**Curriculum Vitae**

**Dr. Sonam Agarwal**

MSc. Ph.D

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Research Gate: <https://www.researchgate.net/profile/Sonam_Agarwal9>

**RESEARCH HIGHLIGHTS**

* Over all research interest revolves around multiple facets cancer research including diagnosis and treatment
* Main aim of research is to isolate biomarkers for early detection of cancer using genomics approaches, development of cost effective diagnostic device
* Elucidation of effects of biological component (pesticides and antioxidants) and pathway of toxicity

SKILLS: Real Time PCR, flow cytometry, phase contrast, fluorescence microscopy, FTIR, western blot, SDS-PAGE, agarose gel electrophoresis, primary cell culture, cancer cell lines, histopathology

**EMPLOYMENT**

* Presently I am working as **Research Associate** under the supervision of Dr. Pramod Kumar Gautam, Associate Professor, Department of Biochemistry, AIIMS, New Delhi from 1/1/2021 to till date.

My project entitled **“*Detection of prostate cancer biomarker using sensitive and rapid lateral flow device with diagnostic and prognostic significance***”.

* June 2018 till Sept 2019: Senior Technical Assistant at Rapid lab (R&D), JMPL, Delhi (India)

**ACADEMIC SCHOLASTICS**

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| **Name of Exam.** | **Subject** | **University/Board** | **Div/Grade** | **Year** |
| **Ph.D** | Biotechnology | Banasthali University, Rajasthan |  | **2018** |
| **M.Sc.** | Biotechnology | Mody University, Rajasthan | First division/70% | **2011** |
| **B.Sc.** | Biotechnology | CSJM University, Kanpur | First division/60% | **2009** |

**Ph.D**

* I have completed my Ph.D thesis work entitled “**Evaluation of antioxidative defence potential of bromelain and bacoside against dichlorvos induced toxicity in kidney and haematological profile of *Mus musculus***” under the supervision of Dr. Renu Bist, from Banasthali University, Rajasthan, India.
* **Teaching Experience-** B.Sc. & M.Sc. practical classes from 2013-2015 in Department of Bioscience and Biotechnology, Banasthali University, Rajasthan, India
* Reviewed manuscript (Toxicology Reports)

**Fellowship**

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| Course Work | 79.44% |
| Reseach Associateship (ICMR) | 2020-till date |

**Membership of Society**

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| 1. | American Association for cancer research |
| 2. | The Science Advisory Board |

**LIST OF PUBLICATION**

1. ChaudharyB, **Agarwal S**, Bist R **(2018)** Invulnerability of bromelain against oxidative degeneration and cholinergic deﬁcits imposed by dichlorvos in mice brains. [Frontiers in Biology](https://link.springer.com/journal/11515), 13: 56–62. <https://doi.org/10.1007/s11515-018-1479-1>
2. **Agarwal S**, Chaudhary B, Bist R **(2017)** Protective propensity of bacoside A and bromelain on renal cholinesterases, γ-aminobutyric acid and serotonin level of *Mus musculus* intoxicated with dichlorvos. Chemico-Biological Interactions, 261: 139-144. <https://doi.org/10.1016/j.cbi.2016.05.017> **(IF- 5.192)**
3. **Agarwal S**, Chaudhary B, Bist R **(2016)** Bacoside A and bromelain relieve dichlorvos induced changes in oxidative responses in mice serum. Chemico-Biological Interactions, 254: 173-178. <https://doi.org/10.1016/j.cbi.2016.11.027> **(IF- 5.2)**
4. **Agarwal S**, Misra S, Bist R (2016) Screening of antagonistic activity of soil isolates against phytogenic fungi. Asian Journal of Microbiology and Biotechnology, 1(1): 33-41.
5. ChaudharyB, **Agarwal S**, Bist R (2016) Curcumin amends oxidative stress and antioxidants status in olfactory lobes, cerebrum, hypothalamus-hippocampus, cerebellum and pons-medulla of mice acutely intoxicated with lindane. International Journal of Pharmacy and Pharmaceutical Sciences, 8 (7): 244-248.
6. ChaudharyB, **Agarwal S**, Bist R (2014) Obliteration in oxidative stress and Ca++ uptake in brain mitochondria leads to impairment of cholinergic system: A possible mechanism underlying neurotoxicity induced by dichlorvos. British Biomedical Bulletin, 2(3): 550-564.
7. ChaudharyB, **Agarwal S**, Bist R (2013) Amenity of cholinergic circuit in schizophrenia. World Journal of Pharmacy and Pharmaceutical Sciences, 2(5): 2430-2451.

