DR.HETALKUMAR J. PANCHAL

Professor

Post Graduate Department of Biosciences, UGC Centre of Advance Study Sardar Patel University, Satellite Campus, Bakrol Vadtal Road, Bakrol 388315 GUJARAT.

(**2**): +919427457245 (M)

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Education Qualifications

Ph. D. (1999-2002)

Title: "Study of some phenolic compounds and growth regulators on Growth and Biochemical parameters of Niger oil seed plant (*Guizotiaabyssinica* .L)"

Department of Biosciences, Sardar Patel University, Vallabh Vidyanagar, Gujarat, India.

Bachelor of Legislative Laws (L.L.B) (2009-2011)

Bachelor of Legislative Laws (L.L.B) with 59 % (Second Class)

Anand Law College, Sardar Patel University, Vallabh Vidyanagar, Gujarat, India.

Diploma in Naturopathy and Yogic Science (2005-2006)

Diploma in Naturopathy and Yogic Science with "A+" Grade

All India Natural Life Association and Life Development Academy (JivanNirman Academy). Bhuj- Kachchh 370001. Gujarat - India

Post Graduate Diploma (2003-2004)

Post Graduate Diploma in Bioinformatics (**P. G. D. B. I**) with 55.12% ("B" Grade) Bioinformatics Institute of India, Noida, UTTARPRADESH, INDIA.

Post Graduate Diploma (1996-1997)

Post B.Sc. Diploma in Computer Science and Applications (**P. G. D. C. A**) with 50.84% (Second class)

Department of Computer Science, Sardar Patel University, Vallabh Vidyanagar, Gujarat.

Master's Degree (1994-1996)

Master of Science (M. Sc.) in Biochemistry with 69.84% (first class)

Department Biosciences, Sardar Patel University, Vallabh Vidyanagar, Gujarat, India.

Bachelor's Degree (1991-1994)

Bachelor of Science (B. Sc.) in Biochemistry with 70.55% (first class Distinction)

M. B. Patel Science College, Sardar Patel University, Anand, Gujarat, India.

Work Experience

June 2022 - Present PROFESSOR

Post Graduate Department of Biosciences, Sardar Patel University, Vallabh Vidyanagar. 388120,

GUJARAT (INDIA)

Aug 2017 - June 2022 ASSOCIATE PROFESSOR

Post Graduate Department of Biosciences, Sardar Patel University, Vallabh Vidyanagar. 388120,

GUJARAT (INDIA)

Jan 2014 - Aug 2017 ASSOCIATE PROFESSOR

Gujarat Agricultural Biotechnology Institute (GABI), Navsari Agricultural University, Surat-395 007, Gujarat (India)

Aug 2005 – Jan 2014 **LECTURER IN BIOINFORMATICS**

Department of Computer Science, Sardar Patel University, VallabhVidyanagar, Gujarat (India)

July 2004 – Dec 2004 LECTURER IN BIOINFORMATICS

Department of Computer Science, Sardar Patel University, Vallabh Vidyanagar, Gujarat (India)

Dec 2003 – July 2004 **COMPUTER INSTRUCTOR**

Smt.M.C.patel I.T.I Uttarsanda, Government of Gujarat, Gujarat (India)

July 2003 – Dec. 2003 LECTURER IN BIOINFORMATICS

Department of Computer Science, Sardar Patel University, VallabhVidyanagar, Gujarat (India)

Aug. 2001 - July 2002 RESEARCH ASSISTANT

Department of Biosciences, Sardar Patel University, VallabhVidyanagar, Gujarat (India)

Jan. 1997 - Jan. 1998 **LAB ASSISTANT**

A.R. College of Pharmacy & G.H Patel Institute of Pharmacy, CharutarVidhyaMandal, VallabhVidyanagar, Gujarat (India)

Refresher courses / Orientation programme / Training Programme

- 1. Attended 42nd Orientation Programme at Academic Staff College, S.P.University, VallabhVidyanagar. during 27/05/2019 to 16/06/2019.
- 2. Attended Refresher Course at Academic Staff College, S.P.University, VallabhVidyanagar.Topic "Application of (Information and Communication Technology) ICTin Biological Sciences (MD)"during 16/12/2013 to 05/01/2014.
- 3. Attended Subject Training on "Computational Tools for Animal Genome Resource Data Analysis" during December 2-13, 2013 Under NAIP Subproject "Establishment of National Agricultural Bioinformatics Grid (NABG) in ICAR" at National Bureau of Animal Genetic Resources(NBAGR), Makrampur Campus, G.T.Road Bye Pass, Near BasantVihar, P.O.Box No. 129Karnal-132001 (Haryana), India.

Current ongoing / Completed Projects

- 1."Comparative Genomic & Proteomic studies of the multi domain Cellulase enzyme from different organisms"Funded by DBT letter No. BT/PR13603/BID/07/312/2010, GOVERNMENT OF INDIA, MINISTRY OF SCIENCE & TECHNOLOGY, DEPARTMENT OF BIOTECHNOLOGY.http://dbtepromis.nic.in/Home.aspx
- 2."Heli-PyD", A comprehensive Database for Helicobacter Pylori"Funded by DSTletter No. G/No.DST Purse/12-13/ 1674, GOVERNMENT OF INDIA, MINISTRY OF SCIENCE & TECHNOLOGY, DEPARTMENT OF SCIENCE AND TECHNOLOGY. (Completed)

3. "Structural and functional studies of NAL1 Protein using Bioinformatics approach in various cereal crops."Navsari Agricultural UniversityFunded Budget Head 12248.(Completed)

Ph.D. students and their research topics

- 1."Insilico Structural And Functional Analysis of Helicobacter pylori Proteins Responsible For Gastro Intestinal Tract Diseases In Human." Ms.MeghaVadiya. (Ph.DThesis Submitted January 2014)
- 2. "Database designing and analysis of data for Leguminosae family members present in Gujarat state by various Bioinformatics tools" Mr.Sagar Patel. (Ph.DThesis Submitted December 2014)
- 3. "Analysis and Integration of Biological Data for Metabolic Pathway Network Reconstruction by Computational System Biology Approach" Mr. Kirtan Dave. (Ph.D. Thesis Submitted August 2015)
- 4. "In-silico and in-vitro study on apoptosis inducing mechanism of Phytochemicals to control Fission Yeast growth" Miss. Gauravi Nileshkumar Trivedi. (Ph.D. registration on 20/09/2019 discontinued)
- 5. "Identification and Analysis of target proteins to treat Breast Cancer by using Natural compounds using Bioinformatics Appraoches and Techniques " Miss. Purvi N. Shukla. (Ph.D. registration on 27/12/2020 continue)

Publication of Research Papers in National Journals.

