abrus agglutinin"

Funding Agency:DBT

Approved Cost: 31,06,000 INR

Duration: 06/24/2011 to 06/23/2014

Role: Principal Invigilator

No. of scientists involved: 1

Current Status: Completed

**Publications: *Intentional*: 69**

69. Panda PK, Naik PP, Meher BR, Das DN, Mukhopadhyay S, Praharaj PP, Maiti TK, **Bhutia SK**. PUMA dependent mitophagy by Abrus agglutinin contributes to apoptosis through ceramide generation. *Biochim Biophys Acta*. (In press) **(IF-5.7)**

68. Naik PP, Mukhopadhyay S, Panda PK, Sinha N, Mishra R, Patil S, **Bhutia SK**,\*Autophagy regulates cisplatin induced stemness and chemoresistance via the upregulation of CD44, ABCB1 and ADAM17 in oral squamous cell carcinoma. *Cell Prolif*. 2017. **I.F.- 4.11**

67. Das DN, Naik PP, Mukhopadhyay S, Panda PK, Sinha N, Meher BR, **Bhutia SK**. Elimination of dysfunctional mitochondria through mitophagy suppresses Benzo[a]pyrene-induced apoptosis. *Free Radic Biol Med*. 2017. **I.F. - 5.60**

66. Das DN, Panda PK, Sinha N, Mukhopadhyay S, Naik PP, **Bhutia SK**. DNA damage by 2,3,7,8-tetrachlorodibenzo-p-dioxin-induced p53-mediated apoptosis through activation of cytochrome P450/aryl hydrocarbon receptor. *Environ Toxicol Pharmacol* 2017. **I.F. -2.31**

65. Sinha N, Panda PK, Naik PP, Das DN, Mukhopadhyay S, Maiti TK, Shanmugam MK,Chinnathambi A, Zayed ME, Alharbi SA, Sethi G, Agarwal R, **Bhutia SK**. Abrus agglutinin promotes irreparable DNA damage by triggering ROS generation followed by ATM-p73 mediated apoptosis in oral squamous cell carcinoma. *Mol Carcinog*. (In Press). **I.F.-4.88**

64.Sinha N, Panda PK, Naik PP, Maiti TK, **Bhutia SK**\*. Abrus agglutinin targets cancer stem-like cells by eliminating self-renewal capacity accompanied with apoptosis in oral squamous cell carcinoma. *Tumor Biology* (In Press) **I.F.-2.9**

63. Mukhopadhyay S, Schlaepfer IR, Bergman BC, Panda PK, Praharaj PP, Naik PP, Agarwal R, **Bhutia SK**\*. ATG14 facilitated lipophagy in cancer cells induce ER stress mediated mitoptosis through a ROS dependent pathway. *Free Radic Biol Med* (In press). **I.F.-5.8**

62. Das DN, Panda PK, Naik PP, Mukhopadhyay S, Sinha N, **Bhutia SK**\*. Phytotherapeutic approach: a new hope for polycyclic aromatic hydrocarbons induced cellular disorders, autophagic and apoptotic cell death. *Toxicol Mech Methods*. 2016 (In press) **I.F.-1.6**

