Details of Ph.D. students who completed their Ph.D supported by DBT BUILDER

1. ***Jyoti Kaushal****:* Characterization of Xylanase Enzyme and Its Immbolilization onto a biocompatible metal organic framework for potential applications in industrials processes.

2. ***Harpreet Singh****:* Nanomaterial- Based florescent sensor for detection of microbial toxin in food.

3. ***Nitish Kumar****:* Dietary Nitrate Based Profiling of Vegetables Grown in Ladakh and their Utility as Dietary Medications for high altitude Environment.

4. ***Aditi Sharma****:* Molecular and phenotypic studies to characterize dhhal3 from halotolerant yeast, *Debaromyces hansenii.*

5. ***Arun Narota****:* Bioactivity-guided approach to evaluate the protective effects of *Randia dumetorum* Lamk. against acute lung injury

6. ***Rohit Kumar****:* Delineating the efficacy of self-assembled amino acid structures in tissue engineering.

7. ***Nisha Sinha****:* Studies on miRNA from renal cells derived exosomes, as non-invasive early biomarker (s), in type 2 diabetic nephropathy.

8. ***Jitender Chandel****:* To understand the impact of particulate matter in COPD pathogenesis in mice

9. ***Vandita Tiwari****:* Biofortified wheat: Effect on hyperlipidaemia and insulin resistance in Type 2 diabetic rodent model

10. ***Shivani*** "Evaluating the Effects of *Phyllanthus emblica E*xtract, *Tinospora cordifolia E*xtract and Their Combination on Rat Kidney Cell Injury Model."

11. ***Shruti Tomar***- "Investigations on Renal Function Restoration in Unilateral Ureter Obstruction Model of Kidney Injury.

Details of Ph.D scholars receiving support from DBT BUILDER for their research work

1. ***Chaitanya Kumar**:* Assessment of toxicological impact of Nano/micro plastics using zebra fish model and process optimization for their remediation
2. ***Nimisha Chaudhary**:* Directed evolution approach to assess infectivity of SARS-CoV-2 variants and the utility of nanobodies
3. ***Sakshi Redu**:* Ongoing her course work and working towards synopsis (Tentative title: synthesis and characterization of biofilms using up conversion nanoparticles for food preservation applications)
4. ***Archit Pundir***: Has completed his pre-PhD coursework and is working towards synopsis submission (Tentative Title: Multi-tiered evaluation of nanomaterial biodistribution and toxicity: Synergizing experimental and computational approaches)
5. ***Ayushi Sandhu***: Understanding the interplay between innate and adaptive immune response under conditions mimicking viral mediated asthma exacerbations in mice.
6. ***Amit***: Exploring the beneficial potential of millet-derived polyphenols in chronic obstructive pulmonary disease.
7. ***Sanjay Singh Rawat***: Working towards synopsis submission (Tentative title- Evaluating the efficacy of non-steroidal anti-inflammatory drugs in the management of bacterial and viral Acute Lung Injury)
8. ***Nidhi Verma***: Completed pre-PhD coursework and is working towards synopsis submission (Tentative title- Understanding immune mechanisms of particulate matter induced exacerbations in a murine model of asthma)
9. ***Rohit Bansal**:* Synthesis, characterization, and evaluation of anti-diabetic activity of flavone-zinc metal complex: A murine model-based study
10. ***Preety Kumari***: Analysis of effect of dietary flavonoid Narirutin on fibroblast growth factor 21 (FGF21) and type2 diabetes mellitus
11. ***Mridual Sharma**:* Isolation and Characterization of Renal Cancer Stem Cells (CSCs) from ACHN Cells Using FACS
12. ***Sanghvi Rana**:* Completed pre-PhD course work and is working towards synopsis (Tentative understanding the stem cell biology in kidney disorder)

Details of PG students who received support from DBT BUILDER in their dissertation work

