



Dr. DEVENDRA LINGOJAR
Ph.D. Biochemistry (INDIA)
Post Doc Hematology – Medicine (USA)

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Ph.D. Biochemistry and Post Doc in Medicine with 19 years of experience in Molecular Biology: R&D, Genomics, Viral Diagnostics, Viral Vaccine, Protein Engineering, Protein Therapeutics, Protein Purification and Drug Development.

Nationality: Indian

Date of Birth: October 18, 1975

Present Location: Pune, INDIA

AIM: To explore *Molecular Biology* for providing solutions for diagnostics and therapeutics

EDUCATION

1. Ph.D. Biochemistry: University Department of Chemistry, University of Pune, Pune, India (May 2009 to Oct 2013)
Ph.D. thesis title: *Molecular Identification of Bacterial Species from Pristine Alkaline Crater Lake, Lonar and Molecular studies of “a” and “c” chains of Fo subunit of ATP Synthase Gene*
2. M.Sc. Biotechnology: SRTM University Campus School of Life Sciences, Nanded, India (Jul 1997 to Jun 1999)
M.Sc. thesis title: *“Studies in the resistance of malaria parasite to antimalarial drugs: A case study of Nanded city”*
3. B.Sc. Biology with Chemistry, GN College of Science, Ballarpur, Nagpur University, India (Jul 1993 to Jun 1996)

AWARDS, HONORS, AND FELLOWSHIPS

1. “Distinguished Bioentrepreneur 2020” by Microbiologists Society, India (2021) *“Contributions in the time of COVID19 pandemic for lab BSL2 lab setup for COVID19 diagnostics, phase I and phase II Clinical Trials and overall impact in the field of microbiology”*
2. Best oral presentation “Int. Conf. on Revolution of Lab Med. in Molecular Biology” NIIH ICMR, Mumbai, India (2017) *“PEG Recombinant Albumin is a novel second generation active plasma expander: Role of pattern of PEGylation in inducing molecular, solution and SCD therapeutic activity of PEGAlb”*
3. “Post-Doc Fellowship in Medicine” by Albert Einstein College of Medicine New York, USA (2014)
“Research in the development of therapeutic reagents for sickle cell disease”
4. “DHYAS foundation 2012” by Excellence group, India in Health and Environment safety as Team Leader (2012) *“Best NGO in the state of Maharashtra in the field of Health and Environ safety category” awarded for contribution in Sickle cell disease in Maharashtra.*
5. “Research Fellowship in Virology” by Indian Council of Medical Research (ICMR), New Delhi, India (2002) *“Generation of infectious cDNA clone for hepatitis viruses for recombinant DNA vaccine research”.*

RESEARCH EXPERIENCE

1. Senior Scientist Molecular Biology: ADEETECH® (Oct. 2018 onwards)
2. Post Doc. Research Fellow in Medicine - Albert Einstein College of Medicine, New York USA (Jul 2014 to Jul 2016)
3. Scientist Molecular Biology: ATG LAB Pune, (Oct 2007 to Oct 2018, except PhD and Post Doc duration)
4. Scientific Staff Protein Biochemistry: (Project Assistant-II) IRSHA, Bharati Vidyapeeth University Pune, (Jan 2006 to Jan 2007)
5. Principal Investigator in Sickle Cell Disease - RESEARCH Pune, India (Jul 2005 to Dec 2005)
6. Senior Research Fellow in Virology: National Institute of Virology (ICMR New Delhi) Pune, (Jul 2002 to Jun 2005)
7. Research Fellow in Biochemistry: University of Pune - Pune, (Oct 2000 to Jun 2002)
8. Laboratory Technician Hematology, Genetics: B.J. Medical College – Pune and NIIH Mumbai, INDIA (Sep 1999 to Oct 2000)
9. Laboratory Technician, State Malaria Department, DMO, Chandrapur (Sep 1996 to Feb 1997)

TEACHING EXPERIENCE

1. Asst. Prof. : Dr. D.Y. Patil Biotech and Bioinfo Institute - Pune, (Jan 2007/Aug 2007) for “Molecular Virology”
2. AssT. Prof. : Indian Institute of eBusiness Management for MBA Biotech (Aug-Sep 2007) for “Business in Biotech”

