Biotechnology Internship

ADEETECH®

- Medical Biotechnology
- Plant Biotechnology
- Plant Virology
- Molecular Microbiology
- Data Analysis: Human Genetics
- Bioinformatics : Human Virology and Genomics

Admission Process: Send scan copy of Reg. form, fees receipt to:

info@adeetech.com or WhatsApp 7020970265

Dr. Devendra Lingojwar has founded two companies, ADEETECHGENE BIOTECH PVT. LTD., (2018) ATG LAB (2007) and one Non-Profit NGO RESEARCH (2001). For sickle cell disease field work and for skill development in PCR genomics. These entities are pioneering in India. Along with skill development, these companies providing Academic research services and contract research projects in India in the areas of Molecular Biology covering various fields: Human Genetics and genomics, Molecular Microbiology, Plant Molecular Biology and Human Virology since 2007.

Dr. Devendra has contributed his services USA and INDIA in Human Genetics specifically in Sickle Cell Disease from simple field work-based epidemiology at National Institute of Immunohematology NIIH ICMR Mumbai India to complex plasma expander-based drug discovery program at Albert Einstein College of Medicine Yeshiva University and Montefiore New York City, NY USA. rDNA Vaccine and B19 virus discovery in India at National Institute of Virology – ICMR. Sickle Cell Disease as field work program through his own NGO and various collaborations. Teaching virology at DY Patil University and Beta thalassemia detection kit IRSHA Bharati University. More than 20 yearsof experience in Molecular Biology.

ATG……First Student Oriented brand in India established in 2007. Trained thousands of students and faculties from all over India and abroad including PhD's. Since 2007, with a decade of experience of providing guidance in biotechnology and life sciences, success stories from our laboratory are self-explanatory, why you should join our team for planning and building your career. Taking only merit student and absorbing in own R&D lab that's the trend of most of the established big labs in India. But the real fun is taking any student wherever they are, at present (irrespective of the marks, gap after marriage for girl students, caste, religion, region, language, color, race, ethnicity and nationality with full understanding of their real problems) and making their career.

Our aim is to provide very good research platform with full freedom for budding scientists. The vision and scientific aptitude we create among students in our lab boosts the confidence in graduate and post graduate students required not only in interviews and but also conducting effectively their actual duties in academics, R&Ds, biotech companies, jobs and career abroad. This will be a golden opportunity to build enough confidence before fresh student enter in job market. Exchange of ideas among the faculties, students and ADEETECH's student community on Facebook, LinkedIn and other social platform as well as past students who are working in USA and other countries. Most of our programs, be it a training or projects, proved beneficial for career guidance for fresh students who wants to go abroad. Contacts and guidance of these eminent persons in their field, with the bond we established, spanning more than a decade will be enough for building strong research profile before project completion.

ADEETECH provides variety of final year dissertation, final year research projects and fees-based internship training for minimum 6 months. Student will be paying fees for laboratory charges and it is based on course contents and not duration based. ADEETECH's premium services are for those who are planning to go abroad for further education, MS or PhD degrees, or at present serving as a faculty or international students and wants to finish hands-on training, can take these courses.

Perfect Timing Beautiful Execution

ADEETECH®
ADEETECHGENE BIOTECH PVT. LTD.

BIOTECH INTERNSHIP IN HUMAN GENETICS (Data Analysis Only)

One of the most appreciated projects by students who want to go abroad and want to make career in human genomics. A very rare course with equal weightage on data analysis and insilico bioinformatics..

Key features:

Theory: Review of literature, Scientists and institutions working in India and abroad, Status of India in the subject of interest. Calculations, Thesis writing guidance with support for PPT preparation.

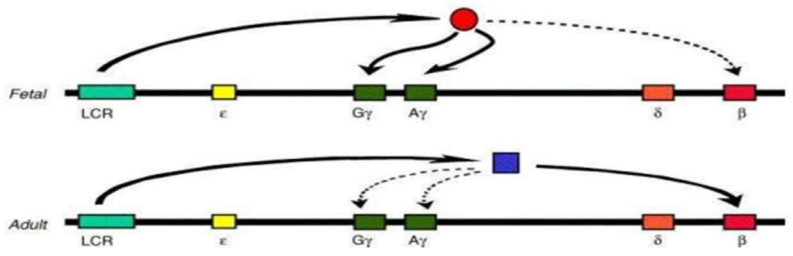
Data Analysis **/ Bioinformatics*in-silico* work:** Database **Selection of gene,** DNA sequence data analysis, Mutation studies for SNPs, Protein modelling etc.

