

Curriculum vitae

Kalpana Panati, M. Sc., Ph. D.

Lecturer in Biotechnology,
Government College for Men (A),
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Education:

- **Ph.D.** (Biotechnology) – Sri Venkateswara University, Tirupati, (2018).
- **M. Sc.** (Biotechnology) - Sri Venkateswara University, Tirupati, (2001) **topper with 79.5%**.
- **B. Sc.** (B. Z. C.) - Sri Padmavathi Women's College, Tirupati, India (1999) with **83.44%**.

Positions:

- 1st January 2013 to till date: **Lecturer** in Biotechnology in Govt. Degree College, appointed through APPSC.
- Academic consultant (2011- 2012) In Genetics & Genomics, Yogi Vemana University, Kadapa.
- September 2007 to August 2010: **CSIR - Senior Research Fellow**, Department of Genetics, Osmania University, Hyderabad, India.
- September 2005 to August 2007: **CSIR - Junior Research Fellow**, Department of Genetics, Osmania University, Hyderabad, India.

Academic Positions:

- Co-ordinator (2016-2019), **IQAC**, Government College for Men (A), Kadapa.
- Chairman - **Board of Studies (U.G)**, Department of Biotechnology, Yogi Vemana University, Kadapa.
- Chairman - **Board of Studies**, Department of Biotechnology, Govt. College for Men (A), Kadapa.
- Member - **Board of Studies**, Department of Biotechnology, SKR & SKR Govt. Degree College for Women (A), Kadapa.
- Member - **Board of Studies**, Department of Biotechnology, D. K. Govt. Degree College for Women (A), Nellore.
- Nominee – The Committee for Control and Supervision of Experiments on Animals (CCSEA).
- Admitted as Associate Fellow of Andhra Pradesh Akademi of Sciences (AFAPAS)-2019
- Life member in Andhra Pradesh Akademi of Sciences

- Life member in Indian Academy Sciences

Achievements and other qualifications:

- Associate fellow of AP Academy of Sciences, A.P 2019
- University Topper in the batch 1999 – 2001 and got the ***Gold Medal***.
- Qualified **CSIR-NET for JRF**
- Qualified in **GATE – 2002**: Secured **92.39** percentile score and got the **197** all India Rank.
- Awarded Prof. N. J. Chinoy prize for the **best poster presentation** in “20th National symposium on Reproductive biology and comparative endocrinology”, Bharathidasan University, Tiruchirappalli during the period 07 - 09 January 2002.

Training programmes attended:

- One-day workshop on “Teaching Methodology” at Govt. Degree College (W), Begumpet, Hyderabad on 10th January 2013.
- Orientation Programme at Academic Staff College, University of Hyderabad during the period 17th April 2013 to 14th May 2013.
- Refresher Course at Academic Staff College, Sri Venkateswara University, Tirupati during the period 8th December 2014 to 27th December 2014 on “Disaster Management”.
- Refresher Course at Academic Staff College, Sri Venkateswara University, Tirupati during the period 9th December 2019 to 21st December 2019 on “Life Sciences”.
- 5 day Faculty Development Programme in “LMS video and Pedagogy” during the period 3rd August 2020 to 7th August 2020 organized by CCE, AP, Vijayawada.
- 5 day Faculty Development Programme in Biosciences during the period 7th September 2020 to 11th September 2020 organized by CCE, AP, Vijayawada
- Refresher Course at Academic Staff College, Sri Venkateswara University, Tirupati during the period 18th October 2021 to 30th October 2021 on “Life Sciences”.
- 6 day training of the trainers programme on English medium of instruction, proficiency in English from 19th June 2023 to 24th June 2023 at NRC, Government College for Men (A), Kadapa organized by CCE, AP, Mangalagiri.

Seminars/Conferences/Workshops:

Organized

- Conducted UGC-sponsored one day National Workshop on “Recombinant DNA (rDNA) Technology” on 21st February 2015 at Dept. of Biotechnology, Govt. College for Men (A), Kadapa.
- Conducted Science Academies’ Lecture Workshop on “Recent Trends in Genetics” at Department of Biotechnology, Government College for Men (A), Kadapa during on 19-01-2023 and 20-01-2023.