- 1. Dr. P.V Virparia and **Dr. HetalkumarPanchal**, "A simulation model to predict the progression of diabetics using non-pathological data" in National Journal of system and Information Technology. ISSN: 0974-3308 Vol. 1, No. 1, June 2008.
- 2. Sarabjot Singh Pabla1, Simarjot Singh Pabla and **Hetalkumar J. Panchal** "SUMOylation Site Prediction using Support Vector Machines" in Journal of Computational Intelligence in Bioinformatics. ISSN: 0973-385X Volume 2 Number 3 (2009) pp. 103–107. http://www.ripublication.com/Volume/jcibv2n3.htm
- 3. PratikRaval, Harshika Shah and **Hetalkumar J. Panchal** "Bioinformatics approach for discovering 'Codon Bias' "in PRAJNA Journal of Pure and Applied Sciences Vol.17: 122-124, 2009 ISSN 0975-2595.
- 4. Binod Kumar, N.N. Jani and **Hetalkumar J. Panchal**"Knowledge Based System in Molecular Structure Prediction with Reference to Chemical Compounds" Journal of SCI-TECH Research, Vol.1, Issue-1: 05-10, 2010 ISSN 0974-9780.
- 5. Krishna Patel and **Hetalkumar J. Panchal** "MSAP: Multiple Sequence Alignment Processor with Block and Pattern Analyzer" Journal of Computational Intelligence in Bioinformatics. ISSN: 0973-385X Volume 4 Number 1 (2011) pp. 83-93.http://www.ripublication.com/Volume/jcibv4n11.htm

- Kirtan Dave, Lawrence Mckechnie and HetalPanchal "Application of Nanobioinformatics in Medical Science – A Probable Therapy" Current Bioinformatics, Volume 6, Number 2, June 2011, pp. 163-172(10).ISSN: 1574-8936.http://www.benthamscience.com/contents-JCode-CBIO.Vol-00000006-Iss-00000002.htm. (Impact Factor:-Current:2.017, last 5 years: 1.552)
- 7. Dave K, Gandhi M, **Panchal H**, Vaidya M. "Revision of QSAR, docking, and molecular modeling studies of anti-influenza virus A (H1N1) drugs and targets: analysis of hemagglutinins 3D structure." Current Computer Aided Drug Design. 2011 Dec; 7(4):255-62. ISSN: 1573-4099, Bentham Science Publishers, (**Impact Factor:-Current:1.54**, **last 5 years: 1.75**)
- 8. MeghaVaidya, **Hetalkumar J. Panchal**, A comparative analysis of "Homology Modeling Servers" for single chain and multi-chain protein structure prediction. National Journal of Engineering Science and Management, Volume 1, (2), December 2011, pp. 35-38. ISSN 2249-0264.
- 9. Tanvi Patel, MeghaVaidya, **Hetalkumar J. Panchal**, "Modeling of Protein Patched (*Ptch*) structure and study of genes that are responsible of MandibularPrognathism (Class III Malocclusion)." National Journal of Engineering Science and Management, Volume 1, (2), December 2011, pp. 90-95. ISSN 2249-0264.
- 10. Shah Richa, Hetalkumar J. Panchal, VaidyaMegha, "An In Silico Analysis Of Folliculin And Folliculin Interacting Proteins Responsible For Skin Tumors And Birt Hogg Dubé Syndrome." Journal of Drug Delivery & Therapeutics; 2012, 2(4),ISSN: 2250-1177. Available online at http://jddtonline.info
- 11. Kirtan Dave and **Hetalkumar J. Panchal**, "Review on Chemogenomics Approach: Interpreting Antagonist Activity of Secreted Frizzled-Related Protein 1 in Glaucoma Disease with In-SilicoDocking." Current Topics in Medicinal Chemistry, 2012; 12(16):1834-42. Bentham Science Publishers. ISSN (Print): 1568-0266, ISSN (Online): 1873-5294, http://www.ncbi.nlm.nih.gov/pubmed/23030617(Impact Factor:- Current: 4.174, last 5 years: 3.885)
- 12. MeghaVaidyaand Hetalkumar J. Panchal"In silico Investigation and Structural Characterization of Virulent Factor and a Metallo Peptidase Present in Helicobacter pylori Strain J99" Interdisciplinary Sciences: Computational Life Sciences, December 2012, Volume 4, Issue 4, pp 302-309. DOI: 10.1007/s12539-012-0145-6, Springer Publication. Print ISSN:1913-2751, Online ISSN: 1867-1462,(Impact Factor:- Year 2013: 0.672)http://link.springer.com/article/10.1007%2Fs12539-012-0145-6
- 13. Tanvi Patel, **Hetalkumar J. Panchal**, Dr Jimis Patel, Dr. Amish Mehta, Dr. TapanRawal. "Interactive studies of proteins involved in controlling expression of DSPP gene responsible for DentinogenesisImperfecta using bioinformatics tools." Dentimedia: Journal of Dentistry. October, November, December 2012, Volume 17, Issue 04, pp. 70-74. ISSN: 0976-8424.
- 14. Kirtan Dave* and Hetalkumar J. Panchal "Metabolism Evolution Based on Network Degrees of Orthologous Enzymes" Current Topics in Medicinal Chemistry, 2013, Volume 13, Issue 5, 663-674, Bentham Science Publishers. ISSN (Print): 1568-0266, ISSN (Online): 1873-5294, http://www.ncbi.nlm.nih.gov/pubmed/23548027 (Impact Factor:-Current: 4.174, last 5 years: 3.885)
- 15. Dave K, **Panchal H.** "ENZPRED-Enzymatic Protein Class Predicting By Machine Learning." Current Topics in Medicinal Chemistry, 2013, July VOLUME: 13, ISSUE: 14. Bentham Science Publishers.ISSN (Print): 1568-0266, ISSN (Online): 1873-5294, http://www.ncbi.nlm.nih.gov/pubmed/23889047 (**Impact Factor:- Current: 4.174, last 5 years: 3.885**)

- 16. MeghaVaidya and **Dr.Hetalkumar J. Panchal**"Comparative Study of Data Generated by Structural Annotation of the Genome for Identifying the Unique Parameter Responsible for Pathogenic Property of Helicobacter Pylori", PharmaceuticaAnalyticaActa 2013, Volume 4, Issue 6, 1000249; ISSN: 2153-2435 PAA, an open access journal. NLM ID: 101606571.(**Impact Factor:** 1.8***Index Copernicus Value:** 5.37)
- 17. Sagar S. Patel and **Hetalkumar J. Panchal**; "Leguminobase: A Tool To Get Information Of SomeLeguminosae Family Members FromNcbi Database" Journal of Advanced Bioinformatics Applications and Research; ISSN 0976-2604.Online ISSN 2278 6007; Vol 4, Issue3, 2013, pp54-59.(Index Copernicus Value (ICV): 3.00)http://www.bipublication.com/files/jabr-V4I3-2013-01.pdf
- 18. Kaushik Dave1, **Dr. HetalkumarPanchal** and Vishal Kothari, "Insilco Epitope Analysis of Conventional Influenza Vaccine (CIV), Indian Influenza Strain and 2011–2012 INFLUENZA Vaccine Strain Recommended by WHO", Research & Reviews: Journal of Genomics and ProteomicsVolume 1, Issue 3, December 2012, Pages 1-13.
- 19. Sagar Patel, KalpeshAnjaria and **Hetalkumar J. Panchal**; "Bioinformatics Database of Some Leguminous Trees in Anand district of Gujarat state in India" Scholars Journal of Agriculture and Veterinary Sciences2014; 1(2):50-57.e-ISSN 2348-1854. http://saspjournals.com/sjavs
- 20. Sagar S. Patel and Hetalkumar J. Panchal; "Evolutionary studies of few species belonging to Leguminose family based on RBCL gene" Discovery, Volume 9, Number 22, January 2014 38-50. ISSN 2278 5469 EISSN 2278 -5450 (Impact factor 0.403). https://discoveryjournals.com/discovery/current_issue/v9/n20-23/A5.pdf
- 21. Sagar S Patel, Dipti B Shah, **Hetalkumar J Panchal**; "Conseq Tool: A Tool to Find Conserved Region in Protein Sequences of Leguminose Family", Journal of Advanced Bioinformatics Applications and Research, ISSN 0976-2604.Online ISSN 2278-6007, Vol 5, Issue3, 2014, pp134-139, http://www.bipublication.com
- 22. Sagar S. Patel, Dipti B. Shah and **Hetalkumar J. Panchal**, "De Novo RNA Seq Assembly and Annotation of Cicerarietinum L. (SRR627764)" Legume Genomics and Genetics 2014, BioPublisher, Vol. 5, No. 6, 1-6, ISSN 1925-1580. http://lgg.biopublisher.ca
- 23. Sagar S. Patel, Dipti B. Shah and **Hetalkumar J. Panchal**, "De Novo RNA Seq Assembly and Annotation of Phaseolusvulgaris L. (SRR1283084)" Genomics and Applied Biology 2014, Vol. 5, No. 5, 1-6, ISSN 1925-1602. http://gab.biopublisher.ca
- 24. Sagar S. Patel, Dipti B. Shah and **Hetalkumar J. Panchal** ,"Comparative study of five Legume species based on De Novo Sequence Assembly and Annotation"Computational Molecular Biology 2014, Vol. 4, No. 9, 1-6, ISSN 1927 5587 http://cmb.biopublisher.ca
- 25. Sagar S. Patel, Dipti B. Shah and **Hetalkumar J. Panchal**, "De Novo RNA Seq Assembly and Annotation of Trigonellafoenum-graecum L. (SRR066197)" Legume Genomics and Genetics 2014, Vol.5, No.7, 1-7, ISSN 1925-1580, http://lgg.biopublisher.ca
- 26. Sagar S. Patel, Dipti B. Shah and **Hetalkumar J. Panchal**, "De Novo Transcriptome Analysis of ArachisHypogaea L. (SRR1212866)," OMICS Research 2015, Vol.5, No.1, 1-6, http://omics.biopublisher.ca
- 27. Sagar S. Patel, Dipti B. Shah and **Hetalkumar J. Panchal**, "Evolutionary studies in sub-families of Leguminosae family based on *matK* gene" PLANT GENE & TRAIT2014, Vol. 5, No.7, 1-9, ISSN 195-2013, **Impact Factor of 0.286** http://pgt.biopublisher.ca