SCIENTIFIC ADVISOR / TECHNICAL CONSULTANT FOR MOLECULAR DIAGNOSTICS AND VIROLOGY

1. Novel Institute of Management Studies, Pune: Scientific Consultant and Principal Investigator, (May 2023 onwards).
2. EON Biotechnology UK, for COVID19 regulatory documentation, RTPCR, Rapid Antigen (Oct. 2020 to Dec 2021)
3. NMB Therapeutics Inc, New York USA: COVID19 Therapeutics (May 2020 to Dec 2021)
4. House of Diagnostics Delhi, India. BSL2 Lab design for COVID19 testing (Nov to Dec 2020)
5. Anabio Bengaluru, India, BSL2 design and project proposal till recruitment for mask testing against COVID19 (Jun to July 2020)
6. Government Medical College Baramati India: COVID19 BSL2 lab design to making it functional (Apr 2020 to Jun 2020)
7. SSLS, Pune India: Virology Biosafety lab BSL2+ establishment: concept to design (Oct 2018 to till date)
8. NVBDCP Surat, India: Dengue Virus serotyping by qualitative and Real-Time PCR diagnostics (Jun 2019 to Oct 2018)
9. PRADO Preclinical Pvt. Ltd. Pune, India: Adventitious agent's testing for private pharma companies (Oct 2017 to Dec 2018)

CONTRIBUTION AND ACCOMPLISHMENTS

(With study design, execution, analysis, reporting, presentation, publication, plus business development)

1. ADEETECH® (Academic projects and industrial CRO services in startup, biotech business)

A. Human Genetics and Genomics : Research projects

Academic research and skill development in Biotech and Life sciences: 1. Genetic Modifier studies in sickle cell disease, clinical genomics, and 2. Molecular haplotyping studies in Indian Sickle cell disease patients from Palghar Maharashtra, 2016 onwards.

Academic and industrial lab services: CRO services for skill development in Biotechnology and Applied Bioinformatics specific in Molecular Biology, PCR Genomics, DNA barcoding etc. in Human genetics and genomics, Molecular Microbiology, Plant Molecular Biology etc. Conference, workshops, training, Internship, Dissertation and PhD guidance in above areas of research.

Biotech workshops: DNA barcoding of medicinal plants, Sickle cell and thalassemia field testing, NESTROFT for thalassemia and solubility test for sickle cell anemia. Hb electrophoresis for onsite testing. Bacterial identification and plant identification by PCR.

B. Human and Plant Virology : Research projects

COVID19 Pandemic, Clinical trials (as Central Lab): Phase II clinical trials for Dr. Reddy's Lab including lab work to sample shipment and logistics, Coordinating pan India with 10 clinical sites, Viral load analysis and reporting to sponsor (antiparasitic drug repurposing for COVID19 (Aug to Oct 2020), Phase I clinical trials pharmacokinetics and pharmacodynamics for MedRegneCo USA, for COVID19 drug discovery. **BSL2 Lab setup** for Government and private sector for COVID19 Diagnostics and BSL2 lab for model Coronavirus testing (Mar 2020 to till date for post COVID19 readiness in future). **Scientific Consultant Virologist** for Rapid Antigen and RTPCR kit documentation for USFDA, WHO dossiers submission EONBT UK (Oct 2020 to Dec 2021), **COVID19 B2B services:** Antiviral testing, RTPCR and Antigen kits (RT PCR kit design, Business development and Antigen kit supply to local government bodies: Diagnocure, Angstrom Biotech, Phase Scientific,(HK). Human parvovirus B19: BSL2.25 lab development in collaboration with SSLS Pune for B19 virus VLP based vaccine design for sickle cell affected pediatric population. **Plant Virology: Papaya Ring Spot Virus (PRSV)** primer design, RNA extraction and DNA sequencing and data analysis

C. Plant, Bacterial and insect Molecular Biology : Research projects

Academic research and skill development in Biotech and Life sciences: 1. ITS2 based DNA barcoding of Indian medicinal plants as a research projects for agri biotech, M.Sc. Biotech students 2. Contract research for academia and industries for ITS2 based plant DNA barcoding studies. 3. Insect molecular identification using ITS1 and ITS2 PCR and DNA sequencing 4. Bacterial identification service using 16 S rRNA PCR and DNA sequencing and phylogeny for molecular taxonomy studies for industry and academic services. 5. Academic training project and workshops in plant, bacterial and insect DNA testing services.