Deliverables: Original research project, Career guidance for study abroad: USA and western countries.

Projects for PhD students and those who are going abroad and need strong recommendation in specific areas of research can take this program. B.Tech, M.Tech. in Biotechnology.

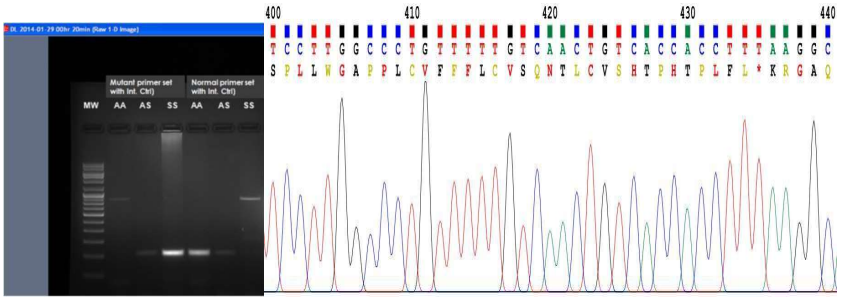
ATG1IN: Data Analysis / Bioinfo: HUMAN GENOMICS / VIROLOGY

Area of research: Human Genetics, Human Genomics and Human Virology
Fees: Rs. 116820/- (for study abroad only)



ATG2IN: Data Analysis / Bioinformatics HUMAN GENOMICS / VIROLOGY

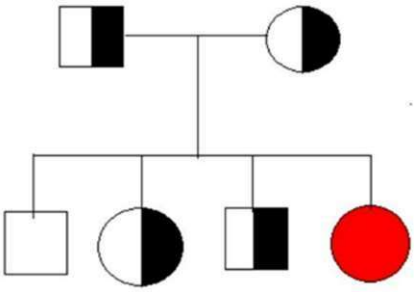
Area of research: Genetic Modifiers in Sickle Cell Disease in India
Fees: Rs. 77, 880/- (for study abroad only)



ATG3IN: HUMAN GENETICS

DNA DATA ANALYSIS / GENE FREQUENCYPREVALENCE STUDIES

Area of research: Earlier work published on Sickle Cell Disease
Fees: Rs. 60,000/-



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BIOTECH-INTERNSHIP PLANT MOLECULAR BIOLOGY AND PLANT

One of the most cost effective program for students and easy for project completion in minimum duration with lab studies. Appreciated projects by International students and faculties interested in Plant molecular biology. A very rare course on DNA barcoding and molecular markers with basic step and its intricacies which can be easily mastered at ADEETECH for any advanced technology later.

Key features:

Shifting from traditional RAPD RFLP to single gene DNA barcoding based on ITS2 , rbcl, matk, rpoB etc. For medicinal plants ITS2 is the best molecular marker for species level identification.

Theory: Review of literature, Scientists and institutions working in India and abroad, Current status of India in the subject of interest. Calculations, Reactions setup, Thesis writing guidance, PPT preparation, Mock presentation.

Practical / Wet lab protocols/ Bioinformatics *insilco* work: Database **Selection of gene,** Primer design, plant genomic DNA extraction, PCR standardization, Scale up PCR, Post PCR purifications, DNA electrophoresis, DNA sequencing sample prep, DNA sequence analysis, Mutation studies, Secondary structure prediction, Molecular Phylogeny.

Deliverables: Original research project, Career guidance for study abroad: USA and western countries.

