# A. RAVI KIRAN,

M. Pharm, Ph. D

#### Associate Professor

G. Pulla Reddy College of Pharmacy, Mehdipatnam, Hyderabad, Telangana, India – 500 028. E-mail: kiransury@gmail.com, Phone: +91 40-23517222 Mobile: +91-98850-28654



# ACADEMIC QUALIFICATIONS

- 2015 Ph. D **Pharmaceutical Sciences**
- 2004 M. Pharmacy Pharmaceutical Sciences
- **Osmania University** The Tamilnadu Dr. MGR Medical

University Gulbarga University. HYDERABAD

1999 **B.** Pharmacy Pharmaceutical sciences

# **TEACHING EXPERIENCE: 17 years**

- Working as Associate Professor at G. Pulla Reddy College of Pharmacy from Aug 2015 to till date.
- Worked as Sr. Asst. Prof at G. Pulla Reddy College of Pharmacy from Jan 2009-July
- Worked as Asst Prof at G. Pulla Reddy College of Pharmacy from Jan-2005 to Dec-2008.

# **RESEARCH EXPERIENCE**

- Biologist with 12 years of experience in the identification of small molecules from • natural resources against Obesity, Cancer, and Diabetes.
- Guided 13 M. Pharmacy projects.

# LIST OF PROJECTS APPROVED

Received one research grant of 25 lakhs entitled "Discovery of non-carbohydrate • selective inhibitors of the galectin-1 for the treatment of cancer" sponsored by DBT, India. – Co-Investigator.

### **TECHNICAL EXPERTISE**

- Cell culture: Maintenance of primary & established cell lines (macrophage, Fibroblasts, breast, prostate, colon, leukemia, neuroblastoma, Liver, Ovarian and Embryonic kidney cells).
- Drug screening assays: High Throughput Screening, MIC determination, Fluorescence assay, Cell proliferation assays, Synergism studies, Apoptotic detection assays, Flowcytometry, HPLC.
- Animal studies: Handling and performing various pharmacological screening methods in rats and mouse. Worked with various cancer and obesity animal models.
- Molecular biology: Blotting techniques, Nucleic acid isolation, RT-PCR, Expression and purification of recombinant proteins, 2D gel electrophoresis, PCR, Purification by Y, HYDERABAD using AKTA Explorer.
- **Immunology**: ELISA and Immunofluorescence.

# **RESEARCH INTEREST**

My area of research involves identification of potential NCEs and scientific validation • in studying the mechanistic events altered by newly identified NCEs from natural resources for human disease. Also I am interested in target based identification of small molecules from natural sources against obesity and cancer.

# LIST OF PROJECTS GUIDED

- G.PULLA. Formulation and Evaluation of nutraceutical values of rice bran (Oryza sativa l) -Akkaladevi Tejaswini. 2021.
  - 2. HPLC method development and validation for related substances in carprofen injection - M. Chandana Reddy 2021
  - 3. Method development and validation of stability indicating method for determination of related substances of tirofiban hydrochloride infusion by RP-HPLC - Aishwarya Dande -2021.
  - 4. Stability indicating method development and validation for determination of related substances of cetrorelix acetate injection by RP-HPLC. Gummadi Rishitha Reddy-2021
  - 5. Development of new RP-HPLC method for simultaneous estimation of luliconazole and naproxen sodium in the formulated gel. T. Sree Ramya-2020.

- 6. Development and Validation of Microbiological Analytical Method for Determination of Potency of Luliconazole cream. Sana Fatima-2020.
- 7. Simultaneous estimation of Luliconazole and methyl paraben in pharmaceutical formulation by UV spectroscopy using absorption ratio method. K. Sri Vidya-2020.
- 8. Formulation evaluation development and validation of simultaneous equation method for estimation of vitamin C & vitamin D in multivitamin lipstick. Saranya Reddy-2019
- Development and validation of RP-HPLC method for simultaneous estimation of sitagliptin phosphate and metformin hydrochloride in solid dosage form for its dissolution studies. B. Sai Manasa-2019
- Determination of pregabalin in human plasma using ultra high performance liquid chromatography with tandem mass spectrometry for bioequivalence studies. M. Vijaya Kranthi-2018
- 11. Development and validation of spectrophotometric method for the determination of thymol content in different brands of ajwain water. Harshitha Reddy Yeddula, 2018
- 12. Determination of Vitamin C in different brands of amla juice by using titrimetric and specrophotometric methods.- Bhargavi Mokila 2018
- 13. Formulation and evaluation of gemcitabine microspheres. Shruthi-2017
- 14. Hepatoprotective activity of Grape fruit (Citrus paradise) on Carbon tetrachloride induced acute hepatotoxicity in rats. Sudarshini Kodali, 2016.
- G.PULLA15. Protective effect of *Macrotyloma uniflorum* on urethane induced lung cancer in Balb/c mice. Mr. Syed Baseeruddin Alvi. 2015.
  - Protective effect of Ranolazine on urethane induced lung cancer in Balb/c mice. Mr. Mirza Noor ullah Baig. 2015.
  - Pharmacological evaluation of ethanolic extract of whole plant of *Cassia absus* on 1, 2 -Dimethyl Hydrazine induced colon cancer in mice. Miss. Athiya Sulthana. 2014.
  - Effect of Ranolazine on 1, 2 Dimethyl Hydrazine induced colon cancer in mice. P. Rama Devi. 2014.
  - Combined effect of Curcumin and Naringin in Progesterone induced obesity. Miss. Arshia Firdouse. 2013.
  - Synergistic activity of Piperine and Naringin in Progesterone induced obesity in female Albino mice. Mr. Mohammad Latif Nazari. 2013.