61. Naik PP, Das DN, Panda PK, Mukhopadhyay S, Sinha N, Praharaj PP, Agarwal R, **Bhutia SK\***. Implications of cancer stem cells in developing therapeutic resistance in oral cancer. *Oral Oncol.* 2016;62:122-135. **I.F.-4.2**
60. Das DN, Naik PP, Nayak A, Panda PK, Mukhopadhyay S, Sinha N, **Bhutia SK\***. Bacopa monnieri-Induced Protective Autophagy Inhibits Benzo[a]pyrene-Mediated Apoptosis. *Phytother Res.* 2016;30(11):1794-1801. **I.F.-2.66**
59. Mukhopadhyay S, Naik PP, Panda PK, Sinha N, Das DN, **Bhutia SK\***. Serum starvation induces anti-apoptotic cIAP1 to promote mitophagy through ubiquitination. *Biochem Biophys Res Commun.* 2016;479(4):940-946. **I.F.-2.29**
58. Das DN, Sinha N, Naik PP, Panda PK, Mukhopadhyay S, Mallick SK, Sarangi I, **Bhutia SK\***. Mutagenic and genotoxic potential of native air borne particulate matter from industrial area of Rourkela city, Odisha, India. *Environ Toxicol Pharmacol* 2016;46:131-139. **I.F.-2.18**
57. Panda PK, Behera B, Nandini Das D, Mukhopadhyay S, Sinha N, Naik PP, Maiti TK, **Bhutia SK\***. Abrus agglutinin, a type II ribosome inactivating protein inhibits Akt/PH domain to induce endoplasmic reticulum stress mediated autophagy-dependent cell death. *Molecular Carcinogenesis* (In Press) **IF-4.88**
56. **Bhutia SK\***, Behera B, Nandini Das D, Mukhopadhyay S, Sinha N, Panda PK, Naik PP, Patra SK, Mandal M, Sarkar S, Menezes ME, Talukdar S, Maiti TK, Das SK, Sarkar D, Fisher PB. Abrus agglutinin is a potent anti-proliferative and anti-angiogenic agent in human breast cancer. *Int J Cancer.* 2016;139(2):457-66 **I.F-5.08**
55. Mukhopadhyay S, Sinha N, Das DN, Panda PK, Naik PP, **Bhutia SK**. Clinical relevance of autophagic therapy in cancer: Investigating the current trends, challenges, and future prospects. *Crit Rev Clin Lab Sci.* 2016;53(4):228-52. **IF-3.69**
54. Mukhopadhyay S, Panda PK, Das DN, Sinha N, Naik PP, Bissoyi A, Pramanik K, **Bhutia SK\***. Autophagy protein Ulk1 promote mitochondrial apoptosis through reactive oxygen species. *Free Radical Biology and Medicine* 2015;89:311-2. **I.F-5.7**
53. Pal I, Parida S, Prashanth Kumar BN, Banik P, Kumar Dey K, Chakraborty S, **Bhutia SK**, Mandal M. Blockade of autophagy enhances proapoptotic potential of BI-69A11, a novel Akt inhibitor, in colon carcinoma. *Eur J Pharmacol.* 2015;765:217-27. **I.F-2.53**
52. Deb M, Sengupta D, Rath SK, Kar S, Parbin S, Shilpi A, Pradhan N, **Bhutia SK**, Roy S, Patra SK. Clusterin gene is predominantly regulated by histone modifications in human colon cancer and ectopic expression of the nuclear isoform induces cell death. *Biochim Biophys Acta.* 2015;1852(8):1630-1645. **I.F-5.7**
51. Saswati, Chakraborty A, Dash SP, Panda AK, Acharyya R, Biswas A, Mukhopadhyay S, **Bhutia SK**, Crochet A, Patil YP, Nethaji M, Dinda R. Synthesis, X-ray structure and in vitro cytotoxicity studies of Cu(I/II) complexes of thiosemicarbazone: special emphasis on their interactions with DNA. *Dalton Trans.* 2015;44(13):6140-57. **I.F-4.19**