Peer reviewed publications:

1. M Derangula, KK Ruhinaz, **K Panati**, PA Subramani, VRA Tatireddigari, Narala VR. Natural Product Ligands of the Peroxisome Proliferator-Activated Receptor Gamma as Anti-Inflammatory Mediators. *The Natural Products Journal*. **2023**. 13 (6), 25-39.
2. Sarkar A, **Panati K**, Narala VR. Code inside the codon: The role of synonymous mutations in regulating splicing machinery and its impact on disease. *Mutation Research - Reviews in Mutation Research*. **2022** Jul-Dec;790:108444. doi: 10.1016/j.mrrev.2022.108444.
3. VR Narala, LV Thimmana, **K Panati**, N Kolliputi, Nitrated fatty acid, 10-nitrooleate protects against hyperoxia-induced acute lung injury in mice. *International Immunopharmacology*. **2022**, 109, 108838.
4. PA Subramani, FB Shaik, RD Michael, **K Panati**, VR Narala. Thiamine: A Natural Peroxisome Proliferator-Activated Receptor Gamma (PPAR- γ) Activator. *Letters in Drug Design & Discovery*. **2022**. 19 (10), 888-896.
5. **K Panati**, LV Timmana, VR AT, RR Saddala, VR Narala. Virology and Molecular Pathogenesis of Coronavirus Disease 2019: An Update. *The Eurasian Journal of Medicine*. **2022**.54 (3), 299.
6. **Panati K**, Timmana LV and Narala VR*. Electrophilic nitrated fatty acids are potential therapeutic candidates for inflammatory and fibrotic lung diseases. *Nitric Oxide*. **2020**, **102: 28-38**. <https://doi.org/10.1016/j.niox.2020.06.003>, **I.F: 3.37**
7. Derangula M, **Panati K** and Narala VR*. Biochanin A ameliorates ovalbumin-induced airway inflammation through peroxisome proliferator-activated receptor-gamma in mouse model. *Endocrine, metabolic & immune disorders drug targets*. **2021**; **21(1)**, 145-155. doi: 10.2174/1871530320666200503051609. **I.F: 1.98**
8. **Panati K**, Arva Tatireddigari V.R.R, Narala VR. An Overview on COVID-19 Pandemic: from Discovery to Treatment. *Infectious Disorders - Drug Targets*. **2021**;**21(7)**: e160921187709. doi: 10.2174/1871526520666201109115820.
9. **Panati K**, E.C. Surendranatha Reddy and Narala VR*. Angiotensin-converting enzyme gene polymorphism may be a risk factor for COVID-19 clinical outcome. *Current Trends in Biotech. and Pharmacy*. 2020 April, Vol. 14 (2) 236-240. DOI: 10.5530/ctbp.2020.2.24, **I.F: 0.3**
10. **Panati, K.**, Narala, V.R. COVID-19 Outbreak: An Update on Therapeutic Options. *SN Compr. Clin. Med*. 2020, 2:379–380
11. **Panati, K.**, Subramani, P.A, Reddy M.M., Derangula M, Arva Tatireddigari V.R.R., Kolliputi N., and Narala V.R*., The nitrated fatty acid, 10-nitrooleate inhibits the neutrophil