- 28. Sagar S. Patel, Dipti B. Shah and **Hetalkumar J. Panchal**, "Gujarat State Leguminosae Family Database (GLDB): Bioinformatics Database of Leguminosae Family present in Gujarat state of INDIA", Computational Molecular Biology 2014, Vol. 4, No. 11 1-13. ISSN 1927 5587(doi: 10.5376/cmb.2014.04.0011) http://cmb.biopublisher.ca
- 29. Sagar S. Patel, Dipti B. Shah and **Hetalkumar J. Panchal**, "De Novo RNA Seq Assembly and Annotation of Vicia sativa L. (SRR403901)", Genomics and Applied Biology 2015, Vol. 6, No. 2, 1-7, ISSN 1925-1602(doi: 10.5376/gab.2015.06.0002) http://gab.biopublisher.ca
- 30. Ronak Shah, Pritam Kumar Panda, Priyam Patel and **Dr. HetalkumarPanchal**, "Pharmacophore Based Virtual Screening And Molecular Docking Studies Of Inherited Compounds Against Ebola Virus Receptor Proteins", World Journal Of Pharmacy And Pharmaceutical Sciences, 05/2015; Volume 4(May Issue 5):1268-1282. ISSN 2278-4357.(**Impact Factor:- Current: 6.647, Index Copernicus Value: 52.5**)
- 31. Pritam Kumar Panda; Priyam Patel; **Hetalkumar Panchal**, Ph.D. "Molecular Modeling and Pharmacophore analysis of Herpes Simplex Virus-1 protein receptor (ICP27) and comparative analysis of commercial drugs vs. phytochemicals compounds as inhibitors against herpes viral disease", World Journal Of Pharmacy And Pharmaceutical Sciences, 05/2015; Volume 4(May Issue 6):1211-1222. ISSN 2278-4357.(**Impact Factor:- Current: 6.647, Index Copernicus Value: 52.5**)
- 32. Pritam Kumar Panda; AbhaysinhaPatil; Priyam Patel; Pritam Kumar Panda; **Hetalkumar Panchal**, Ph.D. "Mutation-based structural modification and dynamics study of amyloid beta peptide (1–42): An in-silico-based analysis to cognize the mechanism of aggregation", Genomics DataVolume 7, Jan 2016, Pages 189–194 Elsevier Journal, ISSN: 2213-5960 (**Impact factor 2.38**).doi:10.1016/j.gdata.2016.01.003
- 33. Pritam Kumar Panda, RiyaRanea, RahulRavichandrana, ShrinkhlaSingha, **Hetalkumar Panchal**; "Genetics of PCOS: A systematic bioinformatics approach to unveil the proteins responsible for PCOS" Genomics DataVolume 8, June 2016, Pages 52–60 Elsevier Journal ISSN: 2213-5960 (**Impact factor 2.38**).doi:10.1016/j.gdata.2016.03.008
- 34. Priyam Patel, Pritam Kumar Panda, Sneha Patil and **Hetalkumar Panchal**, "Mutation Based Structural Modelling and Dynamics Study of Alpha Fetoprotein: An Insight to Inhibitory Mechanism in Breast Cancer" Journal of Proteomics & Bioinformatics 11: 017-025. Doi: 10.4172/jpb.1000462. Accepted Date: Jan 22, 2018 / Published Date: Jan 29, 2018. (**Journal Impact Factor 1.57**; 3.14 (5 Year Journal Impact Factor) H-Factor:12)
- 35. Mishra, Anu, **Panchal Hetalkumar** and Patel V. H. (2019). Analysis of edible fruits against glycolytic enzymes and glycation: In vitro approaches with in silico validation. Food Sci. Res. J., 10(2): 123-134, DOI: 10.15740/HAS/FSRJ/10.2/123-134.Copyright@ 2019: Hind Agri-Horticultural Society.
- 36. Dhimmar Khushbu and Trivedi Gauravi and **Panchal Hetalkumar**, "Identification and Analysis of Common Target Proteins for Vector Borne Diseases Using Bioinformatics Approach" (March 30, 2020). Proceedings of the National Conference on Innovations in Biological Sciences (NCIBS) 2020, Available at SSRN:
 - https://ssrn.com/abstract=3565190 or http://dx.doi.org/10.2139/ssrn.3565190

- 37. Mistry Preyashi and **Panchal Hetalkumar**, "Molecular Interaction Studies of Garlic Active Compound for Lowering Down the Blood Pressure Using Bioinformatics Approach" (March 30, 2020). Proceedings of the National Conference on Innovations in Biological Sciences (NCIBS) 2020, Available at SSRN:
 - https://ssrn.com/abstract=3560793 or http://dx.doi.org/10.2139/ssrn.3560793
- 38. Karlekar Janhavi, Trivedi Gauravi and **Panchal HetalKumar**, "In-Silico Study on Apoptosis Inducing Mechanism of Phytochemicals to Regulate RAS Related G-Proteins Using FDBB Approach" (April 7, 2020). Proceedings of the National Conference on Innovations in Biological Sciences (NCIBS) 2020, Available at SSRN: https://ssrn.com/abstract=3570339 or https://dx.doi.org/10.2139/ssrn.3570339
- 39. D. Hettiarachchi, Hetalkumar Panchal, B. A. P. S. Pathirana, P. D. Rathnayaka, A. Padeniya, P. S. Lai, V. H. W. Dissanayake, "Six Novel ATM Gene Variants in Sri Lankan Patients with Ataxia Telangiectasia", Case Reports in Genetics, vol. 2020, Article ID 6630300, 7 pages, 2020. https://doi.org/10.1155/2020/6630300
- 40. Hettiarachchi, D., Panchal, H., Lai, P.S. et al. Novel variant in NSDHL gene associated with CHILD syndrome and syndactyly- a case report. BMC Med Genet 21, 164 (2020). https://doi.org/10.1186/s12881-020-01094-y

Publication of Research Papers in Inter-National Journals.