50. Panda PK, Mukhopadhyay S, Das DN, Sinha N, Naik PP, **Bhutia SK\***. Mechanism of autophagic regulation in carcinogenesis and cancer therapeutics. *Semin Cell Dev Biol.* 2015;39:43-55. **I.F-6.2**
49. Mohapatra S, Sahu S, Sinha N, **Bhutia SK**. Synthesis of a carbon-dot-based photoluminescent probe for selective and ultrasensitive detection of Hg(2+) in water and living cells. *Analyst* 2015;140(4):1221-8. **I.F-4.10**
48. Dash SP, Panda AK, Pasayat S, Majumder S, Biswas A, Kaminsky W, Mukhopadhyay S, **Bhutia SK**, Dinda R. Evaluation of the cell cytotoxicity and DNA/BSA binding and cleavage activity of some dioxidovanadium(V) complexes containing aroylhydrazones. *J Inorg Biochem* 2015;144:1-12. **I.F-3.44**
47. Panda PK, Mukhopadhyay S, Behera B, Bhol CS, Dey S, Das DN, Sinha N, Bissoyi A, Pramanik K, Maiti TK, **Bhutia SK\***. Antitumor effect of soybean lectin mediated through reactive oxygen species-dependent pathway. *Life Sci.* 2014;111:27-35. **I.F-2.2**
46. Dash SP, Panda AK, Pasayat S, Dinda R, Biswas A, Tiekink ER, Patil YP, Nethaji M, Kaminsky W, Mukhopadhyay S, Bhutia SK. Syntheses and structural investigation of some alkali metal ion-mediated LV(V)O<sub>2</sub>(-) (L(2-) = tridentate ONO ligands) species: DNA binding, photo-induced DNA cleavage and cytotoxic activities. *Dalton Trans.* 2014;43(26):10139-56 **I.F-4.19**
45. Mukhopadhyay S, Panda PK, Das DN, Sinha N, Behera B, Maiti TK, **Bhutia SK\***. Abrus agglutinin suppresses human hepatocellular carcinoma in vitro and in vivo by inducing caspase-mediated cell death. *Acta Pharmacol Sin.* 2014;35(6):814-24. **I.F-2.49**
44. Roy B, Pattanaik AK, Das J, **Bhutia SK**, Behera B, Singh P, Maiti TK. Role of PI3K/Akt/mTOR and MEK/ERK pathway in Concanavalin A induced autophagy in HeLa cells. *Chem Biol Interact.* 2014;210:96-102. **I.F-2.45**
43. Mukhopadhyay S, Panda PK, Sinha N, Das DN, **Bhutia SK\***. Autophagy and apoptosis: where do they meet? *Apoptosis.* 2014;19(4):555-66. **I.F-3.80**
42. Mukhopadhyay S, Panda PK, Behera B, Das CK, Hassan MK, Das DN, Sinha N, Bissoyi A, Pramanik K, Maiti TK, **Bhutia SK\***. In vitro and in vivo antitumor effects of Peanut agglutinin through induction of apoptotic and autophagic cell death. *Food Chem Toxicol.* 2014;64:369-77. **I.F-2.14**
41. Das DN, Panda PK, Mukhopadhyay S, Sinha N, Mallick B, Behera B, Maiti TK, **Bhutia SK\***. Prediction and validation of apoptosis through cytochrome P450 activation by benzo[a]pyrene. *Chem Biol Interact.* 2013;208C:8-17. **I.F-2.45**
40. Dash SP, Pasayat S, Bhakat S, Roy S, Dinda R, Tiekink ER, Mukhopadhyay S, **Bhutia SK**, Hardikar MR, Joshi BN, Patil YP, Nethaji M. Highly Stable Hexacoordinated Nonoxidovanadium(IV) Complexes of Sterically Constrained Ligands: Syntheses, Structure, and Study of Antiproliferative and Insulin Mimetic Activity. *Inorg Chem.* 2013;52(24):14096-107. **I.F-4.55**
39. Sinha N, Mukhopadhyay S, Das DN, Panda PK, **Bhutia SK\***. Relevance of cancer initiating/stem cells in carcinogenesis and therapy resistance in oral cancer. *Oral Oncol.* 2013;49(9):854-62. **I.F-3.6**