- chemotaxis via peroxisome proliferator-activated receptor gamma in CLP-induced sepsis in mice. *International Immunopharmacology*, 2019, 72, 159-165. **I.F: 3.95**
12. Arva Tatireddigari V.R.R., Kiran Kumar M, Narala VR, **Panati K**, Nagaraju. N, Antipyretic activity of ipomoea sepiaria, momordica cymbalaria and pergularia daemia extracts on yeast-induced pyrexia in rats. *International Journal of Innovative Pharmaceutical Sciences and Research*, 2018. **6** (6): p. 6-12.
 13. **Panati, K.**, Narala V.R., Narasimha V.R, Derangula M, Arva Tatireddigari V.R.R and Yeguvapalli S., Expression, purification and biological characterisation of recombinant human irisin (12.5 kDa). *Journal of Genetic Engineering and Biotechnology*, 2018. 16, Issue (2): p. 459-466.
 14. **Panati K**, Narasimha VR., Derangula M, Venkat R.R. Arva Tatireddigari, Narala VR, Suneetha Yeguvapalli, Cloning, expression and evaluation of the immunogenicity of truncated (78-145 aa) human recombinant irisin (fn5). *International Journal of Innovative Pharmaceutical Sciences and Research*, 2018. 6(2): p. 44-53.
 15. Subramani, P.A., **Panati, K.**, and Narala, V.R.* (2017). Curcumin Nanotechnologies and Its Anticancer Activity. *Nutrition Cancer* 69, 381-393. **I.F: 2.447**
 16. Narasimha VR, **Panati K**, Reddy GM, Narala VR*. Protein tyrosine phosphatase nonreceptor type 22 (PTPN22) gene polymorphism in pulmonary tuberculosis in the Indian population. *International Journal of Mycobacteriology* (2016), 5(3):346-350.
 17. **Panti K**, Suneetha Y, Narala VR. Irisin/FNDC5--An updated review. *Eur Rev Med Pharmacol Sci* 2016; 20 (4): 689-697. **I.F: 3.024**
 18. Shaik, F.B., **Panati, K.**, Narasimha, V.R., and Narala V.R.* (2015). Chenodeoxycholic acid attenuates ovalbumin-induced airway inflammation in murine model of asthma by inhibiting the TH2 cytokines. *Biochemical and biophysical research communications* 463, 600-605. **I.F: 2.985**
 19. Kanumuri, R.M., Bajji, C., Tummuru, R.R., Tatireddigari, V.R., Mangamoori, L.N., **Panati, K.**, and Narala V.R.* (2015). Increased yield of high purity recombinant human brain natriuretic peptide by acid hydrolysis of short fusion partner in Escherichia coli. *Protein expression and purification* 111, 61-67. **I.F: 1.513**
 20. Sree Latha T, **Panati K**, Gowd SK, Reddy CM, and Lomada D. Ovarian Cancer Biology and Immunotherapy. *International Reviews of Immunology*. 2014; 33: 428-40 (**IF- 5.75**)
 21. Narala, V.R. *, Subramani, P.A., Narasimha, V.R., Shaik, F.B., and **Panati, K.** (2014). The role of nitrated fatty acids and peroxisome proliferator-activated receptor gamma in modulating inflammation. *International immunopharmacology* 23, 283-287. **I.F: 3.361**
 22. Gudipudi, A., Bajji, C., Kosana, R.R., **Panati, K.**, Lomada, D., Arva Tatireddigari, V.R., and Narala, V.R.* (2014). Gene fragment polymerization for increased yield of recombinant HIV fusion inhibitor enfuvirtide. *Biotechnology letters* 36, 1761-1769. **I.F: 2.154**
 23. Kosana, R.R., Bajji, C., Kanumuri, R.M., **Panati, K.**, Mangamoori, L.N., Tummuru, M.R., and Narala, V.R.* (2014). Recombinant approach for the production of HIV fusion inhibitor Enfuvirtide using Escherichia coli. *Protein expression and purification* 95, 136-142. **I.F: 1.338**
 24. **Panati K**, Narala VR, and Tatireddygari VRA. Changes in ATPase and Phosphatases in different tissues of crab, *Oziotelphusa senexsenex*, following exposure to fenvalerate. *BioScan International Journal*. 2012; 7: 487-489.
 25. Tatireddygari VRA., **Panati K**, and Narala VR. Haematological changes in pregnant rats and their descendants due to teratogenic dose of Cadmium chloride. *BioScan International Journal*. 2012; 7: 473-475
 26. **Panati K**, Sarvajeet Pal, K. V. Rao and V. D. Reddy. Association of Single Nucleotide Polymorphisms (SNPs) of *PADI4* gene with Rheumatoid Arthritis (RA) in Indian population. *Genes & Genetic System*. 2012; 87:191-6. (**IF- 1.0**)

27. Kanala JR, **Panati K**, Ranga Suresh S and Narala VR*. Microbial production of high purity hyaluronic acid from *Streptococcus zooepidemicus*. *BioScan International Journal*. 2011, 4: 601-603.
28. Kanala JR, **Panati K**, Narala VR*. Efficient Recovery of Hyaluronic Acid from Highly Viscous Culture Broth. *The IUP Journal of Life Sciences*. 2011, 2: 15-20.
29. Subramani, P.A., **Panati, K.**, and Narala, V.R.* (2013a). Molecular docking of Glyceroneogenesis pathway intermediates with Peroxisome Proliferator- Activated Receptor-Alpha (PPAR-alpha). *Bioinformation* 9, 629-632. **I.F: 0.50**
30. Narala, V.R., Smith, M.R., Adapala, R.K., Ranga, R., **Panati, K.**, Moore, B.B., Leff, T., Reddy, V.D., Kondapi, A.K., and Reddy, R.C. (2009). Curcumin is not a ligand for peroxisome proliferator-activated receptor-gamma. *Gene therapy & molecular biology* 13, 20-25. **I.F: 0.75**

Papers submitted in Conference Proceedings:

1. Panati K. Nanocurcumin and Its Biomedical Applications. *Proceedings of National Seminar on New Trends on Advanced Materials*, 2015, 67-70.