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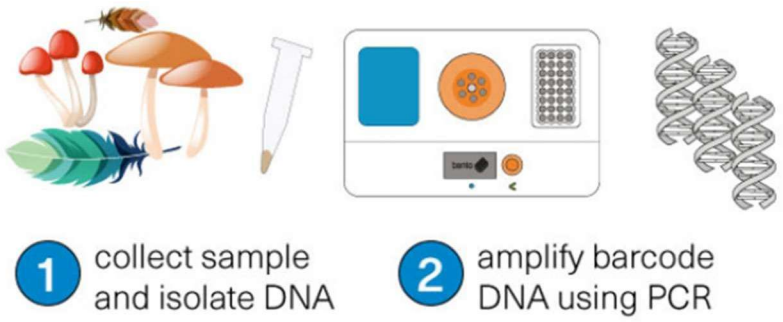
ATG4IN: PLANT MOLECULAR BIOLOGY

Area of research: Protein coding genes in plants of medical and agriculture

Fees: Rs. 116820/- (for study abroad only)

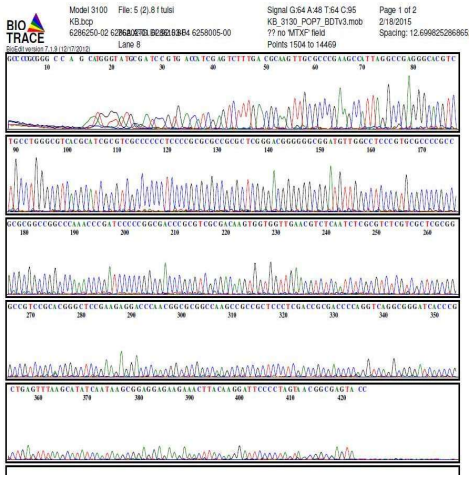


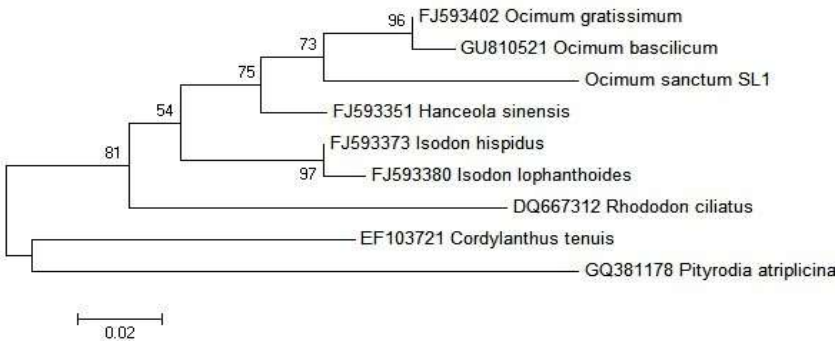
ATG5IN: PLANT GENETIC DIVERSITY

Area of research: Protein Non-coding genes for Medicinal Plant

Fees: Rs. 70, 000/- Two Plants Comparative Study (6 month certification)

Fees: Rs. 55,000/- Single Plant study (3 months duration certification)





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BIOTECH INTERNSHIP IN MOLECULAR MICROBIOLOGY

We started Molecular Microbiology in 2007 and completed hundreds of training programs and final year projects for M.Sc. B.Sc. M. Tech B.Tech projects. or any biotechnology student microbial handling is required for next level advanced technologies. This is most appreciated projects by International students and faculties interested in bacterial genomics and molecular biology. Key genes studied so far: 16S rRNA, rpoB, Cyt C, ATP Synthase etc.

Key features:

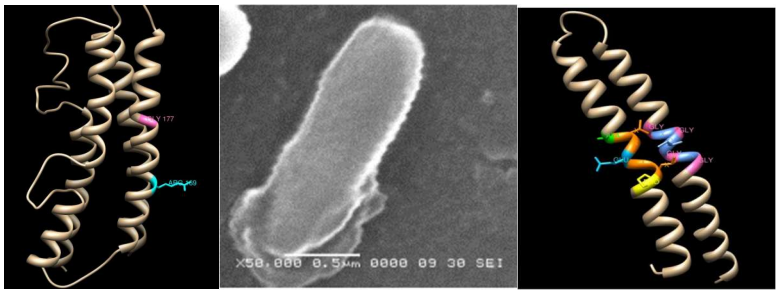
16S rRNA is the choice of molecular identificationand it's in practice for a long. However, unless more than 90% sequence is done and cover all hypervariable regions, only junk will be publishedon NCBI. Since 2007 we are working on majority of bacterial molecular identification based on all 9 hypervariable region, which helped many taxonomists to correctly report related species. In case few bacterial species could not get identified, alternative genes need to be explored. We have worked on rpoB for Bacillus cereus group bacteria. For bioenergetics, ATP Synthase and Cytochromewe are exploring, along with 16S rRNA and rpoB.