38. Azab B, Dash R, Das SK, **Bhutia SK**, Sarkar S, Shen XN, Quinn BA, Dent P, Dmitriev IP, Wang XY, Curiel DT, Pellecchia M, Reed JC, Sarkar D, Fisher PB. Enhanced prostate cancer gene transfer and therapy using a novel serotype chimera cancer terminator virus (Ad.5/3-CTV). *J Cell Physiol* 2014;229(1):34-43. **I.F-4.21**
37. **Bhutia SK**, Das SK, Azab B, Menezes M Dent P, Wang XY, Sarkar D, Fisher PB Targeting breast cancer stem/initiating cells with melanoma differentiation associated gene-7/Interleukin-24 (mda-7/IL-24). *Int. J cancer* 2013; 133(11):2726-36. **I.F-5.08**
36. Das SK, **Bhutia SK**, Azab B, Kegelmann TP, Peachy L, Santhekadur PK, Dasgupta S, Dash R, Dent P, Grant S, Emdad L, Pellecchia M, Sarkar D, Fisher PB. MDA-9/Syntenin and IGFBP-2 Promote Angiogenesis in Human Melanoma. *Cancer Res.* 2013;73:844-54. **I.F-7.8**
35. Venkatesan P, **Bhutia SK**, Singh AK, Das SK, Dash R, Chaudhury K, Sarkar D, Fisher PB, Mandal M. AEE788 potentiates celecoxib-induced growth inhibition and apoptosis in human colon cancer cells. *Life Sci.* 2012;91(15-16):789-99. **I.F-2.55**
34. Das SK, **Bhutia SK**, Sokhi UK, Azab B, Su ZZ, Boukerche H, Anwar T, Moen EL, Chatterjee D, Pellecchia M, Sarkar D, Fisher PB. Raf Kinase Inhibitor RKIP Inhibits MDA-9/Syntenin-Mediated Metastasis in Melanoma. *Cancer Res.* 2012 ;72:6217-26. **I.F-7.8**
33. Kar S, Deb M, Sengupta D, Shilpi A, **Bhutia SK**, Patra SK. Intricacies of hedgehog signaling pathways: A perspective in tumorigenesis. *Exp Cell Res.* 2012;318:1959-72. **I.F-3.55**
32. Maiti S, Mallick SK, **Bhutia SK**, Behera B, Mandal M, Maiti TK. Antitumor effect of culinary-medicinal oyster mushroom, *Pleurotus ostreatus* (Jacq.: Fr.) P. Kumm., derived protein fraction on tumor-bearing mice models. *Int J Med Mushrooms.* 2011;13(5):427-40. **I.F-0.63**
31. Das SK, **Bhutia SK**, Kegelmann TP, Peachy L, Oyesanya RA, Dasgupta S, Sokhi UK, Azab B, Dash R, Quinn BA, Kim K, Barral PM, Su ZZ, Boukerche H, Sarkar D, Fisher PB. MDA-9/syntenin: a positive gatekeeper of melanoma metastasis. *Front Biosci.* 2012; 17:1-15. **I.F-3.28**
30. Chen D, Yoo BK, Santhekadur PK, Gredler R, **Bhutia SK**, Das SK, Fuller C, Su ZZ, Fisher PB, Sarkar D. Insulin-like Growth Factor-Binding Protein-7 Functions as a Potential Tumor Suppressor in Hepatocellular Carcinoma. *Clin Cancer Res* 2011; 17:6693-701. **I.F-6.28**
29. Azab B, Dash R, Das SK, **Bhutia SK**, Shen XN, Quinn BA, Sarkar S, Wang XY, Hedvat M, Dmitriev IP, Curiel DT, Grant S, Dent P, Reed JC, Pellecchia M, Sarkar D, Fisher PB. Enhanced delivery of mda-7/IL-24 using a serotype chimeric adenovirus (Ad.5/3) in combination with the Apogossypol derivative BI-97C1 (Sabutoclax) improves therapeutic efficacy in low CAR colorectal cancer cells. *J Cell Physiol.* 2011; 227(5):2145-5. **I.F-4.28**
28. **Bhutia SK**, Das SK, Kegelmann TP, Azab B, Dash R, Su ZZ, Wang XY, Rizzi F, Bettuzzi S, Lee SG, Dent P, Grant S, Curiel DT, Sarkar D, Fisher PB. mda-7/IL-24 differentially regulates soluble and nuclear clusterin in prostate cancer. *J Cell Physiol.* 2011; 227(5):1805-13. **I.F-4.28**
27. **Bhutia SK**, Das SK, Azab B, Dash R, Su ZZ, Lee SG, Grant S, Yacoub A, Dent P, Curiel DT, Sarkar D, Fisher PB. melanoma differentiation associated gene-7/interleukin-24 (mda-7/IL-24)-induced autophagy switches to apoptosis in prostate cancer cells. *Autophagy* 2011;7:1076-7. **I.F-7.28**