1. Book Chapters:

1. **Panati K**, Subramani PA, Reddy DD, Narala VR*. Chapter 16: Role of gold nanoparticles (GNPs) in cancer diagnosis and treatment. In *Nanotechnology in Biology and Medicine: Research Advancements & Future Perspectives*. CRC Press; November 4, 2019; **ISBN 9780367200503**
2. **Panati K**, Subramani PA, Arva Tatireddigari VRR, Yeguvapalli S and Narala VR*. Nanocurcumin Formulation: A Promising Drug for Lung Diseases. In *Novel Aspects In Nanotechnology Applications & Future Challenges*. Publisher: Agrobios (India) 2019, Pp: 89-112 **ISBN: 9788193925553**.
3. Subramani PA, **Panati K**, Lebaka VR, Reddy DD, Venkata Ramireddy Narala *. *Nanostructures for Curcumin Delivery: Possibilities and Challenges in Nano- and Microscale Drug Delivery Systems*. Editor: Alex Grumezescu 2017, Elsevier (ISBN-9780323527279) Pp: 393-418.
4. **Kalpana Panati** and Venkata Ramireddy Narala Women in Science and technology: an Indian Perspective; in *Women in india through ages: a glance* Edited by N.Sivaparvathi 2016, ISBN # 978-93-5171-082-0 pp: 182-189. India Research Press.
5. Parasuraman Aiya Subramani, **Kalpana Panati**, Venkata Ramireddy Narala. Epithelial to Mesenchymal Transition of Lung Cancer: Role of Peroxisome Proliferator- Activated Receptors, 2015 in *Cancer: Current and Future Perspectives* ISBN# 978-935174-071-1 pp:103-111

Research Grant:

1. **Minor Research Project** has been sanctioned by UGC-SERO entitled “Cloning, expression and molecular characterization of recombinant human Irisin” (2015-2017), completed and submitted.

Attended and Presented papers in Seminars/ Conferences:

1. Presented a paper in an International E-Conference on New Horizons in “Biochemistry, Microbiology and Food Technology – 2020” on COVID-19 and Genetic polymorphism during 12th & 13th October 2020 organized by Yogi Vemana University, Kadapa and Universiti Malaysia Kelantan, Malaysia.

2. Presented a paper in an International e Conference on Recent Trends in Drug Discovery, Diagnostics and Therapeutics - A special emphasis on COVID-19 on An overview on COVID-19 pandemic: from discovery to treatment during 2nd -4th July 2020 organized by Department of Biotechnology, VIGNAN's Foundation for Science, Technology & Research.
3. Presented a paper in A.P. Science Congress on "Irisin: Marker for metabolic disorders" during 8th -10th November 2018 held at Yogi Vemana University, Kadapa organized by YVU and A.P. Academy of Science.
4. Presented a paper National Conference on "The Current and Future Prospects of Animal Physiology and Biotechnology in Disease control in the Era of Interdisciplinary Ethnopharmacology" during 29th & 30th August 2018 held at Sri Venkateswara University, Tirupati organized by Department of Zoology.
5. Participated in Science Academies Lecture workshop on "New Horizons in Genetics" during 7th and 8th February 2018 held at Yogi Vemana University, Kadapa organized by Department of Zoology.
6. Participated in International Conference on "Innovations in Pharma and Biopharma Industry: Challenges and Opportunities for Academy and Industry" during 20th – 22nd December 2017 held at University of Hyderabad, Hyderabad organized by Department of Biotechnology and Bioinformatics, School of Life Sciences.
7. Participated in Science Academies Lecture workshop on "Trends in Conservation of Biodiversity" during 24th and 25th August 2017 held at PVKN Govt. College, Chittoor organized by Department of Botany.
8. Participated in Science Academies Lecture workshop on "Recent Trends in Plant Taxonomy and Biodiversity & Conservation" during 12th and 13th July 2017 held at GCM (A), Kadapa organized by Department of Botany.
9. Presented a paper in UGC sponsored One Day National Seminar on "Advanced Trends in Material Science" on 10th March 2017 held at GCM (A), Kadapa organized by Department of Physics.
10. Presented a paper in UGC sponsored Two Day National Seminar on "Modern Trends in Chemistry Research" during 27th & 28th January 2017 held at GCM (A), Kadapa organized by Department of Chemistry.
11. Presented a paper in UGC-SERO sponsored Two Day National Seminar on "Wild Life conservation- Endangered Species" during 20th and 21st January 2017 held at GCM (A), Kadapa organized by Department of Zoology.
12. Presented a paper in International Conference on "Environmental Conservation and Human Health – Challenges and Strategies" during 21st -23rd December 2016 held at Sri Venkateswara University, Tirupati organized by Department of Zoology.
13. Presented a paper National Seminar on "Recent Trends in Nanotechnology and Aquaculture Technologies" during 18th & 19th August 2016 held at Sri Venkateswara University, Tirupati organized by Department of Fishery Science and Aquaculture.
14. Delivered an invited talk in One Day National Seminar on "Newer Trends in Biochemistry" on 19th March 2015 held at Yogi Vemana University, Kadapa organized by Department of Biochemistry.
15. Participated in UGC-sponsored National Seminar on "Significance of Human Values: A Perspective" during 18th & 19th March 2015 held at Government College for Men (A), Kadapa organized by Department of History.
16. Participated in UGC-sponsored National Seminar on "Environmental Hazards-Causes, Controlling Measures" on 17th March 2015 held at Government College for Men (A), Kadapa organized by Department of Sciences.