Theory: Review of literature, Scientists and institutions working in India and abroad. Calculations, Reactions setup, Thesis writing guidance, Assistance for PPT preparation.
Practical / Wet lab protocols/ Bioinformatics work: Database **Selection of gene,** Primer design, plant genomic DNA extraction, PCR standardization, Scale up PCR, Post PCR.

Deliverables: Original research project, Career guidance for study abroad: USA and western countries. Projects for PhD students and those who are going abroad and need strong recommendation in specific areas of research can take this program.

ATG6IN: MOLECULAR MICROBIOLOGY

Fees: Rs. 116820/- (for study abroad only)
Area of research: Protein Coding Genes e.g. rpoB, ATP Synthase, Cytochrome C based molecular characterization and bioenergetics projects.



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B_pseudo_OF4     -------MAFLGAAIAAGLAAVAGAIAVAIIVKATIEGTTRQPELRGTLQTLMFIGVPLA 53
B_clausii_KSM    -------MTELAIGIAAGLAAIGGAIGVAIIVKAVIEGTARQPEQRGTLQTLMFIGAPLA 53
Lysini_DL15      ---MTGSLGLLAAAIAIGLGALGAGIGNGLIVSKTVEGIARQPEARGVLQTTMFIGVALG 57
B_megate_DSM     -------MGLIASAIAIGLAALGAGIGNGLIVSKTIEGTARQPEARGTLTSMMFVGVALV 53
E_coli_K12       MENLNMDLLYMAAAVMMGLAAIGAAIGIGILGGKFLEGAARQPDLIPLLRTQFFIVMGLV 60
                       :  :. .:  **.*:...*. .::    :** :***:    * : :*:   *

B_pseudo_OF4     EAVPIIAIVISLLILF--- 69
B_clausii_KSM    EAVPIIAIVIAFLLFFMG- 71
Lysini_DL15      EALPIIAVVVAFIVMNK-- 74
B_megate_DSM     EALPIIAVVIAFMVQGK-- 70
E_coli_K12       DAIPMIAVGLGLYVMFAVA 79
                 :*:*:**: :.: :
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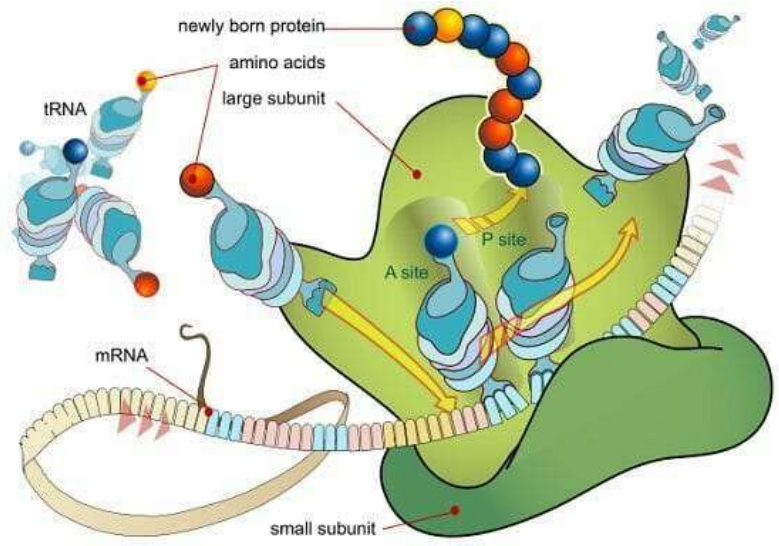
ATG7IN: BACTERIAL EVOLUTION

Fees: Rs. 75,000 Two Bacteria study
Fees: Rs. 60,000 Single Bacteria study

Area of research: 16S rRNA based ribotyping for molecular identification based projects.



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BIOTECH INTERNSHIP

IN MOLECULAR ENTOMOLOGY

After series of experimentation for private companies and contract research project we are providing molecular entomology as a subject area of interest for students who want to explore career in arthropod diseases or Arboviruses. Insects are the largest number of living organisms and more than 9 million species are existing on the Earth.