26. **Bhutia SK**, Kegelman TK, Das SK, Azab B , Su ZZ, Lee SG, Sarkar D, Fisher PB. Astrocytes elevated gene-1 activate AMPK in response to cellular metabolic stress and associated with protective autophagy. *Autophagy* 2011;7:1076-7. **I.F:7.28**
25. Das SK, **Bhutia SK**, Sokhi UK, Dash R, Azab B, Sarkar D, Fisher PB. Human polynucleotide phosphorylase (hPNPase(old-35)): an evolutionary conserved gene with an expanding repertoire of RNA degradation functions. *Oncogene*. 2011 14;30(15):1733-43. **I.F:7.28**
24. Mallick SK, Maiti S, **Bhutia SK**, Maiti TK. Activation of RAW 264.7 cells by *Astraeus hygrometricus* derived Heteroglucan through MAP kinase pathway. *Cell Biol Int*. 2011 35:617-21. **I.F:1.28**
23. **Bhutia SK**, Kegelman TK, Das SK, Azab B , Su ZZ, Lee SG, Sarkar D, Fisher PB. Astrocyte elevated gene-1 induces protective autophagy. *Proc Natl Acad Sci U S A*. 2010; 107:22243-8. **I.F: 9.43**
22. Dash R, **Bhutia SK**, Azab B, Su ZZ, Quinn BA, Kegelman TP, Das SK, Kim K, Lee SG, Park MA, Yacoub A, Rahmani M, Emdad L, Dmitriev IP, Wang XY, Sarkar D, Grant S, Dent P, Curiel DT, Fisher PB. mda-7/IL-24: A unique member of the IL-10 gene family promoting cancer-targeted toxicity. *Cytokine Growth Factor Rev* 2010; 21(5):381-91. **I.F: 6.48**
21. Dent P, Yacoub A, Hamed HA, Park MA, Dash R, **Bhutia SK**, Sarkar D, Wang XY, Gupta P, Emdad L, Lebedeva IV, Sauane M, Su ZZ, Rahmani M, Broaddus WC, Young HF, Lesniak MS, Grant S, Curiel DT, Fisher PB. The development of MDA-7/IL-24 as a cancer therapeutic. *Pharmacol Ther*. 2010; 128:375-384. **I.F: 8.89**
20. Dent P, Yacoub A, Hamed HA, Park MA, Dash R, **Bhutia SK**, Sarkar D, Gupta P, Emdad L, Lebedeva IV, Sauane M, Su ZZ, Rahmani M, Broaddus WC, Young HF, Lesniak M, Grant S, Curiel DT, Fisher PB. MDA-7/IL-24 as a cancer therapeutic: from bench to bedside. *Anticancer Drugs*. 2010; 21:725-731. **I.F: 2.23**
19. Das SK, Sokhi UK, **Bhutia SK**, Azab B , Su ZZ, Sarkar D, Fisher PB. Human polynucleotide phosphorylase selectively and preferentially degrades microRNA-221 in human melanoma cells. *Proc Natl Acad Sci USA* 2010; 107:11948-11953. **I.F: 9.43**
18. Mallick SK, Maiti S, **Bhutia SK**, Maiti TK. Immunostimulatory properties of a polysaccharide isolated from *Astraeus hygrometricus*. *J Med Food* 2010;13:665-672. **I.F: 1.39**
17. Mallick SK, Maiti S, **Bhutia SK**, Maiti TK. Antitumor properties of a Heteroglucan isolated from *Astraeus hygrometricus* on Dalton's Lymphoma bearing mouse. *Food Chem Toxicol* 2010; 48; 2115–2121. **I.F: 2.14**
16. Dash R, Richards JE, Su ZZ, **Bhutia SK**, Azab B, Rahmani M, Dasmahapatra G, Yacoub A, Dent P, Dmitriev IP, Curiel DT, Grant S, Pellicchia M, Reed JC, Sarkar D, Fisher PB. Mechanism by which Mcl-1 regulates cancer-specific apoptosis triggered by mda-7/IL-24, an IL-10-related cytokine. *Cancer Res* 2010;70:5034-5045. **I.F: 7.54**
15. **Bhutia SK**, Dash R, Das SK, Azab B, Su ZZ, Lee SG, Grant S, Yacoub A, Dent P, Curiel DT, Sarkar D, Fisher PB. Mechanism of autophagy to apoptosis switch triggered in prostate cancer cells by antitumor cytokine melanoma differentiation-associated gene 7/interleukin-24. *Cancer Res* 2010;70:3667-3676. **I.F: 7.54**



