

## RESEARCH PROJECTS

| No. | Title of the Project   | Name of the           |                     | Project Outlay Rs. In lakhs | Status of Project (Applied/Awarded/Completed) | Sponsoring Agency | Equipment purchased  |
|-----|--|-----------------------|---------------------|-----------------------------|---|-------------------|--|
|     |  | Coordinator           | Co-Coordinator      |                             |   |                   |  |
| 1   | Construction and studies on vaccine potential of chimeric protein molecules comprising immunodominant regions of outer membrane proteins of enterobacteriaceae for application as broad spectrum vaccine against Salmonella, Shigella, E. coli and Proteus | Dr. M.S. Shivakiran   |                     | Rs. 32.09 lakhs             | Grant released/in progress                    | DST-SERB          | electrophoresis, horizontal and vertical electrophoresis, water bath & dry bath. |
| 2   | Degenerative effects of organophosphate pesticides on the formation of an inner plexiform layer during retinal development and protective roles of growth factors in an invitro 3D culture system derived from embryonic chick retina                      | Dr. T.S.Gopenth       |                     | Rs. 35.06 lakhs             | Grant released/in progress                    | DST-SERB          |  |
| 3   | Development of novel ssDNA aptamer based bio-sensing platforms for biothreat fungal toxins using nano-biotechnology approaches   | Dr. M. Venkataramana; | Dr. M.S. Shivakiran | Rs.49.80 lakhs              | Submitted/under review                        | DST-SYST          |  |
| 4   | Molecular cloning, expression and functional characterization of IL-4 splice variants in the   | Dr.D.Vijaya Ramu 2016 |                     | Rs. 27.50 lakhs             | Awarded In May, 2016                          | DST-SERB          |  |

|                          |   |                       |                   |                    |                            |        |  |
|--------------------------|---|-----------------------|-------------------|--------------------|----------------------------|--------|--|
|                          | guinea pig model  |                       |                   |                    |                            |        |  |
| 5                        | DST MRP : Heterogeneity of Haemocyanin among the gastropods   | Dr.S.Krupanidhi       |                   | Rs.41.25 lakh      | On-going                   |        |  |
| 6                        | DST FIST – Bio-resource and waste Management  |                       | Dr.S.Krupanidhi   | Rs. 42.50 lakhs    | On-going                   |        |  |
| <b>In-House Projects</b> |   |                       |                   |                    |                            |        |  |
| 1                        | Cost effective method of waste water treatment by phytoremediation with concurrent production of biogas and biomanure | Dr. M.S. Shivakiran   | Dr. T.S. Gopenath | Rs. 5.05 lakhs     | Grant released/in progress | VFSTRU |  |
| 2                        | Landscape development, cultivation and maintenance of medicinal herbs and flowering plants near hanuman statue        | Dr. Md. Nazneen Bobby |                   | Rs. 8,30,345 lakhs | Grant released/in progress | VFSTRU |  |

### Inter-institutional collaborative projects and associated grants received

#### a) National collaboration b) International collaboration

| Project title  | Institution                                      | Year | Outcome  |
|--|--|------|--|
| National collaboration   |  |      |  |
| Clonal propagation studies in hot pepper   | M/s Advanta Pvt. Ltd., Hyderabad                 | 2015 | Successfully propagated pepper                                 |
| Protease from <i>B. subtilis</i> and its compatibility with detergents   | M/s Global Institute of Biotechnology, Hyderabad | 2013 | Publication in International Journal of Current Research       |
| A note on Phyto diversity and Phytochemistry of important Plant species of Vignana University Campus, Vadlamudi, AP. | SV University College of Engineering, Tirupati   | 2014 | Publication in International Journal of Pharma and Bio Science |
| International collaboration  |  |      |  |
| Molecular and Biochemical Characterization of Recombinant Guinea pig model for tuberculosis                          | McMurray laboratory for clinical studies, USA    | 2015 | Publication in Mediators of Inflammation                       |
| Arsenic waste from water treatment systems: characteristics, treatments  | Institute of waste management, Hongkong          | 2014 | Publication in Water Science & Technology: Water Supply        |

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| and its disposal |  |  |  |
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