D. Training program/ Internships/ Hands on workshop on site

Biotech training program: Total 15 programs for graduates, post graduates, PhDs and International faculties

Biotech Workshops and Internships: Hands on workshop on site and one- and two-months internships for student across India.

2. Albert Einstein College of Medicine New York, USA (R&D project Drug development: Human Genetics)

Plasma expander-based drug designed using protein engineering, compared two isomers of PEG-Albumin. Using intravital microscopy and examined in transgenic Sickle Cell Disease (SCD) mice. Highly compact plasma expander due to higher packing density and compactness, induces more colloidal osmotic pressure and resolves vaso-occlusive crisis (VOC) better than the other molecules.

3. National Institute of Virology, NIV - ICMR Pune, India (R&D project Drug development: Human Virology)

First time reported - Human Parvovirus B19 virus in Indian SCD patients using serology and genomics. First time established SCD affected tribal sera bank in India for virus and antibody testing in Indian tribal population. Contributed for Dengue virus projects during Dengue outbreak in 2003 in Pune district: Dengue virus platelet assay for FCγII receptor, Generation of Hepatitis E virus infectious cDNA clones for rDNA vaccine, Chandipura virus NT test etc.

4. ATG LAB, Pune, INDIA (Academic projects and industrial CRO services in startup)

Provided transferable skills in molecular biology including PCR genomics and DNA barcoding in bacteria, plants, viruses, human and parasites. Skill development in Biotech PCR genomics: 100+students in 6-month projects,300+ students in training, 400+ students in workshops. General administration, staff training, course and content development. Provided consultancy with lab services to pharma and biopharma companies for adventitious agent testing (22 viral and non-viral adventitious agents testing panel in duck and swine), Provided R&D services to academic institutes. Guidance to M.Sc. and Ph.D. students with publications as guide and co-guide.

5. Regional Society for Education and Research in Community Health (RESEARCH), Pune INDIA (Non-profit, for human genetics studies in NGO)

SCD epidemiology (10,000 tested till date), clinical genomics, genetics modifiers and molecular haplotyping. Grant writing and submission, lab establishment in the rural tribal area, training staff, Arranging Diagnostic camp, Marriage Counseling and Genetic Counseling for prenatal diagnosis, SCD clinical management. Project idea, training students, data analysis and troubleshooting

6. Interactive Research School for Health Affairs, Bharati Vidyapeeth University – Pune, INDIA (Nutraceuticals for Beta thalassemia, ADHD and type 2 diabetes: Omega 3 fatty acid and cardiovascular marker studies)

First Time Reported- Mg deficiency in type 2 diabetes, which gained most of the citations in micronutrient deficiency in type 2 diabetes. Beta thalassemia field level screening test development (award: Lockheed Martin Gold Medal). Conducted research on these two prominent projects, diabetes and beta-thalassemia.

7. Biochemistry Division, Chemistry Department, University of Pune - Pune, INDIA (Entry level academic basic research which leads to PhD studies with same guide at later years)

Initial work on alkaliphiles formed the basis of Bioenergetic studies: Molecular aspects of ATP synthase about thermodynamically challenging proton uptake in Alkaliphile. First Time Reported: no specific amino acid residues in ATP synthase is required for bacteria to grow at high pH. PhD studies application: Bioenergy generation

8. B.J. Medical College – Pune and NIIH ICMR Mumbai, INDIA (Entry level job which made my way to human genetics studies in future career)

Contributed to the first-ever multicentric project amongst Primitive Tribal Population of India on SCD by ICMR. Fieldwork and lab establishment in tribal areas, population screening for genetic analysis, diagnosis of hemoglobinopathies-Beta Thalassemia, SCD, HbF and G6PD deficiency in tribal areas by arranging camps. Sample preparation for further molecular tests at NIIH Mumbai.

9. District Malaria Office, Chandrapur, Maharashtra, INDIA (First job introduced me to tribals health in India)

Established first malaria testing lab in Jiwati mother PHC. Worked mainly on faciparum malaria in malaria endemic region.

RESEARCH PROJECTS: HUMAN GENETICS: Sickle Cell Disease: HbS, HbE and Beta Thalassemia etc.