## FELLOWSHIPS AND AWARDS

- 1. Elected as "Associate fellow" of Telangana Academy of sciences 2017.
- First Prize for oral presentation in Innovations in Pharmaceutical Research held at G. Pulla Reddy College of Pharmacy, Hyderabad, 27<sup>th</sup> Dec 2013.
- 3. First prize for poster presentation in PHARMAX-2K10 held at Mather Teresa College of Pharmacy, Hyderabad.
- 4. First prize for poster presentation in APTI-2010 National level conference held at Hyderabad.

# **PROFESSIONAL ACTIVITIES**

- Examiner for Pharmaceutical Microbiology, Pharmaceutical Biotechnology, Biology, and Biochemistry at Osmania University, Kakatiya University, Palemuru University.
- Reviewer for Journal of Food Biochemistry, African Journal of Microbiology Research, Journal of Nutritional Disorders & Therapy, Life Sciences (OMICS), Journal of King Saud University and Pharmaceutical Biology.
- Life Member of A.P.T.I.
- Instrumental in organizing conferences in G. Pulla Reddy College of Pharmacy.

# PAPERS PRESENTED

G.PUL

- Antiproliferative activity and molecular mechanism of *Pupalia lappacea* on chronic myeloid leukemia (K562) cells- Presented at 12<sup>th</sup> International congress of Ethnopharmacology, Jadhavapur University, February 17-19, 2012 at Kolkata.
- 2. Anti-cancer activity of methanolic extract of *Cassia absus* seeds in K562 cells, National Conference on Natural Product Research: for Health and Biopharma Industry, Kumara guru College of Technology, Coimbatore, 25th Mar 2011.
- 3. Anti-proliferative activity of *Tecomella undulata* Bark extract, APTI CONVENTION-2010, Hyderabad, 2nd Oct 2010.

 Protective effect of Ranolazine on 1,2 dimethyl hydrazine induced colon cancer in Swiss albino mice. 66<sup>th</sup> Indian Pharmaceutical Congress held at Hyderabad during 23-25 January, 2015. Mr.Syed Baseeruddin Alvi, Ravi Alvala.

5. Targeting multiple proteins involved in cancer by plant polyphenols: In-silico molecular

docking studies. 66<sup>th</sup> Indian Pharmaceutical Congress held at Hyderabad during 23-25 January, 2015. Rmaya Nuti, Ravi Alvala.

- 6. Development of pantothenate synthetase inhibitors for Mycobacterium tuberculosis infection: design and enzyme inhibition studies. 2<sup>nd</sup> national symposium on Current Trends in Pharmaceutical Sciences, 17th Nov, 2012 at BITS-Pilani, Hyderabad Campus, Hyderabad.
- 7. In-silico design of novel sirt1 inhibitors for targeting benign prostatic hyperplasia. Conference on "Recent Advances in Computational Drug Design (RACDD)" held at IISc, Bangalore on 16-17<sup>th</sup> Sep 2013. Mallika Alvala, Ravi Alvala.
- 8. Antiobesity effect of novel SIRT1 activator: In-vitro and In-Vivo studies. 2<sup>nd</sup> national symposium on Current Trends in Pharmaceutical Sciences, 17th Nov, 2012 at BITS-Pilani, Hyderabad Campus, Hyderabad.
- 9. Development of homology model and docking studies of Mycobacterium tuberculosis sirtuin protein (Rv1151c), MedChem 2011 Congress, IICT, Hyderabad, 26th Feb 2011.
- 10. In vitro anticancer activity of Abutilon indicum leaves on U-87 MG, a brain tumor cell line. XXXXIV Annual Conference of Indian Pharmacological Society, IPS, INDIA. 19<sup>th</sup> Dec 2011.