Key genes studied and planned for student's projects: ITS 2 and COX I

Key features:

Cytochrome Oxidase I (COXI) is the choice of molecular identification for insects and its in practice for a long. We are providing projects based on COX I, ITS2 and ITS2 with RFLP or DNA Sequence based RPLP.

Priority insects are vectors of Malaria and Dengue.

Theory: Review of literature, Scientists and institutions working in India and abroad. Calculations, Reactions setup, Thesis writing guidance, PPT preparation, Mock presentation.
Practical / Wet lab protocols/ Bioinformatics *insilco* work: Database **Selection of gene,** Primer design, plant genomic DNA extraction, standardization, Scale up PCR, Post purifications, DNA electrophoresis,

sequencing sample prep, DNA sequence analysis, Mutation studies, Secondary structure prediction, Molecular Phylogeny.

Deliverables: Original research project, Career guidance for study abroad: USA and western countries.

ATG8IN: MOLECULAR ENTOMOLOGY

Fees: Rs. 116820/- (for study abroad only)
Area of research: Protein coding genes Cytochrome

ATG9IN: INSECT EVOLUTION

Fees: Rs. 79,900/- Two Insect Study
Fees: Rs. 62,500/ Single Insect Study

Area of research: ITS2 and other DNA sequencing-based DNA barcode genes

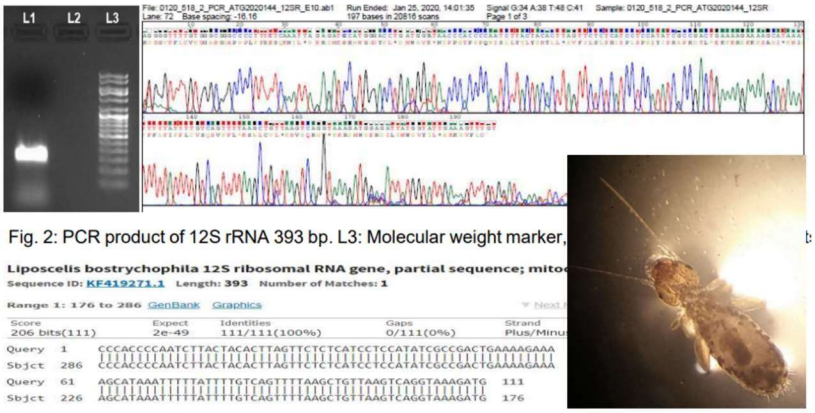
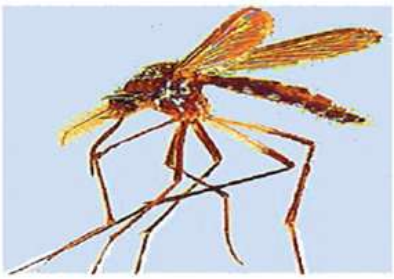


Fig. 2: PCR product of 12S rRNA 393 bp. L3: Molecular weight marker,

Aedes aegypti

Aedes albopictus

Aedes polynesiensis


Aedes niveus

ATG10IN: VIRUS EVOLUTION

Area of research: Pandemic Preparedness skill development with projects on All Risk Group (RG) viruses BSL1 to BSL4

INTERNSHIP IN APPLIED BIOINFORMATICS FOR MOLECULAR VIROLOGY

First time in India

Virology Education for anyone interested in Virology with any science or engineering degree.

Virology Basics: 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, Antigen test, antibody test, ELISA recent and past infections and types of ELISA, Virus neutralization tests, virion and multiplicity of infection. Viral life cycle, viral pathogenesis in human host. Significant Plant viruses.

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. HEV and Dengue.

Duration: 3 to 12 months depending on biosafety level of viruses

Bioinformatics for Virology: 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 RT PCR Tests, 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.

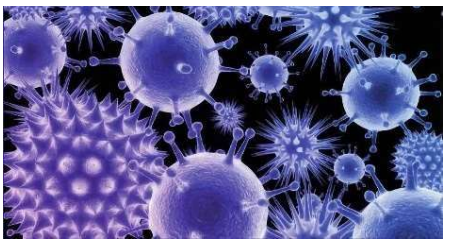
Deliverables: Original research project in applied Bioinformatics for Virology. Very Unique course in virology by online /offline mode**:** For final year studentsin Biotechnology, Microbiology and any other field of Science and Engineering who are interested to make career in Virology.