1. Neyaz Ahmed: Computational and experimental assessment of engineered nanomaterial dosimetry in zebrafish (*Danio rerio*) Using a Python-Based ISDD Model
2. *Monika Sharma:* Neurotoxicity evaluation of micro/nanoplastics released from polystyrene using zebrafish model
3. *Navjeet Kaur:* Innovative PLGA/CNC-Based Biofilms With UCNP@SiO2@Cur: A Smart Material for Controlled Release and Antimicrobial Protection
4. *Purvi Sharma:* Photocatalytic Degradation of Alizarin Yellow under UV and Solar Irradiation
5. *Priya*: Studies on the protective role of gallic acid against acute lung injury: analysis of cellular and molecular factors
6. *Garima*: Oleanolic acid alleviates HCl mediated acute lung injury in mice
7. *Divya Sharma:* Neuro-metabolic stress in type 2 diabetes mellitus: disruption of mitochondrial homeostasis, oxidative injury, and the neuroprotective promise of catechin.
8. *Abdul Saboor:* Unravelling Intestinal and Mitochondrial Dysregulation in Type 2 Diabetes Mellitus: Integrative Insights from i*n-silico* and e*x vivo* Approaches
9. *Sheenam Wadhera:* The Impact of Mitochondrial Dysfunction in Type 2 Diabetes Mellitus: Special Reference to Cardiac Tissue from Murine Model
10. *Simran Dhiman:* To investigate the effect of finger millet diet on the Osteoclastic markers of ovariectomized rats
11. *Ishneet Kaur:* To investigate the potential role of finger millet on the Osteoblastic factors of bone in rats
12. *Aastha*: To investigate the antiproliferative effects of *Ficus religisoa* leaf extract on HUH-7 cancer cell line.
13. *Abhishek:* Comparative study to examine the effects of pre-conditioned and non-conditioned mesenchymal stem cells Secretome on cellular depression model of Neuro 2a cell line.
14. *Devlina:* Development and characterization of controlled release system: Polyvinyl alcohol (PVA) hydrogel-entrapped selenium nanoparticles for advanced biomedical applications.
15. *Harnoor Kaur:* To study the effect of *Artemisia annua* leaf extract on C3H10T1/2 and HUH-7 cell line.
16. *Loveleen:* To study the effects of *Salvia officinalis* leaf extract on liver cell lines – Huh7 & Hepg2

17. *Mansi Rathore:* To study the effect of Myristica fragrans extract on HUH-7 and HepG2 cell lines.
18. *Navjot:* Exploring the therapeutic potential of *Amorphophallus paeoniifolius* extract: Anti-proliferative, anti-inflammatory, and antioxidative effects on liver cancer cells
19. *Nitin Jindal:* To investigate the antiproliferative effects of *Foeniculum vulgare* seeds aqueous extract on liver cancer cell line (HUH-7).
20. *Sakshi Vats:* To study the antiproliferative effect of *Nigella sativa* seed extract on HUH-7 liver cancer cell line.
21. *Sanghvi Rana:* To investigate cell viability, cytotoxicity, and anti-cancerous property of *Phyllanthus emblica* on HUH7 and L929 cell line.
22. *Shreya Kaushal:* To investigate the antiproliferative effect of aqueous extract of *Pistachio vera* L. PERICARP on HUH-7 cell line.
23. *Urvashi Dangi:* Architecting glutamine-based nanoluminophore carbon QDots for biomedical advancements.
24. *Virbhan Singh:* Reciprocal effects of L929 fibroblasts and HUH7 hepatic cancer cell-derived secretome on cellular proliferation and migration.
25. *Yashreet:* Delineating the efficacy of composite scaffolds for regeneration and applications in tissue engineering.
26. *Yukti Dhingra:* Integrated Bioinformatics Approaches for Investigation of Biomarkers and their Regulators in Acute Kidney Injury
27. *Simran:* Exploring Mitochondrial Protein-Encoding Genes as Biomarkers for Obesity and Comorbid Disorders: A Bioinformatics Approach
28. *Preeti Thakur*: Integrative approach to collagen structure prediction and protein protein docking with antimicrobial peptides in *Labeo rohita*, *Cyprinus carpio* and *Ctenopharyngodon Idella.*
29. *Mansi Sharma:* Integrative Bioinformatics: A Synergistic Approach to Identify Potential Biomarkers in Heart Failure (HF)
30. *Onkriti*: Extraction and characterization of Exopolysaccharides from halophilic bacteria for sustainable Environmental Applications
31. *Sanskriti Bamba*: Synthesis and Photocatalytic activity of TiO2 and Tungsten doped TiO2 for degradation of Rhodamine B under UV and Solar Radiation
32. *Preet Bains:* To evaluate the beneficial potential of *Cassia glauca* against HCl induced Acute Lung Injury in mice