1. Intervention program on nutritional anemia and hemoglobinopathies in Indian primitive tribes
2. Sickle Cell Disease (SCD) epidemiology studies in Western India and Central India
3. Prevalence and pathogenesis of B19 virus in Sickle Cell Disease affected tribes in Western, Central and Southern India
4. Sickle Cell Disease prevalence studies in Eastern India (Chhattisgarh) and Central India (Maharashtra)
5. Sickle Cell Disease epidemiology studies of tribal and non-tribal population groups from Central and South India
6. Beta thalassemia POC diagnostic kit development: Lockheed Martin Gold medal awarded project for point of care assay development
7. Single blood drop technology for diagnosis of homozygous Sickle Cell Disease (Maharashtra) point of care assay development for Sickle Cell Disease
8. Variation of abnormal hemoglobin: Sickle Cell Disease hemoglobin (HbS), Hb E and HbAJ in Durg Chhattisgarh
9. Research in the Development of Therapeutic Reagents for Sickle Cell Disease (at EINSTEIN, New York USA)
10. Clinical genomics study of Indian Sickle Cell Disease patient with high fetal hemoglobin (Ongoing)
11. Sickle Cell Disease genomics-based haplotype studies: Fetal Hb > 20% Vs HbF < 5% (Ongoing)
12. Conducting status survey of SCD and issuance of cards to tribal students in schools and hostels in Maharashtra (Ongoing)

RESEARCH PROJECTS: HUMAN VIROLOGY: Dengue, HEV, Parvovirus B19, HHV6, CMV, COVID19 etc.

1. Prevalence and pathogenesis of human parvovirus B19 in sickle cell affected population
2. Generation of infectious cDNA clones for hepatitis E virus for developing rDNA vaccine
3. Viremia and altered platelet aggregation: early triggers of thrombocytopenia in Dengue virus infection
4. Prevalence of HHV6, CMV and B19 virus in aplastic anemia cases from KEM hospital Mumbai
5. Preparation of tribal sera bank at ICMR NIV for sickle cell anemia affected tribes for different viruses
6. Neutralizing antibodies against Chandipura virus in Western Indian tribal population affected by Sickle Cell Disease
7. Human Herpes Virus 6, Cytomegalovirus and Human Parvovirus B19 virus in aplastic anemia cases in KEM Mumbai
8. Serotype analysis of Dengue virus from Western India Surat NVBCDP, Gujarat
9. Novel Coronavirus SARS 2 COVID19: Diagnostics and Therapeutics: Lab set up Maharashtra Govt. Medical college, Private labs in Delhi and Bengaluru, Regulatory documentation for kits, (EONBT, UK), Clinical trials for COVID19 Viral load phase II (Dr. Reddy's Lab, INDIA) and KIT preparation of Pharmacokinetics and pharmacodynamic studies phase I (MedRegen USA), etc. (since 2020 to 2022).

RESEARCH SKILLS AND EXPERTISE

A. Molecular Biology: Diagnostics and Therapeutics: Virology and Bacteriology

Viruses studied: Dengue, Hepatitis E virus, Human Parvovirus B19, HHV6, CMV, COVID19

Bioinformatics for viral and bacterial gene studies, primer design for PCR and primer and probe design for Real Time PCR, protocol standardization, DNA, RNA and protein extraction by manual and kit based protocols, PCR, Reverse Transcriptase PCR, Real-Time PCR (Eppendorf, Applied Biosystems, MJ mini, Bio-Rad), ELISA and virus NT, cloning and gene expression for infectious cDNA clones, Maxi and Miniprep of DNA, Viral molecular taxonomy and phylogeny, Viruses studied: Dengue, Hepatitis E virus, Human Parvovirus B19, HHV6, CMV, COVID19 for Real Time PCR Kit development, primer and probe design using RdRp and E/S/N gene, Bacterial 16S rRNA molecular phylogeny. Viral and Non - Viral infectious agents testing for pharma companies: viruses, bacteria, fungus and mycoplasma under adventitious agent testing (22 test panel of swine and duck viral and non-viral agents), Viral peptide design B19 virus, Platelet assays for Dengue virus, Dengue Virus serotyping by Real Time PCR and malarial parasite genotyping by Sanger's method. Negative staining for Transmission electron microscopy, virus isolation by animal cell culture e.g. HepG2 cell line and co-culture with primary liver culture for Hepatitis E virus. Acute and chronic phase viral peptide synthesis etc. Viral and Bacterial rDNA technology and genetic engineering, PCR amplified product cloning, TA clone, Transformation, Restriction digestion of PCR product and plasmid, screening of blue white colonies, colony PCR, Sanger sequencing and sequence analysis, submission to NCBI, protein conjugation and protein purification for viral vaccine studies etc.