Most excited area post COVID19 Pandemic.

ATG 10IN BSL1 i.e. Risk Group 1 Virus:

Bovine Respiratory Syncytial Virus, Duck Hepatitis Virus

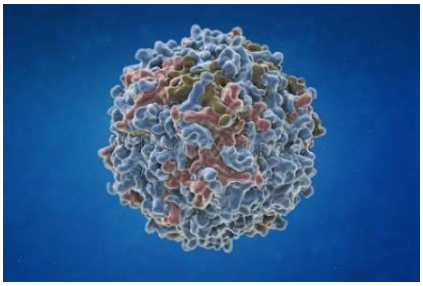
Fees: Rs. 35,000/-



ATG 11IN BSL2 i.e. Risk Group 2 Virus:

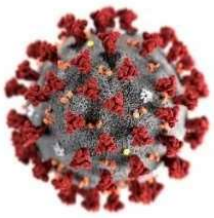
Parvovirus B19 and all Parvoviruses, All Hepatitis viruses.

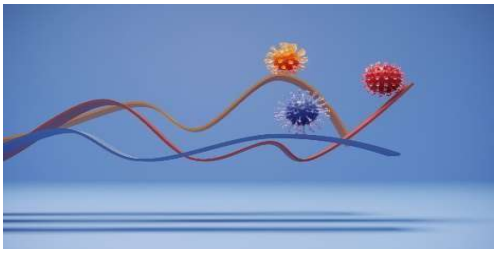
Fees: Rs. 65,000/-



ATG 12IN BSL3 i.e. Risk Group 3 Virus:

Influenza, SARS1 and SARS2 COVID19, HIV, Dengue viruses.Fees: Rs. 85,000/-

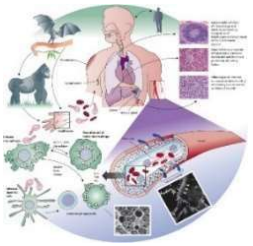


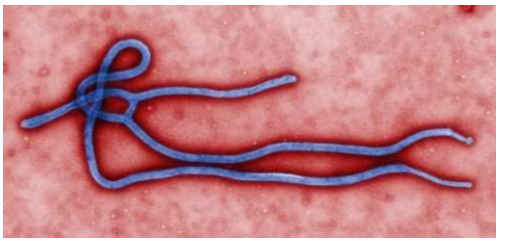


ATG 13IN BSL3 i.e. Risk Group 3 Virus:

Ebola, Marburg, Lassa Fever, Rift Valley Fever, FMD

Fees: Rs. 99,000/-





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BIOTECH INTERNSHIP
ADEETECH's Medical Biotech INTERNSHIP PROGRAM

First time in India

Medical Biotech Projects for anyone interested in Molecular Biology with any science or engineering degree.

Host Vector Virus Parasite relationship Basics: Molecular Biology of Viruses, Parastates, Vectors with reference to host genome. Initial focus on vector genes as primary project followed by which infectious agents it harbors virus parasite etc.

Duration: 6 to 12 months depending on progress of the project . Ideal for Medical Biotech B.Tech, M Tech, MSc.

This program will be purely wet lab based or Combination of Bioinformatics in later part as routine project. Additionally based on interest of student initial bioinformatics part is also available as pet readiness to invest time and money for the academic interest in the subject of molecular biology.

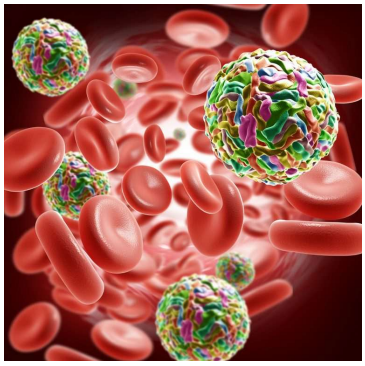
Students will handle primarily non human samples only but related to medical biotech and work will be based on genes of :
MOSQUITO:
VIRUS
PARASITE

Deliverables: Original research project in wet lab along with applied Bioinformatics .