- 1. **Dr. HetalkumarPanchal**, Simarjot Singh Pabla and Sarabjot Singh Pabla "A Novel Approach For Wireless Computing In Bioinformatics" in International Journal of Intelligent Information Proceesing. ISSN:0973-3892 Volume 3 Number 2 July-December 2009: pp.193-198.
- 2. MeghaVaidya, Maulik Patel, **Dr. HetalkumarPanchal** "ProPhyC: Protein PhysicoChemical properties calculator" in International Journal of Computer Science and Management Research Vol. 1 Issue 5 December 2012 ISSN 2278-733X, pp.980-983.
- 3. Sagar Patel, **HetalkumarPanchal**, Jignesh Smart, KalpeshAnjaria, "Distribution of Leguminosae family members inGujarat State of India: Bioinformatics Approach" in International Journal of Computer Science and Management Research Vol. 2 Issue 4 April 2013, ISSN 2278-733X, pp.2184-2189.
- 4. Sagar Patel, **HetalkumarPanchal**, Jignesh Smart, KalpeshAnjaria, "Species Information Retrieval Tool: A Bioinformatics tool for Leguminosae Family" in International Journal of Bioinformatics and Biological Science: v.1 n.2 p.187-194 June, 2013, Print ISSN 2319-5169.
- 5. Priyam Patel, **HetalkumarPanchal** "In silico Structure Modeling and Comparative Analysis of Characterization Properties of Protein Polymers Useful for Protein-Based Nano Particulate Drug Delivery Systems (NPDDS): A Bioinformatics Approach" in International Journal of Peptide Research and Therapeutics, Volume 19; DOI 10.1007/s10989-013-9369-5; September 2013, Print ISSN 1573-3149, Online ISSN 1573-3904, Publisher: Springer Netherlands.
- 6. Sagar Patel and **HetalkumarPanchal**; "Bioinformatics Information of Leguminosae Family in Gujarat State" International Journal of Agriculture, Environment & Biotechnology, 7(1): 11-15 March 2014. Print ISSN NO: 0974-1712, Online ISSN No: 2230-732XDOI 10.5958/j.2230-732X.7.1.002. **National Academy of Agricultural Sciences (NAAS): 4.69**

7. Payal Patel and HetalkumarPanchal, "Primary, Secondary and Tertiary Structural Analysis of Disease Resistance Protein RGA4 of Zea Maize Using Bioinformatics Tools" International Journal of Advanced Research in Computer and Communication Engineering, Vol. 5, Issue 6, June 2016. ISSN (Print): 2319-5940, ISSN (Online): 2278-1021, DOI: 10.17148/IJARCCE.2016.5602, Impact Factor (SJIF 2016): 5.332.

Book Published

 Sagar Patel, KalpeshAnjaria and HetalkumarPanchal, "Leguminous Trees In Anand District: Collection and Analysis with Bioinformatics Applications; Lambert Academic Publishing (LAP), Number of pages: 176; Published on: 2012-12-10; Category: Biology; Book Details: ISBN-13: 978-3-8433-6982-4; ISBN-10: 3843369828 EAN: 9783843369824 Book language: English https://www.lap-publishing.com/catalog/details/store/hu/book/978-3-8433-6982-4/leguminous-trees-in-anand-district?search=Leguminous Trees

Dissertations carried out by various students under my guidance.

- 1. "Annotation and analysis of KLF4 protein on human chromosome & its comparison with another vertebrates by using VISTA tool", Miss. Roma Darji. Dec 2019 April 2020.
- 2. "In-Silico Studies of Anti-Alzheimer's Activity of Flavonoids on Proteins Playing an Important Role in onset of Alzheimer's Disease ", Miss. Shreya K S Unnikrishnan Nair. Dec 2019 April 2020.
- 3. "Identification and analysis of common target proteins for vector borne diseases using Bioinformatics approach", Miss. Khushbu Bharatbhai Dhimmar. Dec 2019 April 2020.
- 4. "In-silico study on apoptosis inducing mechanism of phytochemicals to regulate Ras related G-proteins using FBDD approach ", Miss. Janhavi T. Karlekar. Dec 2019 April 2020.
- 5. "In Silico Molecular Docking and pharmacokinetics study of Strawberry (Fragaria × ananassa) extract phytochemicals against dengue virus protein, NS2B / NS3 protease", Miss. Dhruviben Soni. Dec 2019 April 2020.
- 6. "Cytotoxic Effect of Eucalyptol and α-Pinene and Probing to Find Probable Target", Miss. Kajal Jayantibhai Patel. Dec 2018 April 2019.
- 7. "Microarray Image Analysis of Anti-Mullerian Hormone Effect on Rattus Norvegicus ovary By Using Bioinformatics Tool CARMAWEB" Miss. Vadodariya Ameedhara. Dec 2018 April 2019.
- 8. "Prediction of Molecular Interaction of Endogenous and Exogenous opioids with Mu opioid Receptor using Bioinformatic Approach" Miss. Minal Sharma. Dec 2018 April 2019.
- 9. "Probing the potential and mechanism of Thymol and Sebinene to Induce Cytotoxicity." Miss. Pallavi Rameshchandra Kyada. Dec 2018 April 2019.

- 10. "In silico characterization and interactive studies of endoglucanase from Bacillis licheniformis" Miss. Shikha Singh. Dec 2017 April 2018.
- 11. "To study anticancer effect of phytochemicals (Isoaromadendrene Epoxide and 2,4-di-tert-butylphenol) by *In-vitro* and *In-silico* approach" Mr. Jaydeepkumar Limbasiya. Dec 2017 April 2018.
- 12. "To predict the mechanism of action of active components of Garlic (*Allium sativum*) in lowering down the blood pressure using Bioinformatics tools" Miss. Preyashi Mistry. Dec 2017 April 2018.
- 13. "In silico interactive studies of active ingredients from *Tinospora cordifolia* for curing jaundice" Mr. Chirag R. Vasava. Dec 2016 June 2017.
- 14. "In Silico Analysis of Major Cause of Dengue fever with the Help of Leaf juice of red lady Papaya which contain Chymopapain Enzyme using Bioinformatics tools." Mr. Nakrani Parth Gopalbhai. Dec 2016 June 2017.
- 15. "To prove that medicinal plant Aloe Vera cures the ulcer without antibiotics using various bioinformatics approaches." Miss. Nirali Pokiya. Dec 2016 June 2017.
- 16. "To prove that Jamun seed can cure the Diabetis Melitus Type-2 without using Antibiotics and with help of Bioinformatics approaches." Mr. Milan Pandya. Dec 2016 June 2017.
- 17. "Primary, Secondary and Tertiary Structural Analysis of Disease Resistance Protein RGA4 of ZEA Maize Using Bioinformatics Tools" Miss. Payal Patel. Dec 2015 June 2016.
- 18. **"Study of Differential Gene Expression in Pancreatic Cancer Cells."** Mr. Urvesh C. Patel. Dec 2012 June 2013.
- 19. "Insilico Study of Differential Gene Expression in Brest Cancer Cells by using Microarray Data Available in Gene Expression Omnibus (GEO) Database."Ms. Nasima Patel.Dec 2012 June 2013
- 20. "Genomics and Proteomics Study of Dentofacial Anomalies: A Bioinformatics Approach Case: Dental Disorders "Ms.Tanvi Patel. Dec 2012 June 2013 (Dissertation student completed)
- 21. "Functional and Structural Study of Folliculin, A key Protein Responsible for Skin Tumors and Birt Hogg Dubè Syndrome"Ms.Richa Shah. Dec 2012 June 2013 (Dissertation student completed)
- 22. "Whole genome annotation of Pathogen Helicobacter Pylori B45 By using Bioinformatics resources." Ms. Prutha Desai. Dec 2012 June 2013 (Dissertation student completed)
- 23. "Modeling and structural Analysis of Tyrosine Protein Kinase ABL2 isoform B (*Homo sapiens*) By Using the Putative Conserved Domain Information" Ms.ShivaniGangrade. Dec 2011 June 2012 (Dissertation student completed)