33. *Ritika Jaswal:* To explore the protective efficacy of *Buddleja asiatica* flower extract against HCl induced Acute lung injury
34. *Jashanpreet Kaur Grewal:* To evaluate the protective efficacy of *Anagallis arvensis* against HCl mediated Acute lung injury
35. *Tanya Gupta:* To investigate the effect of finger millets on Mitochondrial function in the heart and uterus of postmenopausal ovariectomized rats
36. *Shivani Devi:* To investigate the effects of finger millets on mitochondrial function in brain and optic nerve of ovariectomized rats
37. *Divya Sharma:* Neuro-metabolic stress in type 2 diabetes mellitus: disruption of mitochondrial homeostasis, oxidative injury, and the neuroprotective promise of catechin.
38. *Abdul Saboor:* Unravelling Intestinal and Mitochondrial Dysregulation in Type 2 Diabetes Mellitus: Integrative Insights from *in-silico* and *ex vivo* Approaches
39. *Sheenam Wadhera:* The Impact of Mitochondrial Dysfunction in Type 2 Diabetes Mellitus: Special Reference to Cardiac Tissue from Murine Model
40. *Deepti:* Comprehensive evaluation of cytotoxicity, wound healing, and dapi-assessed nuclear apoptotic changes induced by calendula extract, copper nanoparticles, and their conjugates in c3h/10t1/2 cells
41. *Gursimran:* Ancient remedies, modern insights: cell viability and migratory Modulation by *Azadirachta* indica and *Curcuma longa* on mesenchymal cell behaviour in vitro
42. *Harmanjot singh:* Modulation of chlorpyrifos-induced cytotoxicity in hek293 cells by c3h10t1/2 mesenchymal stem cell secretome
43. *Jyoti:* To study the effect of *Bergenia ciliata* root extract on HEK293 cell line
44. *Komal:* Investigating the effect Naringin on the adipogenic differentiation of murine mesenchymal stem cells (C3H10T1/2)
45. *Malhaar:* Neuroprotective effects of metformin-preconditioned mesenchymal stem cell secretome andnon-conditioned secretome on depression-induced neurotoxicity in neuro-2acells
46. *Navya:* Effect of Secretome of Amla-treated HEK293 Cells on C3H10T1/2 Cells via CXCL8 regulation
47. *Paras:* Effect of *Ajuga bracteosa* extract on HEK 293 stem cell line
48. *Shilpa:* To study the effect of *Bergenia ciliata* root extract on HEK293 cell line
49. *Shikha:* Analysing the effect of ayurvedic compound (*ashwagandha* with *Ania somnifera*) on the protein extracts of HEK293 and C3H10T1/2 cell lines
50. *Shreya:* To study the effect of *Swertia chirayita* extract on HEK293 cell line and C3H10T1/2