ATG 14IN/15IN/16IN:
Medical Biotech Projects

Fees: Rs. 116820/- (for study abroad only)
Bioinformatics + Biotech wet lab
Fees: Rs. 77880/- (for study abroad only)
Only Biotech wet lab based

ATG14IN Mosquitoes: Cyt P450, Stress Response (Insecticide Resistance, HSP90).
ATG15IN: Viruses: RdRp, env,
ATG16IN: Parasite: Pfcrt (Chloroquire resistance gene), Pfmdr, Gametocyte marker genes, Cyp2 etc.



CONTACT

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info@adeetech.com
www.adeetech.com

FEEDBACK AND TESTIMONIAL FROM OUR PAST STUDENTS, INTERNATIONAL FACULTIES AND STUDENTS

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Social sites and our studies
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https://www.ncbi.nlm.nih.gov/nuccore/?term=lingojwar

https://scholar.google.com/citations?user=tsq9ab0AAAAJ&hl=en&oi=ao

https://www.researchgate.net/lab/Devendra-Lingojwar-Lab

Research and social activities

www.sicklecelldiseaseindia.org

www.adeetech.com

REGISTRATION FORM

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Student ID No. ADEETECH/20……-……/_____ /_____

Faculty / Scientists / Student's details

Paste Passport Size front facing color photograph here

Name……
Passport /Aadhar Card No…..……..……Nationality……
Date of Birth…… Male / Female

Imp Note: If the intention of the foreigner is to stay for more than 180 days, he/she should get himself/herself registered with the Foreigners Registration Officer concerned. (For more details please visit, https://indianfrro.gov.in/eservices/home.jsp)

Father's / Husband's name……
Contact No (Landline and mobile)……
Permanent address……
……Country……
Class & Semester / Year ……(B.Sc./ M.Sc. / B.Tech. / M.Tech / MS / BE / MBA Biotech etc)
Degree / Institution / College / University details with address
……
……

Please tick (✓) what is applicable:

Dissertation / Final Year Project	Graduate and Post Graduate Internship	Training for Indian Students	Training for International students / faculties	PhD program lab services

Candidate's contact details: Email Mobile:

Duration: ……Days / Months. Dates, from…… to…… **Candidate's Signature**

Required documents for Registration:

***1.* Completely filled registration form along with lab fees transaction proof** *(For All Services)*
2. Photocopy of ID proof: Any one (Aadhar card/ PAN/ Driving License/Voter ID/ Passport etc.)

Details of online payments: (However, Google pay/ Cash also accepted).
Account Name: ADEETECHGENE BIOTECH PRIVATE LIMITED (18% GST Applicable on fees mentioned)
Bank: Bank of Baroda, Aundh Branch Pune
Account Number: 386 002 000 002 29 **IFS code:** BARB0AUNDHX **Swift Code:** BARBINBB
Registration Process: Send this filled registration form along with above documents and receipt of the online fees paid i.e. 100% of the total fees (as per pricelist) to info@adeetech.com

1. All research projects are individual basis. Guidance will be provided for entire project; however, thesis writing for projects or internship or training report writing is a responsibility of research student / interns. Additional paid service for thesis writing can be made available through our faculties, in an exceptional case where final year research students can not complete thesis writing in time, due to medical emergency or any other unavoidable circumstances. No data can be used for publication without consent from ADEETECH and without corresponding authorship of ADEETECH as principal place of research.
2. Students / Faculties agree that knowledge of any product or services of our company they gain at ADEETECHGENE BIOTECH PRIVATE LIMITED (ADEETECH®) is an intellectual property of ADEETECH® and they don't have right to share these details after completing their work at ADEETECH® to individuals or companies other than ADEETECH®
3. Fees: All student agree that they will do 100% advance payment or post-dated cheques to avoid payment follow-up.

Details of online payments:

For NEFT, IMPS: online payment through bank

Account Name: ADEETECHGENE BIOTECH PRIVATE LIMITED

Bank: Bank of Baroda, Aundh Branch Pune
Account Number: 386 002 000 002 29
IFS code: BARB0AUNDHX

(UPI: Google pay/ Phone Pay also accepted).