- 24. "Insilico sequence assembling and analysis of Cryptococcus gattii R265 contigs by using freely available Bioinformatics tools." Mr.Manohar Singh. Dec 2011 June 2012 (Dissertation student completed)
- 25. "Computational Analysis of Protein Tyrosine Phosphatases From Five Different Organisms." Ms.Mruduka Patel. Dec 2011 June 2012 (Dissertation student completed)
- 26. "Sequential and Structural Analysis of Ribosomal RNA of Different Members of Crenarchaeota and Euryarchaeota Phylum." Ms.Nilam Patel. Dec 2011 June 2012 (Dissertation student completed)
- 27. "Comparative Phylogenetics using molecular and Metabolic data of Tryptophan metabolic pathway to study the effectiveness of Tryptophan over anti-depressants to control depression in mammals" Ms.TanushreeTiwari. Dec 2010 June 2011. (Dissertation student completed)
- 28. "Designing and optimization of pcr primer's by *Insilico* and wet laboratory methods" Mr.Imtiyaz A. H. S. Khan. (Dissertation student completed)
- 29. "CBT: Computational Blotting Tool" Mr. AkashBharadwaj. (Dissertation student completed)
- 30. "Comparative Genomic & Proteomic studies of the multi domain Cellulaseenzyme from different organisms." Mr.JeetishDosi. (Dissertation student completed)
- 31. "MSAP: Multiple Sequence Alignment Processor with block and pattern analyzer." Ms.Krishna Patel. (Dissertation student completed)
- 32. "ProLyzer: A wireless application for Physico-Chemical Analysis of Protein Sequences." Mr.Simarjot Singh Pabla. (Dissertation student completed)
- 33. **"Sumolylation Site Prediction tool using Support Vector Machine."** Mr.Sarabjot Singh Pabla. (Dissertation student completed)
- 34. "Genomic Studies of *Bacillus ThuringiensisIbl* 200By Using Bioinformatic Tools." Ms.Nishtha Singh. (Dissertation student completed)

Subjects taught (to M.Sc. Bioinformatics, B. Sc.(Agri. Biotechnology), M.Sc. Botany, M.Sc. Zoology, M.Sc. Microbiology, M.Sc. Biochemistry, M.Sc. Biotechnology, M.Sc. Industrial Biotechnology, & MCA Students)

- 1. Fundamentals of Biology
- 2. IT Fundamentals
- 3. Databases in Life Sciences
- 4. Principles of Mathematics & Biostatistics
- 5. Molecular Biology & Recombinant DNA Technology
- 6. Basic & Advanced Sequence Analysis
- 7. Genomics & Proteomics
- 8. Computational Structural Biology
- 9. Immunology

- 10. CS-248: Bio-Statistics (1+1)
- 11. BIF-4.1: Introduction to Bioinformatics (2+1)
- 12. BIOCHEM 5.1: Plant Biochemistry (3+0)
- 13. CS 3510: Computer Application in Biotechnology (1+2)
- 14. BIOCHEM6.1: Animal Biochemistry (3+0)
- 15. AST6.1: Biostatistics and Computers (2+1)
- 16. PB 369: Introduction to Bioinformatics (1+2)
- 17. Molecular Biology
- 18. Omics and Computational Biology
- 19. Horticulture
- 20. IPR and Biosafety
- 21. Biochemistry
- 22. Plant Biochemistry
- 23. Animal Biotechnology

Publication of Research Papers/Posters in conferences, Seminars etc.

- 1. PritiSajja and Hetal Panchal, "Fuzzy membership functions to analyse microarray images: A knowledge-oriented approach", published in the Souvenir Proceedings of the 3rd Convention of BRSI & International Conference on "Exploring Horizons in Biotechnology: A Global Venture" at B.R. Doshi School of Biosciences, Sardar Patel Univ. V V Nagar, Gujarat, during 2 4 Nov 2006.
- 2. P.V Virparia and Hetal Panchal, "Bioinformatics approach for developing a simulation a model to predict the progression of diabetics", published in the Souvenir Proceedings of the CSI National seminar on "Information and Communication Technology for productivity 2006" at G.H.Patel Post Graduate Department Of Computer Science and Technology, Sardar Patel Univ. V V Nagar, Gujarat, 23rd Dec 2006.
- 3. Rajiv Reghuvaran and Hetal Panchal, "Prediction of RNA secondary structure: Challenges in Software development", published in the Souvenir Proceedings of the CSI National seminar on "Information and Communication Technology for productivity 2006" at G.H.Patel Post Graduate Department Of Computer Science and Technology, Sardar Patel Univ. V V Nagar, Gujarat, 23rd Dec 2006.
- 4. P.V Virparia and Hetalkumar Panchal, "In silico Protein Structure Modeling", published in the Proceedings of the National Conference on "Advanced Data Computing Communications & Security" at S.V.Institute of Computer Studies, SarvaVidhyalay Campus, Kadi, Gujarat. in association with CSI of India Ahmedabad chapter during 14th 15th July 2007.
- Ravi Patel and Hetalkumar Panchal, "Compare The Sequence Comparison Program Package", presented at International Conference on "Emerging Technologies and Applications in Engineering, Technology and Sciences" at Computer Science Department, Saurashtra University, Rajkot. Gujarat. Jointly withAmoghsiddhi Education ScoietySangli - 416415, Maharashtra, India. during 13th - 14th January, 2008.
- 6. Dr. P.V Virparia and Dr. Hetalkumar Panchal, "A simulation model to predict the progression of diabetics using non-pathological data", presented at National conference on Innovative Dimension for business and Information Technology, at ShrimadRajchandra Institute of Management and Computer Application, Bardoli, Dist. Surat. during 23rd 24th Feb 2008.