B. Immunodiagnosics and molecular diagnostics: Virology: Human Parvovirus B19

Human Parvovirus B19 prevalence in SCD patients, Tribal sera bank for viral prevalence and blood component separation: Plasma, RBC, PBMC; DNA, protein isolation, PCR and Sanger's DNA Sequencing, Multiple Sequence alignment and phylogeny, IgM ELISA, IgG ELISA for establishing Transient Aplastic Crisis in sickle cell disease patient, for the first time in India using genotyping of the virus.

C. Protein Engineering and Protein Therapeutics: Hematology Genetics: Sickle Cell Disease

Protein modification by PEGylation chemistry for plasma expander based protein therapeutics, human Albumin and recombinant Albumin modification using Cys34, purification and characterization, Analytical and preparative chromatography i.e. Size Exclusion Chromatography (SEC), Ion Exchange Chromatography (IEC), (Mono Q), DEAE, CM52), Amersham Pharmacia Biotech FPLC AKTA Basic and AKTA purifier preparatory system with Unicorn 7 software for scale-up of protein products, Colloidal Osmotic Pressure and Viscosity studies, molecular radius by Dynamic Light Scattering (DLS), Thermal Transition protein folding studies by Digital Scanning Calorimetry (DSC), MALDI TOF Mass Spectra data analysis, Final product development and preclinical trials on transgenic SCD mice models, BERK and NY1DD by intra vital microscopy.

D. Epidemiology, Diagnostic and Clinical Studies: Hematology Genetics: Sickle Cell Disease

Fieldwork preparation in tribal areas, lab set up in the field, IV and finger-prick blood collection, blood component separation, processing for plasma/sera bank, RBCs and PBMCs; DNA and protein isolation, Solubility test and Hb electrophoresis, NESTROFT for thalassemia, Fetal Hb estimation by Sanger's method and Bio-Rad HPLC Variant,

Pedigree analysis and gene frequency studies, marriage counseling for sickle cell carrier population, prenatal diagnosis by ARMS PCR, genetic counseling.

E. Clinical Genomics: Sanger's DNA sequencing for Hematology Genetics Sickle Cell Disease

Polymorphisms in cis acting elements in beta globin gene cluster for BCL11A using Sanger's DNA sequencing and sequence analysis: Human genome map studies for beta-globin cluster region primer designing, PCR amplification of exon 1, exon 2 and exon 3 of Beta Globin (HBB), A Gamma Globin (HBG1) and G Gamma Globin (HBG2) with their promoter and introns regions, DNA sequencing by Sanger's method for clinical genomics studies, Analysis of clinical biochemistry, HbF level and reporting of SNPs.

Beta globin haplotype studies using Sanger's DNA sequencing and sequence analysis: Sickle Cell Disease

Xmn I (G γ region), Hinc II (ϵ region, 5' $\psi\beta$ and 3' $\psi\beta$), Hind III (A γ region, and G γ region), Rsa I (5' β), Ava II (β) and Hinf I (3' β) etc.

CONTRIBUTIONS IN RESEARCH

Molecular Biology: Virology, Microbiology and Human Genetics

1. First time reported **Human parvovirus B19** associated transient aplastic crisis in Sickle Cell Disease patients in India, sequence data will be significant for global B19 viral vaccine for humans.
2. Basic research on bacterial adaptation studies at alkaline pH from Pristine alkaline Lake, Lonar, applications in bioenergy generation better option than solar energy.
3. Developed single blood drop technology for mass screening for **Sickle Cell Disease** for cost effective testing, proposed to Health Ministry Govt. of India.
4. Conducted NGO based projects for understanding epidemiology of **Sickle Cell Disease** in India
5. Trained more than one thousand biotech students in Molecular Biology (mostly PCR genomics and Sanger's DNA sequencing chromatogram data interpretation and data analysis using bioinformatics online tools and software) with wet lab facilities for 8 plus years.