17. Participated in UGC-sponsored National Symposium on “Emerging Trends in Environment- Conservation – Public Awareness” during 14th & 15th March 2015 held at Yogi Vemana University, Kadapa organized by Department of Environmental Science and Department of Journalism and Communication.
18. Participated in UGC-sponsored National Seminar on “Challenges and strategies for consumer Protection” during 13th March 2015 held at Government College for Men (A), Kadapa organized by Department of Commerce.
19. Participated in One Day Training Programme on “Choice Based Credit System” on 7th March 2015, organized by Government College for Men (A), Kadapa
20. Presented a paper in One Day National Seminar on “New Trends in Advanced Materials” held on 27th February 2015 held at GCM (A), Kadapa organized by Department of Physics.
21. Participated in State level workshop on “Basic Molecular Biology Techniques” during 7th -9th November 2014 held at GDC, Koduru (R.S) organized by Dept. of Biotechnology.
22. Presented a paper in UGC-sponsored National Seminar on “Emerging Trends in Environmental Science and Technology” during 14th & 15th March 2014 held at Yogi Vemana University, Kadapa organized by Department of Environmental Science.
23. Presented a paper in UGC-sponsored National Conference on “Recent Trends in Biotechnology” during 25th & 26th February 2014 held at Yogi Vemana University, Kadapa organized by Department of Biotechnology.
24. Presented a paper in UGC-sponsored National Seminar on “Emerging Trends in Genetics & Genomics Research” during 13th & 14th February 2014 held at Yogi Vemana University, Kadapa organized by Department of Genetics & Genomics.
25. Presented a paper in UGC-sponsored National Conference on “Recent Trends in Biotechnology and Bioinformatics” during 12th & 13th February 2014 held at Yogi Vemana University, Kadapa organized by Department of Biotechnology & Bioinformatics.
26. Participated in One Day Workshop on “Importance of Intellectual Properties and its protection” held on 2nd January, 2013 at Govt. City College (A), Hyderabad organized by Department of Biotechnology.
27. Participated in One Day Workshop on “Recent Advances in Structure and Ligand Based Drug Design” on 6th December 2012 held at Yogi Vemana University, Kadapa.
28. Participated in National Symposium on “Perspectives of Genomics and Proteomics” during 30th and 31st January, 2009 held at Osmania University, Hyderabad organized by Department of Genetics & Biotechnology.
29. Presented a paper in AP Science Congress 2008 during 14th-16th November 2008 held at Osmania University, Hyderabad.
30. Participated in National Seminar on “Living Organisms in changing Environment” during 14th and 15th March, 2008 held at Osmania University organized by CPMB.
31. Served as resource person in a Refresher Course on Plant Biotechnology during 19th February to 11th March, 2007 held at CPMB, Osmania University, Hyderabad.
32. Participated in International Symposium on “Frontiers in Genetics and Biotechnology- Retrospect and Prospect” during 8th-10th January, 2006 held at Osmania University, Hyderabad organized by Department of Genetics.
33. Participated in Association of Microbiologists of India 46th Annual Conference “Micro-Biotech 2005” during 8th -10th December 2005 held at Osmania University, Hyderabad organized by Department of Microbiology.
34. Presented a paper in 20th National Symposium on “Reproductive Biology and Comparative Endocrinology” during 7th-9th January 2002 held at Bharathidasan University, Tiruchirapalli organized by Department of Animal Sciences.

Area of Research Interest:

Animal Biotechnology, Recombinant DNA Technology, Immunology, Genetics.