- 7. Simarjot Singh Pabla, Sarabjot Singh Pabla and Dr. Hetalkumar Panchal, "Anovel approach for wireless computing in Bioinformaitcs" presented in CSI National Seminar on "Current Trends in ICT" (CTICT 2009), at G.H.Patel Post Graduate Department Of Computer Science and Technology, Sardar Patel Univ. V V Nagar, Gujarat. on 14th Feb 2009.
- 8. PratikRaval, Harshika Shah and Dr.Hetalkumar Panchal, "A COMPUTER PROGRAMMING APPROACH FOR FINDING "CODON BIAS" IN Arabidopsis Thaliana" presented in CSI National Seminar on "Current Trends in ICT" (CTICT 2009), at G.H.Patel Post Graduate Department Of Computer Science and Technology, Sardar Patel Univ. V V Nagar, Gujarat. on 14th Feb 2009.
- 9. Kirtan Dave and Dr. Hetalkumar Panchal, "EMBL FLAT FILE PARSING PROGRAM" presented in CSI National Seminar on "Current Trends in ICT" (CTICT 2009), at G.H.Patel Post Graduate Department Of Computer Science and Technology, Sardar Patel Univ. V V Nagar, Gujarat. on 14th Feb 2009.
- 10. M.B.Prajapati and Hetalkumar Panchal, "Distance Education in 21st Century" presented in National Seminar organized by Nalini-Arvind&T.V.Patel Arts College, Sardar Patel University, V.V.Nagar. Sponsored by U.G.C. New Delhi. during13-14 March 2010.
- 11. Kirtan Dave, Nikita Patel and Dr.Hetalkumar Panchal, "SubCellLoc Prediction of subcellular Localization of Human Protein By Support Vector Machine" presented in 1st IFIP International Conference on Bioinformatics organized by Department of applied mathematics & Humanities, SardarVallabhbhai National Institute of Technology(SVNIT), Surat during 25–28 March 2010.
- 12. Simarjot Singh Pabla and Hetalkumar Panchal, "PROLYZER SwissProt Edition A wireless application for physico-chemical analyses of protein sequences" presented in 1st IFIP International Conference on Bioinformatics organized by Department of applied mathematics & Humanities, SardarVallabhbhai National Institute of Technology(SVNIT), Surat during 25–28 March 2010.
- 13. Pratik Rawal and Dr.Hetalkumar Panchal," "An imoroved Algorithm of traceback step in Dynamic Programming for Matching Biological Sequences" presented in 1st IFIP International Conference on Bioinformatics organized by Department of applied mathematics & Humanities, Sardar Vallabhbhai National Institute of Technology (SVNIT), Surat during 25–28 March 2010.
- 14. Mansi Rajesh Gandhi and Dr.Hetalkumar Panchal," "Analysis and 3D protein Structure Modeling of HemagglutininProtien of the recent subtype of Influenza Virus causing pandemic Swine flu (Influenza A (H1N1))" presented in 1st IFIP International Conference on Bioinformatics organized by Department of applied mathematics & Humanities, SardarVallabhbhai National Institute of Technology(SVNIT), Surat during 25–28 March 2010.
- 15. Shivani Gangrade and Hetalkumar Panchal "Modeling of Protein Structure Using PutativeConserved Domain Information" at GSBTM sponsored two days National level workshop on "Application of Bioinformatics In Biotechnology & Microbiology" Organized by Ganpat University Department of Bioinformatics, Kherva.during 5th-6th March 2011.
- 16. Shivani Gangrade and Hetalkumar Panchal "Modeling and structural Analysis of Tyrosine protein kinase ABL2 isoform B (Homo Spaiens) by using putative conserved domain information" at 2nd International Conference of Bioinformatics jointly organised by S.S. Dempo College of Commerce and Economics, Panaji, Goa and CSI, IFIP during 22nd- 25thSeptember 2011.
- 17. Sagar Patel, KalpeshAnjaria, Hetalkumar Panchal, "Multiple sequence alignment of some leguminous trees in Anand District using CLUSTAL W2 Bioinformatics Tool" in Conference on Advanced Trends in Applied Sciences and Technology. At Surat, 27th 28th January 2012.

- 18. Sagar Patel, KalpeshAnjaria, Hetalkumar Panchal, "Preliminary Bioinformatics Information In Relevance With Taxonomy: A Case Study Of Some Leguminous Trees Of Gujarat" at IAAT conference and Seminar, Bhubaneswar, 2nd -4th December 2011.
- 19. Sagar Patel, KalpeshAnjaria, Hetalkumar Panchal, "Bioinformatics study of some Leguminous trees by using sequence available from databases & Analysis by some bioinformatics tools" at ECCB'12 the European Conference on ComputationalBiology, 9th 12th September 2012 in Basel, Switzerland.
- 20. Sagar Patel, KalpeshAnjaria, Hetalkumar Panchal, "Phylogeny a case study of some Leguminous trees using CLUSTALW2 Bioinformatics Tool in context withsequence available in UNIPROT database" at ECCB'12 the European Conference on ComputationalBiology, 9th 12th September 2012 in Basel, Switzerland.
- 21. Sagar Patel, KalpeshAnjaria, Hetalkumar Panchal, "Phylogeny & Multiple sequence alignment study of some Leguminous trees based on Ribulosebisphosphatecarboxylase large chain (rbcL) protein sequences by usingClustalW program of PIR database "at The IEEE International Conference on Bioinformatics andBiomedicine (BIBM) Philadelphia,USA from Oct 4-7, 2012.
- 22. Sagar Patel, KalpeshAnjaria, Hetalkumar Panchal, "Bioinformatics based Protein Sequence Analysis of available different species from Fabaceae family" at The IEEE International Conference on Bioinformatics and Biomedicine (BIBM) Philadelphia, USA from Oct 4-7, 2012.
- 23. Sagar Patel, KalpeshAnjaria, Hetalkumar Panchal, "Phylogenetic analysis of some Leguminous trees using CLUSTALW2 Bioinformatics Tool"at The IEEE International Conference on Bioinformatics and Biomedicine (BIBM)- Philadelphia, USA from Oct 4-7, 2012.
- 24. Sagar Patel, KalpeshAnjaria, Hetalkumar Panchal, "DNA Sequence analysis by ORF Finder & GENOMATIX Tool: Bioinformatics Analysis of some tree species of Leguminosae Family." at The IEEE International Conference on Bioinformatics and Biomedicine (BIBM) Philadelphia, USA from Oct 4-7, 2012.
- 25. Hetalkumar Panchal, "Comparative study of data generated by structural annotation of the genome for identifying the unique parameter responsible for pathogenic property of Helicobacter pylori" at 3rd International Conference and Exhibition on Pharmaceutics & Novel Drug Delivery Systems" during April 8-10, 2013 at Hilton Chicago/Northbrook, USA.
- 26. AnuMishra; Hetalkumar Panchal, Ph.D; V.H. Patel, Ph.D," *In Vitro* A-Amylase Inhibition And *In Silico* Molecular Docking Of Anti-diabetic Raw Mango Fruit", at National Conference on Food and Nutrition Priorities From Evidence to Action" Organized by Department of Foods and Nurtition(UGC DSA SAP-III Program) at The Maharaja Sayajirao University of Baroda, Vadodra. During 2 3September 2016.
- 27. Hetalkumar Panchal and R. M. Patel, "In-silico interactive studies of nutraceuticals of ginger with target proteins" at International Conference on Nutraceuticals and Functional Foods The Challenges and Opportunities and XIII Convention of the Indian Society of Agricultural Biochemists, Kanpur (ICNFF-16-ISAB) (ICNFF-16-ISAB) organized by Biochemistry Department, B.A.College of Agriculture, Anand Agricultural University, Anand, during December 6-8, 2016.

- 1. Best Paper in IT enabled services in faculty category in National Conference on "Advanced Data Computing Communications & Security" at S.V.Institute of Computer Studies in association with CSI of India Ahmedabadchapter ,SarvaVidhyalay Campus, Kadi, Gujarat, 14th 15th July 2007.
- 2. Second Prize to poster presented by dissertation student at GSBTM sponsored two days National level workshop on "Application of Bioinformatics In Biotechnology & Microbiology" Organized by Ganpat University Department of Bioinformatics Kherva during 5th-6th March 2011.
- 3. First Prize to poster presented by collaborative student at National Conference on "Food and Nutrition Priorities From Evidence to Action" Organized by Department of Foods and Nutrition (UGC DSA SAP-III Program) at The Maharaja Sayajirao University of Baroda, Vadodra, during 2nd– 3rd September 2016.
- 4. First Prize to poster presented by collaborative student at National Conference on "New Horizons in Cancer Biology" Organized by The Gujarat Cancer & Research Institute (GCRI) and Gujarat Cancer Society (GCS), supported by Gujarat State Biotechnology Mission (GSBTM), at J B Auditorium, Ahmedabad Management Association, Ahmedabad during 16th 17th March 2018.

