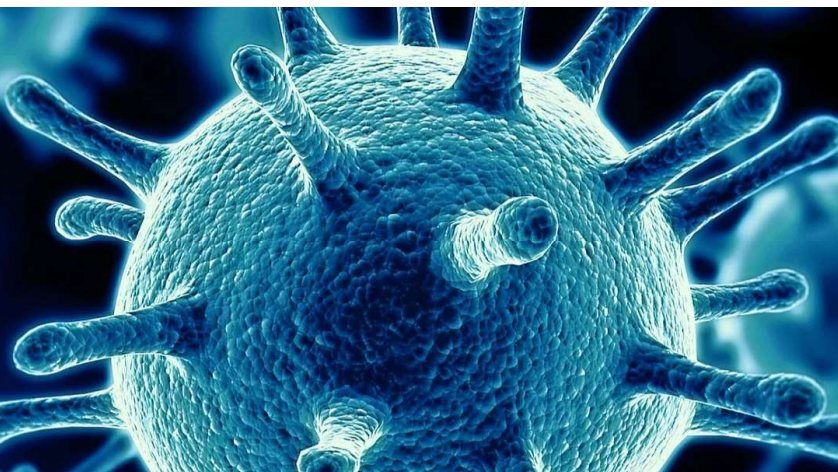




Dr. Devendra Lingojar
Molecular Virologist
CoFounder Director, ADEETECH



ATG 15 : Virology and Genomics

Final Year Project for Biotechnology and Lifesciences

Topics: DNA virus and RNA viruses: HIV, HBV, HEV, Dengue, Influenza, B19 virus, Coronaviruses: SARS, MERS, COVID19 etc.

Eligibility: B.Sc. M.Sc. B.Tech., M.Tech. Biotechnology final year students

Virology Theory: Molecular Biology of Viruses. Replication strategies of different types of viruses based on nature of DNA and RNA genome. Genome organization. Plant and animal viruses. History of virology, common diagnostic techniques in virology. Antigen test, antibody test, ELISA recent and past infections, Different types of ELISA, Virus neutralization tests, virion and multiplicity of infection. Viral life cycle, viral pathogenesis in human, animal and plants, Plant viruses important from crop and vegetables in India, Common viral infections in India, new and emerging viruses in the world. SARS Corona virus, HIV, HCV, HBV, HAV, HEV, Parvovirus B19, Cytomegalovirus, Zika virus, Ebola virus, Vaccine research and recent trends in virology for jobs and career development. National Institutes of virus diagnostics centers and jobs in India and USA. Selected topics for review in Virology, Duration: 6 months

Comparative Genomics and proteomics studies on COVID19:

Database and ICTV, types of viruses based on Genome DNA and RNA, viral genome organization, protein sequence comparative antigen sequence, epitope mapping for antigen kit R&D, DNA and RNA sequence data analysis for conserved region test development for PCR and RT PCR, Viral genomics and proteomic for phylogenetics studies, variant detections using bioinformatics tools.

Similarities and differences in COVID19 variants. Past, present and predicted future of COVID19

Course content theory and protocols: ATG15 plus Review writing in viral diagnostics/ viral vaccines/ antiviral research/ prevalence and epidemiology.

Project design using above *in silico* protocol (work from home mode) in viral genomics and proteomics to generate data for final year project submission. Each student separate topic. Duration 6 months (Fees: Price on Request)

Key features while learning at ADEETECH

Original work and entirely new project designed for your needs based on your CV, current industry requirements in molecular biology, Initial training before starting of the project, guidance on review of literature, wet lab demonstration, individual handling of instruments, protocol set up, calculations and learning from failure and trouble shooting in molecular biology, publication in NCBI database as first author. (i.e. data generated will be published in Insilco database with first authorship for research student).

Benefits after completing research project from ADEETECH

1. Case studies of successful research students and faculties in last 15 years.
2. Recommendation for further job and PhD studies abroad along with sharing contacts of past students who are placed in India and abroad for guidance for MS / PhD studies abroad.
3. Complete guidance on PhD preparation in biotechnology and life sciences, including statement of purpose (SOP) for different universities in USA, UK, Europe and Australia and Canada, passport and visa guidance and CV preparation etc. with 50% discounted rates

For admission, send completely filled registration form to ADEETECHGENE BIOTECH PVT LTD. B 402 Thorve Vishva Commercial, Balewadi Road, Balewadi, Pune 411033. For more information, read registration form. Call +91 9921446321 or email to info@adeetech.com For further details of earlier projects and successful alumni, visit www.adeetech.com

Last date of admission : November 1st, 2021 Classes will be opened from 1st December 2021

Download registration form from <https://www.atgbiotech.com/training-programs>