14. **Bhutia SK**, Mallick SK, Maiti TK. Tumour escape mechanisms and their therapeutic implications in combination tumour therapy. *Cell Biol Int* 2010;34:553-563. **I.F: 1.04**
13. Dash R, Dmitriev I, Su ZZ, **Bhutia SK**, Azab B, Vozhilla N, Yacoub A, Dent P, Curiel DT, Sarkar D, Fisher PB. Enhanced delivery of mda-7/IL-24 using a serotype chimeric adenovirus (Ad.5/3) improves therapeutic efficacy in low CAR prostate cancer cells. *Cancer Gene Ther* 2010; 1–10. **I.F: 3.12**
12. Mallick SK, **Bhutia SK**, Maiti TK. Macrophage Stimulation by Polysaccharides Isolated from Barometer Earthstar Mushroom, *Astraeus hygrometricus* (Pers.) Morgan (Gasteromycetidae). *Int J Med Mushrooms* 2009; 11: 237-248. **I.F: 0.70**
11. **Bhutia SK**, Mallick SK, Maiti S, Mishra D, Maiti TK. Abrus abrin derived peptides induce apoptosis by targeting mitochondria in HeLa cells. *Cell Biol Int* 2009; 33:720-727. **I.F: 1.04**
10. **Bhutia SK**, Mallick SK, Maiti TK. In vitro immunostimulatory properties of Abrus lectins derived peptides in tumor bearing mice. *Phytomedicine*. 2009; 16:776-782. **I.F: 2.17**
9. Ghosh D, **Bhutia SK**, Mallick SK, Banerjee I, Maiti TK. Stimulation of murine B and T lymphocytes by native and heat-denatured Abrus agglutinin. *Immunobiology*. 2009;214:227-234. **I.F: 3.58**
8. **Bhutia SK**, Mallick SK, Maiti S, Maiti TK. Inhibitory effect of Abrus abrin-derived peptide fraction against Dalton's lymphoma ascites model. *Phytomedicine*. 2009;16:377-385. **I.F: 2.17**
7. **Bhutia SK**, Maiti TK. Targeting tumors with peptides from natural sources. *Trends Biotechnol*. 2008; 26:210-217. **I.F: 6.90**
6. **Bhutia SK**, Mallick SK, Maiti S, Maiti TK. Antitumor and proapoptotic effect of Abrus agglutinin derived peptide in Dalton's lymphoma tumor model. *Chem Biol Interact* 2008; 174:11-18. **I.F: 2.45**
5. Maiti S, **Bhutia SK**, Mallick SK, Kumar A, Khargi N, Maiti TK. Antiproliferative and immunostimulatory protein fraction from edible mushrooms. *Environmental Toxicology and Pharmacology* 2008; 26; 187-191. **I.F: 1.29**
4. **Bhutia SK**, Mallick SK, Stevens SM, Prokai L, Vishwanatha JK, Maiti TK. Induction of mitochondria-dependent apoptosis by Abrus agglutinin derived peptides in human cervical cancer cell. *Toxicol In Vitro*. 2008;22:344-351. **I.F: 2.06**
3. Das T, Mallick SK, Paul D, **Bhutia SK**, Bhattacharyya TK, Maiti TK. Microcontact printing of Concanavalin A and its effect on mammalian cell morphology. *J Colloid Interface Sci* 2007; 314:71-79. **I.F: 3.01**
2. Shah S, Ghosh D, Sarangi I, Mallick SK, **Bhutia SK**, Banerjee I, Maiti S, Maiti TK. Immunomodulatory and Antitumor Activities of Water-Soluble Proteoglycan Isolated from the Fruiting Bodies of Culinary-Medicinal Oyster Mushroom *Pleurotus ostreatus* (Jacq.: Fr.) P. Kumm. (Agaricomycetidae). *Int J Med Mushrooms* 2007; 9: 123-138. **I.F: 0.70**
1. Sarangi I, Ghosh D, **Bhutia SK**, Mallick SK, Maiti TK. Antitumor and immunomodulating effects of *Pleurotus ostreatus* mycelia-derived proteoglycans. *Int Immunopharmacol* 2006;6:1287-97. **I.F: 2.21**