Conferences, Seminars and workshops attended

	Name of the Event	Nature of Participation	Sponsorship / place	Year
1	National Symposium "Sustainable Environment: Achievements and Future Prospects"	Participant	UGC (DSA) Department of Biosciences, S.P.Uni, VVNagar, GUJARAT	4 – 6 Jan 2001
2	Workshop On Horticulture	Participant	UGC (DSA & COSIST and DST-FIST) Department of Biosciences, S.P.Uni, VVNagar, GUJARAT	18 - 23 June 2001
3	3rd Convention of BRSI & International Conference on "Exploring Horizons in Biotechnology: A Global Venture"	Participant (Poster Presentation)	B.R. Doshi School of Biosciences, Sardar Patel Univ. V V Nagar, Gujarat.	2 - 4 Nov 2006
4	CSI National seminar on "Information and Communication Technology for productivity 2006"	Participant (Paper Presentation)	G.H.Patel Post Graduate Department Of Computer Science and Technology, Sardar Patel Univ. V V Nagar, Gujarat.	23 rd Dec 2006
5	Workshop on "Knowledge Discovery in Life Sciences : Tools & Techniques in Bioinformatics"	Participant	University Of Pune, Bioinformatics Centre, Pune, Maharashtra.	Jan 29 - Feb 2, 2007.

6	National Conference on "Advanced Data Computing Communications & Security"	Participant	S.V.Institute of Computer Studies, Sarva Vidhyalay Campus, Kadi, Gujarat. in association with CSI of India Ahmedabad chapter.	14 th - 15 th July 2007.
7	International Conference on "Emerging Technologies and Applications in Engineering, Technology and Sciences"	Participant	Computer Science Department, Saurashtra University, Rajkot. Gujarat. Jointly with Amoghsiddhi Education Scoiety Sangli – 416415, Maharashtra, India.	13 th - 14 th Jan, 2008.
8	National Conference on "Genomics Proteomics & System Biology"	Participant	Dept. of Biotech. Sir.M.V.Visvesvaraya Institute of Tech. & Dept. of Biotechnology Dayand Sagar College of Engineering, Bangalore.	1 st - 3 rd Oct, 2008.
9	CSI National Seminar on "Current Trends in ICT" (CTICT 2009)	Participant	G.H.Patel Post Graduate Department Of Computer Science and Technology, Sardar Patel Univ. V V Nagar, Gujarat.	14 th Feb 2009.
10	2 nd Science Conclave: A Congregation of Nobel Laurates	Participant	Indian Institute of Information Technology-Allahabad	7-14 th Dec 2009.
11	State level workshop on "Prologue and Relevance of MATLAB"	Participant	Department of Computer Science under Career Oriented Programme (COP). Petlad.	28 th Jan 2010.
12	1 st IFIP International Conference on Bioinformatics.	Participant	Department of applied mathematics & Humanities, Sardar Vallabhbhai National Institute of Technology (SVNIT), Surat.	25 th – 28 th Marc h 2010.
13	3 rd Science Conclave: A Congregation of Nobel Laurates	Participant	Indian Institute of Information Technology-Allahabad	8th - 14th Dec 2010.
14	Short Term Training Program on "CoreJava"	Participant	Department of Computer Science sponsored by University Grants Commission (UGC), Govt. of India.	28 th - 30 th Jan 2011.
15	2 nd IFIP International Conference on Bioinformatics.	Participant	S.S. Dempo College of Commerce and Economics, Panaji, Goa, CSI and IFIP.	22 nd - 25 th Sept 2011.
16	3 rd International Conference and Exhibition on Pharmaceutics & Novel Drug Delivery Systems"	Participant	Omics Group, at Hilton Chicago/Northbrook, USA.	8-10 April, 2013.
17	Seminar on" Role of Bio- Technology in Developing Climate Resilient And Sustainable Agriculture"	Participant	Anand Agricultural University, Anand, Gujarat.	1 st March 2014

18	Global Conference on Technological Challenges and Human Resources for Climate Smart Horticulture - Issues and Strategies	Participant	Navsari Agricultural University, Navsari, Gujarat.	28- 31st May 2014,
19	A Workshop on NGS Data Analysis by Strand NGS	Participant	The Department of Botany, Bioinformatics & CCIM of Gujarat University, Ahmedabad - 380009	10 th - 11 th April 2018
20	Workshop on "Basic and Advanced Proteomics Approach"	Participant	The Department of Biosciences & Bioengineering, Indian Institute of Technology (IIT) Bombay is organising DST Sponsored.	23 rd Sept - 4 th Oct 2019.

Invited Speaker / Judge in conferences, Seminars, workshops.

- 1. Acted as resource person for talk on "Comparative Genomics" at National workshop on BIO+CHEMI+PHARMA INFORMATICS at Department of Computer Science, Kadi Sarva Vishwavidyalaya, Gandhinagar, Gujarat During 20th 21st February, 2010.
- Acted as resource person for talk on "Bioinformatics and Comparative Genomics" at National Conference on "CONTEMPORARY DEVELOPMENTS AT BIOTECH- BIOINFORMATICS INTERFACE" at BitVirtual, Patan Node, Department of Life Sciences, Hemchandracharya North Gujarat University, Patan on March 5, 2010 sponsored by Gujarat State Biotechnology Mission, Gandhinagar (GSBTM).
- 3. Acted as judge for oral presentation of papers related to bioinformatics subject in SCI-TWIST-2010: Intercollegiate Competition, Organized by Department of Biotechnilogy, Genetice& Bioinformatics and Department of Microbiology of N.V.Patel College of Pure and Applied Sciences, VallabhVidyanagar. on Saturday 18th September, 2010.
- 4. Acted as resource person and judge for poster presentation at GSBTM sponsored two days National level workshop on "Application of Bioinformatics in Biotechnology & Microbiology" Organized by Ganpat University Department of Bioinformatics Kherva during 5th-6th March 2011.
- 5. Acted as resource person for National Seminar on "Changing Role of Bioinformatician in Next Generation Sequencing" at Ome Research Facility, Department of Animal Biotechnology, Anand Agricultural University, Anand, sponsored by Gujarat State Biotechnology Mission (GSBTM), Department of Science & Technology, Government of Gujarat, Gandhinagar, on 18th November 2011.
- 6. Acted as resource person for National Workshop on "Computational Models, tools & techniques in Bioinformatics" under Bioinformatics Infrastructure Facility of Department of Biotechnology, New Delhi & Special Interest Group on Bioinformatics of Computer Society of India at Department of Applied Mechanics, Sardar Vallabhbhai National Institute of Technology (SVNIT), Surat 395007, during November 21-25, 2011.