SCIENTIFIC CONTRIBUTIONS AND ACADEMIC ACTIVITIES

A. Workshops conducted in Molecular Biology and genomics: 13 workshops 550+ beneficiary (2007 – 2022)

B. Volunteer judge at NYC Science and Engineering Fair: *Cell and Molecular Biology* :03/01, 2015

C. Volunteer judge at NYC Science and Engineering Fair: *Cell and Molecular Biology* :03/07, 2016

D. Volunteer judge at NYC Science and Engineering Fair: *Cell and Molecular Biology* :03/29, 2016

E. "Bio-entrepreneurship in Genomics" Patkar Varde College Goregaon Mumbai (Feb. 10, 2018),

F. Member of Academic Council: D.Y. Patil Education Society Kolhapur, India for Biotechnology for year 2020 - 2022.

G. Member of Board of Studies: Bajaj College of Science, Wardha India for Biotechnology for year 2020 onwards

H. Delivered Invited lectures:

1. "Bio-entrepreneurship in Genomics" Patkar Varde College Goregaon Mumbai (Feb. 10, 2018),
2. "Applications of Molecular Markers in Animal Diversity Assessment" Wadia College, Pune (Oct. 1, 2018),
3. "Bio entrepreneurship: Fun, Business, Risks and sometimes success" SRTM University, Nanded. (Mar. 2, 2019),
4. "**Sickle Cell Disease** in India and The World" DY Patil Education Society Kolhapur (Sep 30, 2019)
5. "Success Story as Bioentrepreneur" Microbiologists society of India and Bajaj college of Science, Wardha, Webinar (Jul 22, 2020)
6. "**Sickle Cell Disease**: "Epidemiology, Diagnostics, Pathogenesis, Therapeutics and way forward" in India and The World" Biotechnology Day 2022, SRTM University Nanded (Dec. 12, 2022)

I. Organized National Conference on "Sickle Cell Disease and Rare Genetic Disorders 2023: Achieving Mission SCD Elimination-2047 " as a Co-convenor and scientific advisory committee member. This conference was organized by Central University of Rajasthan at Ajmer, Rajasthan in collaboration with ADEETECH® Pune. Details of this even is available on www.sicklecelldiseaseindia.org website owned by ADEETECH® Pune.

E. Reviewer for National and International journals: *Scientific Reports, Journal of Genetic Syndromes & Gene Therapy, Journal of Phylogenetics & Evolutionary Biology, Journal of data mining in genomics and proteomics, Current Agriculture Research Journal, Transcriptomics, Current Science*

PUBLICATIONS (Full Length Papers available in Google Scholar, ResearchGate, etc.)

1. NCBI database DNA and Protein (88): All corresponding and first or senior authored) (3 submitted in May 2023 and 14 under publication sequences for Sickle cell haplotype and genetic modifiers, 11+ 5.8S-ITS2-28S nucleotide data of Indian medicinal plants)
NCBI: <https://www.ncbi.nlm.nih.gov/nuccore/?term=lingojwar>
2. Publications in International and National Journals, (18 journal publications) with 310 citations; Hi Index 6, i10 index 6,
<https://scholar.google.co.in/citations?user=tsq9ab0AAAAJ&hl=en&oi=ao>
3. International and National Conferences abstracts: (25)
4. https://www.researchgate.net/profile/Devendra_Lingojwar2 (RG Score 182.1) (57.68% citations, 24.47% full text)
5. <https://www.linkedin.com/in/dr-devendra-lingojwar-71378039/>