**Book Chapter:**

1. Naik PP, Panda PK, **Bhutia SK\***. Oral Cancer Stem Cells Microenvironment. Adv Exp Med Biol. 2017;1041:207-233.
2. Bhutia SK\*, Naik PP, Panigrahi DP, Bhol CS, Mahapatra KK. Mitophagy, Diseases and Aging in Models, Molecules and Mechanisms in Biogerontology. Rath PC Editor. Springer Nature Press.
3. Bhutia SK, Mukhopadhyay S, Sinha N, Das DN, Panda PK, Patra SK, Maiti TK, Mandal M, Dent P, Wang XY, Das SK, Sarkar D, Fisher PB. Autophagy: cancer's friend or foe? Adv Cancer Res. 2013;118:61-95.
4. **Bhutia SK** and Maiti TK. Crabs Eye (*Abrus precatorius*) seed and its immunomodulatory and antitumor properties. In: Preedy VR, Watson RR, Patel VB editor. Nuts and seeds in Health and Disease Prevention. Academic Press 2011. P409-415

**PhD thesis guided:****Completed (04)**

1. Dr. Durgesh Nandini Das, 2015  
Topic: "Mechanisms of Benzo[a]pyrene Mediated Apoptotic and Autophagic Cell Death and its Prevention with Phytotherapeutics"  
Current position: Assistant Professor, School of Biotechnology, NIT Calicut, India
2. Dr. Subhadip Mukhopadhyay, 2016  
Topic: "Unraveling the Intricate Molecular Mechanism between Apoptosis and Autophagy during Cellular Stress"  
Current position: Postdoctoral fellow, New York University, USA
3. Niharika Sinha, 2017  
Topic: "Mechanism of Tumor Inhibitory Potential of *Abrus* agglutinin in Oral Squamous Cell Carcinoma"  
Current position: Postdoctoral fellow at Michigan State University, Michigan, USA
4. Prashanta Kumar Panda, 2017  
Topic: "Autophagy Dependent Cell Death, Senescence, Differentiation by *Abrus* agglutinin in cancer therapeutics"  
Current position: Selected as a Postdoctoral fellow at University of Birmingham, Birmingham, UK

**Under Progress (05)**

5. Prajna Paramita Naik  
Topic: "Deciphering Role of Cancer Stem Cells to Therapeutic Resistance in Oral Cancer"
6. Prakash Priyadarshi Praharaj  
Topic: "Stonin regulates Autophagy and Autolysosomal Reformation"
7. Debasna Pritimanjari Panigrahi  
Topic: "Molecular Profiling of Apoptotic Pathway in Cancer Stem Cells of Oral Squamous Cell Carcinoma and Its Modulating by Plant Lectins for Potential Cancer Therapeutics"
8. Chandra Sekhar Bhol  
Topic: "Epigenetics Regulation of Autophagy in Oral Cancer"
9. Kewal Kumar Mahapatra  
Topic: "Stonin-2 Regulation of Autophagy in Oral Cancer"