- 7. Acted as resource person in the State Level Hands on Training "Topics in Bioinformatics for Teachers", organized by Department of Biotechnology & Bioinformatics Centre (Sub-DIC, DBT New Delhi), Barkatullah University, Bhopal, M.P. and sponsored by Madhya Pradesh Biotechnology Council Bhopal. During 23-28 July 2012.
- 8. Acted as resource person for National Seminar on "Bioinformatics Challenges in Cutting Edge MetagenomicResearch" at Ome Research Facility, Department of Animal Biotechnology, Anand Agricultural University, Anand, sponsored by Gujarat State Biotechnology Mission (GSBTM), Department of Science & Technology, Government of Gujarat, Gandhinagar, on 7th March 2013.
- 9. Acted as resource person for National Seminar cum Workshop on "Applications of Bioinformatics in life Sciences" under the Bioinformatics Infrastructure Facility, Bioinformatics Centre, School of Studies in Neuroscience, Jiwaji University, Gwaloir, (M.P.) during 8th 9th March 2013.
- 10. Acted as resource person for NATIONAL WORKSHOP ON BIOINFORMATICS under Bioinformatics Infrastructure Facility of Department of Biotechnology, New Delhi & Special Interest Group on Bioinformatics of Computer Society of India at Department of Applied Mechanics, Sardar Vallabhbai National Institute of Technology (SVNIT), Surat 395007, during May 13-17, 2013.
- 11. Acted as keynote speaker in 6th Swadesh Prem Jagriti Sangosthi- 2014& Global Conference on Technological Challenges and Human Resources for Climate Smart Horticulture Issues and Strategies on "Application of Bio-Informatics in Climate Smart Horticulture" during 28-31st May 2014, Navsari Agricultural University, Navsari, Gujarat.
- 12. Acted as Resource Person for Refresher Course on "Computer Applications" (Inter disciplinary) organised by UGC-Human Resource Development Centre, Maharshi Dayanand Saraswati (MDS) University, Ajmer (Rajasthan), during 22nd September to 12th October 2017.
- 13. Acted as Judge for Poster Competition at Gujarat Science Academic Meet (GSA-VVN) organized at V. P. Science College on 21st January 2018.
- 14. Acted as Judge in the 31st State level competitions on 2nd February 2020 organized by Gujarat Integrated Bio Network [GIBioN]
- 15. Rendered service as Judge for the evaluation of proposals submitted on the theme of "Bioinformatics in COVID-19" for National level COVID Hackathon' 2020 during 18/05/2020 to 08/06/2020 organized by Student Startup and Innovation Center, Anand Pharmacy College, Anand Managed by Shri Ramkrishna Seva Mandal and Sponsored by SSIP, Govt. of Gujarat and Supported by IIC, MHRD.
- 16. Acted as Resource Person for workshop on "Modelling of protein 3 D structure & Annotation" organised by Department of Biotechnology, Parul Institute of Applied Science, Parul University, Limda, Waghodia, Vadodara, Gujarat- 391760, during 8th March to 10th March 2021.

- 1. Associate Editor in International Magazine on Advances in Computer Science and Telecommunications (IMACST).IMACST is a peer-reviewed journal published monthly by the Association for Computer Science and Telecommunications. IMACST is dedicated to advancing and spreading the knowledge in the areas of computer science and telecommunications. http://www.imacst.com/index.php?p=1_4_Editorial-Board.
- 2. Member of Course Design committee for Graduate level under Choice Based Credit System (CBCS).
- 3. Member of Indian Science Congress Association (ISCA).
- 4. Acting as a reviewer of research paper for "Interdisciplinary Sciences: Computational Life Sciences", ISSN: 1913-2751 ISSN: 1867-1462 Journal no. 12539. http://www.springer.com/life+sciences/bioinformatics/journal/12539
- 5. Life Member of Computer Society Of India (CSI)
- 6. Editorial Board Member of JOURNAL OF COMPUTATIONAL INTELLIGENCE AND ELECTRONIC SYSTEMS (www.aspbs.com/jcies).Published by AMERICAN SCIENTIFIC PUBLISHERS (www.aspbs.com).
- 7. Acting as a reviewer of research paper for journal named "Current Computer-Aided Drug Design"ISSN: 1573-4099 (Print) ISSN: 1875-6697 (Online), published by Bentham Science Publishers, http://bsp-cms.eurekaselect.com/index.php/CCADD.
- 8. Acting as a reviewer of research paper for journal named "Molecular Biology Reports" An International Journal on Molecular and Cellular Biology, ISSN: 0301-4851 (print version) ISSN: 1573-4978 (electronic version), Published by Springer. http://www.springer.com/life+sciences/animal+sciences/journal/11033

Events Coordinated

- 1. **Workshop** on "Molecular Modeling and Drug Designing" at Department of Computer Science, Sardar Patel University, VallabhVidyanagar, GUJARAT (INDIA) During 28th 30th August 2008.
- 2. **Workshop** on "Bioinformatics Tools for Molecular Modeling and Drug Designing" at Department of Computer Science, Sardar Patel University, VallabhVidyanagar, GUJARAT (INDIA) During 22nd 24thSeptember 2009.
- 3. **Workshop** on "Bioinformatics Tools for Molecular Modeling and Drug Designing" at Department of Computer Science, Sardar Patel University, VallabhVidyanagar, GUJARAT (INDIA) during 22nd– 24thSeptember 2010.

- 4. **Workshop** on "Basic Bioinformatics Tools for Sequence Analysis" at Department of Computer Science, Sardar Patel University, VallabhVidyanagar, GUJARAT (INDIA) on 6th August 2012.
- 5. **NationalWorkshop** on "Molecular Modeling for Drug Design (MMDD-12)" under the auspices of PURSE Program of DST-SPU, VallabhVidyanagar. During 29th 30th November 2012.
- 6. "Blood Donation Camp" at G.H.Patel Post Graduate Department Of Computer Science and Technology, Sardar Patel Univ. V V Nagar, Gujarat. on 28th July 2008.
- 7. "National Service Scheme Camp for Cleaning the village" at Budiya Village, on 15th August 2016.
- 8. National conference on "Current trends in Biological Sciences (CTBS-2020)", conducted by the Department of Biosciences, Sardar Patel University Vallabh Vidyanagar under auspices of UGC-CAS programme.

Otherimportant information

- 1. Serving as a **project guide** for the students of M.Sc. (Bioinformatics) of various universities.
- 2. Serving as a **visiting lecturer** at Animal Biotechnology Department, College of Verterinary Science And Animal Husbandry, Anand Agriculture University, Anand.
- 3. Serving as a **visiting lecturer** at P.G. Department of Bioinformatics, Bhavnagar University, Bhavnagar.
- 4. Serving as a **visiting lecturer** at P.G. Department of Biosciences, Sardar Patel University, V V Nagar.
- 5. Participated in Campus Diversity Initiative Programmes, Sponsored by Ford Foundation, New York at Sardar Patel University, VallabhVidyanagar.
- 6. Attended National Service Scheme (NSS) special camp from 29-11-1991 to 8-12-1991 held at Jobanpura of Anandtaluka, Gujarat.
- 7. **Awarded Second** prize for short-put event during the year 1999- 2000 by Sardar Patel University, VallabhVidyanagar.
- 8. Served as a **Cultural Secretary** of Sardar Patel University Biological Society, VallabhVidyanagar during the year 1999 2000.
- 9. Member of Bioinformatics Institute Of India (BII), Noida (U.P.), India.
- 10. Attended "State level Conference of Voluntary Blood Donation Camp Organizers" Jointly organized by Gujarat State AIDS Control Society and Indian Society of Blood Transfusion and Immunohematology, at Civil hospital Ahmedabad .on 15th March, 2009.
- 11. Follower of BochasanwasiAksharPurusotamSanstha (B.A.P.S).