IMPORTANT Note:

Fees for any project is designed as per course content irrespective of duration. All projects are categorized under different fees structures and their brief course details are mentioned here:

1. **Premium category internship M. Tech. for upto 10 months**
   Fees Rs. 116820/- plus 18% GST Extra for study abroad only and for M.Tech. final year project in India
   This internship will have initial applied bioinformatics part with reference to genomics, finding gene in genome, primer design, working on designed primers for gene of interest from whole genome. This part is unique in this course content of premium project and not included in remaining two types of project. This part will be followed by wet lab i.e. working on gene of interest starting from primer standardization, DNA isolation, PCR, Gradient PCR for Tm standardization, Scale up PCR, DNA sequence data analysis based on nature of project i.e. SNP studies or protein molecular Modeling.

2. **Internship with thesis for M.Sc. /B. Tech. /M Tech. for 6 months**
   Fees Rs. 70,000/- onwards* plus 18% GST Extra
   Project starting from DNA extraction onwards. Protocols included here, DNA extraction, PCR, DNA sequencing, Phylogenetic analysis, structure prediction-based database available. SNP match studies, Phylogenetic tree of 16SrRNA in bacteria or ITS2 secondary structure prediction in medicinal plants etc. For 6 months Vs 3 months projects there is clear cut differences e. g. Agri biotech project we will consider comparison of two medicinal plants for 6 months duration which is suitable for Post graduation.

3. **Internship with thesis / Mini Project for B. Sc. / B.Tech / M.Sc./ M.Tech 3 months**
   Fees Rs.55,000/- onwards* plus 18% GST Extra
   Project starting from DNA extraction onwards. Protocols included here, DNA extraction, PCR, DNA sequencing, Phylogenetic analysis, ITS2 studies on plant samples or phylogenetic analysis of 16S rRNA. In short duration and as per fees mentioned above one plant is sufficient for 3 months project. Agri biotech project we will provide in-depth study of single medicinal plants for 3 months duration which is suitable for graduation or any mini project internship for 3 months duration.

4. **Internship for B. Sc. / B.Tech / M.Sc./ M.Tech**
   Fees Rs. 20,000/- for 1 month and Rs. 40,000/- for 2 months plus 18% GST Extra
   This will be an internship for one month / two months duration only. No thesis is will be provided in this very short of time internship, Only training certificate will be provided, however, more protocols are added as compared to research project since there is no repetition of protocols in this one-month training. Following genomics based wet lab plus bioinformatics will be provided under one month internship: Course contents for **workflow-based experiments for DNA Barcoding:** NCBI Database and finding gene is genome, Primer designing assignments, DNA extraction, PCR, DNA electrophoresis, DNA Sequencing data analysis (Sanger modified DNA Sequencing method) NCBI and ITS2 Database for species level identification, NCBI BLAST data analysis, Molecular Phylogenetic analysis using MEGA software. SIGNIFICANCE: At the end of this program any Biotechnology/ Lifesciences student will able to start research project independently in any lab or in employment in genomics.

5. **Ph.D. contract research / from research proposal to guidance with publication**
   Duration: (Excluding planning or Pre PhD proposal and post wet lab work for publications) 1 year only wet lab work Rs. 4,00,000/- to 5,00,000/-.
   All above areas in Molecular Biology including, human genetics and genomics, Plant Molecular Biology, Plant Virology, Molecular Microbiology, Molecular Entomology, Bioinformatics for human Virology. First authorship Rs. 5,00,000/- (in all formats: NCBI Database, Conference abstract and journal publication). Groups authorship Rs. 4,00,000/- (in all formats: NCBI Database, Conference abstract and journal publication).
   Important Note: 1. For any project in which human subjects are involved, ethical clearance and all regulatory part is the responsibility of host university and PhD guide of that specific PhD student. 2. Publication charges if any by the journal is not included in the fees mentioned for any of the project, will be separately charged as an actual. 3. Duration of wet lab related work can be more than one year and based on how planned project works, extends delays. 4. Any additional cost extra if more work needs to do based on PhD students / PhD guide expectation other than planned project submitted with mutual understanding of ADEETECH PI, PhD student/ PhD guide or any other factor or need of the logical completion of the PhD work based on RR Committee's decision or recommendation. Intellectual Property (Publications, Patents) is protected for ADEETECH as co guide for PI from ADEETECH for all PhD projects originated at ADEETECH, if topic is generated by PI / co-guide of ADEETECH on request by PhD student/ PhD guide for any university.

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