PUBLICATIONS

1. Henu Kumar Verma, Yashwant Kumar Ratre, L.V.K.S Bhaskar, Tarun Sahu, **Devendra Purushottam Lingojwar** Hematopoietic stem cell transplant therapy, clinical trials, complications, and quality of life for patients with Sickle cell anemia: Clinical potential and future perspectives. *Iran J Ped Hematol Oncol.* 2022, Vo I 12, No 4, 272 -302
2. **Devendra Lingojwar**, Savita Bhutoria, Fantao Meng, Sangeetha Thangaswamy, Henny H Billett, Caterina Minniti, Amy Tsai, Marcos Intaglietta, Craig A Branch, Seetharama A Acharya, Therapeutic Activity of Peg Albumin in Transgenic Mouse Model of Sickle Cell Disease Is a Function of the Pattern of Pegylation, *Blood* (2016) 128 (22) : 4848.
3. Sarita Lingojwar, Gayatri Sonawane and **Devendra Lingojwar*** "Molecular identification of Indian medicinal plant tulsi (*Ocimum tenuiflorum* Linn.) by Internal Transcribed Spacer 2 region" *Medicinal Plants* Vol. 8 (4), December 2016, 267-271
4. **Devendra Lingojwar***, Pramod Gupta, Savita Bhutoria, Sarita Lingojwar, Nikhil Mishra, Anil Kumar (2016) "Variation of abnormal hemoglobins concentrated in Durg, Chhattisgarh: A brief note based on cross-sectional study" *Journal of Genetic Disorder and Genetic Reports* 5:2
5. Santosh A. Misal, **Devendra P. Lingojwar**, Mahendra N. Lokhande, Pradeep D. Lokhande, Kachru R. Gawai "Enzymatic transformation of nitro-aromatic compounds by a flavin-free NADH reductase from *Lysinibacillus sphaericus*" *Biotechnology Letters* January 2014, 36(1), 127-131 (PMID 24068503)
6. **Devendra Lingojwar**, Ravikant Jadhav and Kachru Gawai "Alkaliphile specific motif analysis of *Stenotrophomonas* species DL18 F1Fo-ATP synthase c-subunit isolated from Indian alkaline Soda Lake, Lonar." *Current Science* May 2013, 104(9), 1216-1218
7. **Devendra Lingojwar**, Ravikant Jadhav, Sanket Khobragade and Kachru Gawai "Isolation and identification of alkaliphiles from Indian Soda Lake, Lonar and their applications in Microbial Fuel Cell" *SRTMU's Research Journal of Science* March 2013, 2(1), (ISSN No. 2277-8594)
8. Santosh A. Misal, **Devendra P. Lingojwar**, Kachru R. Gawai "Properties of NAD (P) H Azoreductase from Alkaliphilic Red Bacteria *Aquiflexum* sp. DL6" *Protein Journal* 2013, 32, 601-608 (PMID 24186471)
9. S.A. Misal, V.D. Bajoria, **D.P. Lingojwar** and K. R. Gawai "Purification and Characterization of Nitroreductase from red alkaliphilic bacterium *Aquiflexum* sp. DL6" *Applied Microbiology and Biochemistry*, 2013, 49(3), 249-254 PMID 23882943
10. **Devendra Lingojwar**, Ravikant Jadhav and Kachru Gawai "Isolation and identification of alkaliphile *Stenotrophomonas* species DL18 from Indian Soda Lake, Lonar and analysis of F1FoATP synthase a-subunit" Dec 2012, 1(53), (doi: 10.3410/f1000research.1-53.v1)

11. Khanapurkar, R. S., Paul Nilesh, Desai D. M., **Lingojwar, D. P.**, Raut, M. R., and Gangawane, A. K. "Molecular identification of *Tinospora sinensis* by ITS2 sequence analysis." *International Journal of Molecular Biology*, 2012, 3(2), 55-57
12. Khanapurkar, R. S., Desai D. M., Gudekar N.S. , **Lingojwar, D. P.**, Raut, M. R., Vichare V.V., and Gangawane, A. K. "Molecular identification of *Tinospora cordifolia* by ITS2 sequence analysis." *International Journal of Biochemistry and Biotechnology*, July-Dec 2012, 3(2), 91-94 (ISSN0976-6235)
13. Hariomsing Powar, **Devendra P. Lingojwar** and Vijay S. Wadhai, Isolation of bacteria from Personal Computer Hardware and its molecular Detection by 16s rRNA hyper variable Region (V4) Specific Sequence Analysis *Asian Jr. of Microbiol. Biotech. Env. Sci.* 2012, 14(4), 547-552, (ISSN:0972-3005)
14. Santosh A. Misal, **Devendra P. Lingojwar**, Ravindra M. Shinde and K. R. Gawai "Purification and Characterization of Azoreductase from alkaliphilic bacterium *Bacillus badius*". *Process Biochemistry* June 2011, 46(6), 1264-1269
15. Vishal Gaddelpalliwar, A.Y. Dawande and **Devendra Lingojwar** "Comparative studies on hyper variable regions of 16S ribosomal RNA in alkaliphiles of Lonar Lake: A Bioinformatics approach" *Asiatic J. Biotech. Rec.* 2010, 1(3), 200-213
16. **Devendra p. Lingojwar**, Diagnosis of sickle cell anemia by single blood drop technology, *Indian Patent Journal*, 2008 Date of Publication 05/Dec/2008. *Indian Patent Journal Mumbai* Dec 2008. Application No. 2384/MUM/2008/A
17. Diwan AG, Pradhan AB, **Lingojwar DP**, et al "Serum Zinc, Chromium and Magnesium levels in type 2 Diabetes" *International Journal of Diabetes in Developing Countries*, 2006,26(3), 122-123
18. Kate SL and **Lingojwar DP** "Epidemiology of Sickle cell disorder in the state of Maharashtra" *International Journal of Human Genetics*, 2002, 2(3), 161-167