**MSc thesis guided****Completed (21)**

1. Archana Bhoi, 2012  
Topic: "Isolation and Characterization of Lectins from *Ricinus communis*"
2. Chandra Sekhar Bhol, 2012  
Topic: Isolation and Characterization of Soybean (*Glycine max*) Lectin"
3. Chandan Kanta Das, 2012  
Topic: "Isolation and Characterization of Peanut (*Arachis hypogaea*) Lectin"
4. Nitu Majhi, 2012  
Topic: "Isolation and Characterization of agglutinin and ricin from *Ricinus communis*"
5. Sangeeta Minz, 2012  
Topic: "Isolation and Characterization of Concanavalin A from Jack bean (*Canavalia ensiformis*) seed"
6. Rekha Marandi, 2012  
Topic: "Isolation and Characterization of Concanavalin A from the seeds of *Canavalia ensiformis*"
7. Abhipsa Mishra, 2012  
Topic: "Isolation and characterization of lectins from white seeds of *Abrus precatorius*"
8. Sneha Prasad, 2012  
Topic: "Isolation and characterization of lectins from red seeds of *Abrus precatorius*"
9. Sandeep Dev, 2013  
Topic: "In vitro antitumor potential of soybean lectin, isolated from *Glycine max*"
10. Md Khurshidul Hassan, 2013  
Topic: "Isolation and characterization of peanut (*Arachis hypogaea*) lectin and study of its anti-cancer properties"
11. Himadri Tanaya Panda, 2013  
Topic: "Elucidation of the anticancer property of *Abrus* agglutinin in oral cancer cell lines"
12. Supriya Dehury, 2014  
Topic: "Analysis of cd44 expression in oral cancer tissue"
13. Aditi Nayak, 2014  
Topic: "*Bacopa monnieri* (Brahmi) induced Autophagy Inhibit Benzo[a]pyrene mediated cytotoxicity"
14. Priyadarshini Padhi, 2014  
Topic: "*Terminalia bellerica* (Baheda) inhibits protective autophagy and induces apoptosis in oral cancer cell lines"
15. Madhusmita Panda, 2014  
Topic: "Concanavalin A induced autophagy switches to apoptosis"
16. Subhalakshmi Samal, 2014  
Topic: "Active compounds from tulsi inhibits benzo[a]pyrene mediated cytotoxicity:in vitro & in silico analysis"
17. Tanmayee Prusty, 2015  
Topic: "Apoptosis and Autophagy Induction in T98G Cells (Glioblastoma) with Concanavalin A"
18. Puja Sahoo, 2015  
Topic: "*Ricinus* Agglutinin Induced Autophagy in Glioblastoma Cells"
19. Gogineni Balarama Krishna, 2016

Topic: "Benzo (a) pyrene induced mitochondrial damage in HaCaT cells"

20. Sarbari Saha, 2017

Topic: "Bacopaside A1 induces mitophagy as a protective in response to Benzo[a]pyrene cytotoxicity"

21. Suchitra Sahoo, 2017

Topic: "Heat denatured agglutinin in apoptosis and autophagy induction in HaCaT cells"

### ***Under Progress (02)***

22. Trisha Kundu, 2018

Topic: "To study the anti-cancerous effect of *Aloe vera* in oral cancer cells"

23. Nilesh Kumar Meher, 2018

Topic: "To study the anti-cancerous effect of cow urine in oral cancer cells"

### **Other Current Project Scholars**

1. Srimanta Patra:

Topic: "Molecular profiling of apoptotic pathway in cancer stem cells of oral squamous cell carcinoma and its modulating by plant lectins for potential cancer therapeutics"

2. Sarbari Saha:

Topic: "Stonin-2 regulated Beclin-1 dependent autophagy and autophagic lysosome reformation."

### **Personal Details:**

- Date of Birth: 08<sup>th</sup> September 1980
- Father's Name: Gatikrishna Bhutia
- Nationality: Indian
- Gender: Male
- Marital status: Married
- Blood group: B<sup>+</sup>
- Passport No: G2013873
- Permanent Address: At/Po: Kangula, Dist : Anugul, State: Odisha, Pin: 759132
- Languages Proficiency: English, Hindi, Oriya, Bengali

### **Statement of Declaration:**

I do hereby declare that all the information furnished by me are true and correct to the best of my knowledge and belief.

Place: Rourkela

Date: 20. 12. 2017

(Sujit Kumar Bhutia)