51. *Shubham: Saraca asoca* mediated modulation cell proliferation and wound healing potential of HEK293 AND C3H10T1/2
52. *Shiwana:* Integrative Bioinformatics Workflow for Biomarker Prioritization and Therapeutic Target Identification in Polycystic Kidney Disease
53. *Anjali verma:* A Computational Framework for Identifying Diagnostic Biomarkers and Repurposable Drugs in Acute Kidney Injury (AKI)
54. *Babanpreet:* De Novo Protein Design: A Computational Workflow from Backbone to Binding of Sweet-Tasting Proteins
55. *Kritika sharma:* Integrated Computational Profiling of Klotho-FGF Signaling in Renal Pathophysiology: miRNA-Mediated Regulation and Drug Target Discovery
56. *Mansheerat dhinsda:* A Systematic Bioinformatics Approach to Identify Chronic Kidney Disease Biomarkers and Potential Therapeutic
57. *Nilmani Kumar:* Smartphone assisted colorimetric detection of glutathione using MIL-88A(Fe) in pharmaceutical and food samples.
58. *Saganpal Kour:* Optimization, production, Characterization of Agarase from *Microbulbifer* CMC-5: Kinetics and Thermodynamic Study.
59. *Novdeep Kour:* Photocatalytic degradation of Diclofenac Sodium Using ZnO and Doped ZnO Under UV and Solar Irradiation.
60. *Nistha Goel:* Evaluation of release of micro/nano plastics from plastic bags and their impact on zebrafish.
61. *Monika Mahajan:* Deciphering The Genetic Terrain Of ADPKD: Unveiling Biomarkers Through Integrated Bioinformatics Expedition
62. *Bhawani Singh:* Investigation of novel biomarkers for the acute kidney injury disease
63. *Muskan:* To evaluate the beneficial potential of ethyl acetate soluble fraction against HCL-induced acute lung injury in mice.
64. *Smriti Kamboj:* To evaluate the beneficial potential of oleanolic acid against aspiration mediated acute lung injury.
65. *Tripti:* To evaluate the beneficial potential of gallic acid against aspiration mediated acute lung injury.
66. *Veenushah Bakshi:* Mechanistic evaluation of lupus nephritis in relation to mitochondrial health, oxidative stress and their by-products: A murine model based study. (DBT-BUILDER fellowship)
67. *Shivani:* Analyses of mechanisms associated with mitochondrial activity, anti-oxidants and by-products in lupus liver from pristine induced murine model.

68. *Samridhi:* Evaluation of mitochondrial function and redox status in murine lupus lung and analysis of oxidative by-products in maintenance of associated mechanisms.
69. *Aashna Vasudeva:* Co-polymerized Natural polymer-based Scaffold and its Billability
70. *Abha Thakur:* To Investigate the Anti-proliferative Effect of Phylloquinone on Breast Cancer Cell Line (MCF-7)
71. *Aditi:* To Investigate Anti-Profilirative effect of Cholecalciferol on Breast Cancer Cell Lines (MCF-7)
72. *Anjali:* Study the effect of Oleo-Gum Resin (*Commiphora mukul*) Extract on Human Embryonic Kidney Cell Line (HEK293)
73. *Anshita Srivastava:* Study the effect of a-Tocopherol on Tamoxifen-Treated ER+Breast Cancer Cell Line(MCF-7)
74. *Chahat:* One pot Green Synthesis of Selenium Nanoparticles and its Biological Applicability
75. *Harshita Gupta:* Study the effect of Cinnnamic Acid & Tannic Acid Administration on High Fructose Treated Human Embryonic Kidney Cell Line (HEK293)
76. *Himanshi:* Study the effect of Breast Cancer Cell Line (MCF-7) Derived Secretome on Human Embryonic Kidney Cell Line(HEK293)
77. *Mitali:* Study the effect of *Cucumis melo* seed Extract on Human Embryonic Kidny Cell Line, HEK293
78. *Mrinalini Thakur:* Study the effect of *Rhododendron arboretum* Flower Extract Administration on Human Embryonic Kidney HEK293 Cell Line
79. *Riya:* Study the effect of *Cichorium intybus* root extract on human embryonic kidney Cell Line (HEK293)
80. *Shakshi:* Study the effect of *Brassica oleracea* Florets extract on Human Embryonic Kidney Cell Line (HEK 293)
81. *Rashi Jain:* Propounding the Premise for Fingerprinting DN and MN: A Comparative Bioinformatics Analysis
82. *Varinder Madhav Verma:* Bioinformatics-Driven Identification Of Prognostic Biomarkers In Kidney Renal Cell Carcinoma (KIRC)
83. *Shiwani: Predicting* Disease Prognosis In Papillary Renal Cell Carcinoma: An In Silico Bioinformatics Approach For Biomarker Discovery
84. *Prerna Goel:* Targeting ADPKD progression: A comprehensive Bioinformatics Approach for unraveling Molecular Pathways and promising therapeutic targets.