**Book Chapter**

1. **Agarwal S**, Bist R, Behera KK (2013) Hypoxia and its clinical aspects. In: Advance Frontier on Biotechnology, Jaya Publishing House, Delhi, India, By K.K. Behera (Ed.) Chapter 6, Pp 143–154.

**Manuscript Communicated**

1. β –defensin 2 modulates the anti-tumor function of IFN-γ, TNF-α, IL-1α, IL-6, IL-3, IL-10, TGF-β, CD32 and CD204 in macrophage phenotype.
2. Immunomodulatory characteristics of Mesenchymal Stem Cells and their causal effect in Brest Cancer.

**LIST OF CONFERENCES/SYMPOSIA/SEMINARS**

1. Poster Presentation in the 10th India-Japan Bilateral Conference on “Applied science for advancement of research and industrialization” entitled “Manifestation of protection offered by bacoside A in terms of oxidative stress and renal enzymatic antioxidants” held at Biyani Girls College, Jaipur (India) in September, 2015.
2. Poster Presentation in International Conference on “Current status, opportunities and challenges in medicinal plants and natural product research” entitled “Paradoxical action of bromelain in renal tissue is figured by alteration of endogenous antioxidants, oxidative stress and cholinesterases” held at C G Bhakta Institute of Biotechnology, Uka Tarsadia University, Bardoli, Gujarat (India) in September, 2014.
3. Poster Presentation in National Conference on “Applications of natural products for human health and bioremediation of pollutants” entitled “Screening of certain bacterial strains associated with UTI and analysis of their antibiotic susceptibility pattern against different antibiotics using RFLP” held at Centre for Advance Studies, Department of Zoology, University of Rajasthan, Jaipur (India) in March, 2013.
4. Participate in DBT Sponsored National workshop on “Protein structure prediction and function analysis” held at Centre for Bioinformatics, Department of Bioscience & Biotechnology, Banasthali University, Rajasthan in March, 2017.
5. Participate in “Sensitization workshop on technological empowerment of women” organized by The National Academy of Science, India (NASI) in joint collaboration with Banasthali University, Rajasthan in March, 2016.
6. Participate in DBT Sponsored National workshop on “*In Silico* genome and proteome analysis” held at Centre for Bioinformatics, Department of Bioscience & Biotechnology, Banasthali University, Rajasthan in March, 2014.
7. Attended A one day Seminar on “Biotechnology Innovation, Its Need and Promotion” held at Dr. B. Lal Institute of biotechnology in collaboration with Department of Science and Technology, Government of Rajasthan, Jaipur in May, 2014.
8. Attended National Seminar on Biotechnology and Microbiology in Human Welfare: The Indian Scenario at MITS University, Lakshmangarh, Rajasthan in Sept, 2009.

**PERSONAL DOSSIER**

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| **Name** | Sonam Agarwal |
| **Father’s Name** | D N Agarwal |
| **Mother’s Name** | Reeta Agarwal |
| **Date of Birth** | 2.12.1988 |
| **Gender** | Female |
| **Marital Status** | Unmarried |
| **Passport** | N0533467 |
| **Nationality** | Indian |
| **Address** | |
| 1. **Correspondence:** | 306, Shreejee Apartment, Behind R Block |
|  | Masjid Moth, South Extension-II, New Delhi- 110049 |
| 1. **Permanent Address** | 43/1 Site No.2, Kidwai Nagar, Kanpur – 208011 (UP) |
| 1. **E- mail:** | [sonam.2mits@gmail.com](mailto:sonam.2mits@gmail.com) |
| 1. **Phone No:** | 9450255615 |

**REFERENCES**

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| **1.** | **Dr. Pramod Kumar Gautam**  Associate Professor  AIIMS, New Delhi- 110029, India  Email: [pramodgautam\_13@yahoo.com](mailto:pramodgautam_13@yahoo.com)  Ph: +91-9838442087 |
| **2.** | **Dr. Renu Bist**  Associate Professor  University of Rajasthan, Rajasthan - 302004, India  Email: [renu\_bisht22@yahoo.co.in](mailto:renu_bisht22@yahoo.co.in)  Ph: +91-74248 52622 |
| **3.** | **Dr. Surabhi Bajpai**  Assistant Professor  Banasthali University, Rajasthan 304022, India  Email: [surabhibiochem@gmail.com](mailto:surabhibiochem@gmail.com)  Ph: +91-7023132691 |

**DECLARATION**

I hereby declare that the entries in this curriculum vitae furnished herewith are true to the best of my knowledge and belief.

**Place: New Delhi Date: 25.04.20212**

**(Sonam Agarwal)**