Manuscripts submitted / under submission (sickle cell disease) (first / corresponding author*)

1. Ananthanarayanan, Aparna; Bhutoria, Savita; Hazarika, Lima; Lingojwar, Sarita ; Ghatbandhe, Pankaj; **Lingojwar, Devendra*** "Role of microRNA in Sickle Cell Disease Pathogenesis and Therapeutics". *Annals of Human Genetics* (Ref. No. AHG-REV-17-0041)
2. **Devendra Lingojwar**, Savita Bhutoria, Craig Branch, Marcos Intaglietta, Seetharama Acharya* "PEGylation Induced Colloidal Plasma Expander Like Properties of PEG-recombinant Albumin: Influence of Pattern of PEGylation in Inducing Plasma Expansion Properties" (with PI, Albert Einstein College of Medicine, NY USA)
3. **Devendra Lingojwar**, Sudam Kate, Shobha Gangodkar, Millind Gore, Akhileshchandra Mishra, Atanu Basu*. Human Parvovirus B19 infection in some Tribal Populations from India with Homozygous Sickle Cell Disease. (with PI, at NIV ICMR, Pune INDIA)

Presentation at State, National and International conferences: (*corresponding/ \$presenting author) Only Sickle Cell Disease studies: Epidemiology, Pathogenesis and drug development

1. **Devendra Lingojwar** "Sickle Cell Disease nationwide testing of 7,00,00,000: What are the challenges and solutions for developing India specific program" National Conference on Sickle Cell Disease and Rare Genetic Disorders 2023: Achieving Mission SCD Elimination 2047" organized by CURAJ, Ajmer and ADEETECH Pune, Sep 7 to 9, 2023.

2. S. Acharya* and **D. Lingojar** "Paradigm Shift in Designing SCD Therapeutics: Balancing Between the Proper Brain Tissue Oxygenation and Attenuation of Vaso Occlusion During Therapy of SCD is an Essential Aspect of Designing New Therapeutics" National Conference on Sickle Cell Disease and Rare Genetic Disorders 2023: Achieving Mission SCD Elimination 2047" organized by CURAJ, Ajmer and ADEETECH Pune, Sep 7 to 9, 2023.
3. **D. Lingojar*** R. Enadle S. Lingojar "Sickle Cell Disease and Human parvovirus B19 journey: From first reporting in India to BSL2+ Lab facility development for future B19 R&D, therapeutics, and preventive vaccine development" National Conference on Sickle Cell Disease and Rare Genetic Disorders 2023: Achieving Mission SCD Elimination 2047" organized by CURAJ, Ajmer and ADEETECH Pune, Sep 7 to 9, 2023.
4. **D. Lingojar*** **M. Talegaonkar**, A. Lingojar, S. Lingojar, "Empowering Tribal Youths: ADEETECH® Single Blood Drop Hemoglobin Electrophoresis for Village-Level Confirmatory Testing of Sickle Cell Anemia" National Conference on Sickle Cell Disease and Rare Genetic Disorders 2023: Achieving Mission SCD Elimination 2047" organized by CURAJ, Ajmer and ADEETECH Pune, Sep 7 to 9, 2023.
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