- 1. Attended 5 day e-FDP program on "Building Research and Innovative Culture among Pharmacy Teachers" from 18<sup>th</sup> to 22<sup>nd</sup> May 2020 are of Pharmaceutical Sciences and Research, Pimpri, Pune in association with APTI.
  - 2. Attended two week e-FDP program on "Pedagogy and Challenges in Pharmaceutical Research" from 1<sup>st</sup> June to 12<sup>th</sup> June 2020 organized by Maharaja College of Phaarmacy, Phool Baugh, Vizianagaram, Andhra Pradesh, India.
  - 3. Attended AICTE sponsored QIP-STC workshop on 'Research Communication' from 2<sup>nd</sup> Dec to 6<sup>th</sup> Dec 2019 organized by Dept of Humanistic studies, IIT-BHU, Varanasi.
  - 4. One Day Seminar on Innovations in Pharmaceutical Research and Poster Presentations-2018 on 25<sup>th</sup> September 2018 at G. Pulla Reddy College of Pharmacy, Hyderabad.
  - 5. Attended BIOASIA-2018 in Novotel, HITEX, Hyderabad on 22<sup>nd</sup> 23<sup>rd</sup> and 24<sup>th</sup> of Feb 2018.
  - 6. Attended National symposium on "Current research in cancer biology and therapy"

during 7<sup>th</sup> and 8<sup>th</sup> Oct 2016 at School of Biological Sciences and Biotechnology, University and Indian Institute of Advanced Research, Koba Institutional area, Gandhi Nagar.

- Attended Workshop on Role of Pharma in Health Care conducted by Administrative Staff College of India, Hyderabad on 9-4-2015.
- One Day Seminar on Innovations in Pharmaceutical Research on 27<sup>th</sup> Dec 2013 at G. Pulla Reddy College of Pharmacy, Hyderabad.
- Participated in Faculty Development Programme conducted by Shiva Sivani Institute of Management on 19-10-2012.
- Attended 12<sup>th</sup> International Congress of Ethnopharmacology held at Science City, Kolkata from 17-19, 2012.
- Participated in Symposium on Current Trends in Pharmaceutical Sciences organized by Department of Pharmacy on 12<sup>th</sup> Nov 2011 at BITS-Pilani Hyderabad Campus.
- 12 Attended National Conference on Natural Product Research for Health Care and Bio-Pharma Industry organized by Kumarguru College of Technology, Coimbatore held on 25<sup>th</sup> and 26<sup>th</sup> Mar 2011.
- Attended 15<sup>th</sup> National Convention of APTI at Shilpakala Vedika, Hyderabad on 2-3<sup>rd</sup> Nov 2010.
- 14 Attended National Seminar on Recent Advances in Pharmaceutical Research at G. Pulla Reddy College of Pharmacy on 9<sup>th</sup> and 10<sup>th</sup> Oct 2009.
  15. Quality Improvement Press
  - Quality Improvement Programme on Advanced Techniques in Experimental Pharmacology organized by JSS College of Pharmacy Ootacamund, Tamilnadu from Mar 30 – April 6 2007.
  - One day seminar on Pharmaceutical Education- Challenges and opportunities organized by APTI, A.P. State branch at G. Pulla Reddy College of Pharmacy on 17<sup>th</sup> July 2006.
  - 17. Attended PHARMAX-2K10, held at Mather Teresa College of Pharmacy, Hyderabad.
  - Attended one day workshop on TEACHING SKILLS organized by APTI, A.P. State at Bharat Institute of Pharmacy on 9-9-2005.
  - 19. Under gone Training in production and quality control of Rabies Vaccine and DTP group at Pasteur Institute, Coonoor, Nilgiris, from 5-7-2004 to 9-7-2004.
  - 20. Attended 55<sup>th</sup> IPC at Chennai on Dec 19, 20, 21<sup>th</sup> 2003.

- State level seminar on Emerging Trends in Microbiology: Organized by Sri Rama Krishna College of Arts and Sciences, Coimbatore on Mar 6<sup>th</sup> 2003.
- 22. Second PSG Tech Symposium in Biosciences: Organized by PSG college of Technology, Coimbatore, on Feb 14-15, 2003.

#### PUBLICATIONS

- Synthesis and biological evaluation of novel 4, 7-disubstituted coumarins as selective tumorassociated carbonic anhydrase IX and XII inhibitors. KM Chandra, NS Goud, M Arifuddin, M Alvala, R Alvala, A Angeli. Bioorganic & Medicinal Chemistry Letters 39, 127877.
- An updated patent review of galectin-1 and galectin-3 inhibitors and their potential therapeutic applications (2016–present). Aaftaab Sethi, Swetha Sanam, Ravi Alvala, Mallika Alvala. Expert Opinion on Therapeutic Patents. Volume 31, 2021 - Issue 8
- Development and Validation of Microbiological Analytical Method for Determination of Potency of Luliconazole Cream. Sana Fathima, Yenumula Padmavathi, Ancha Divya, Nayaka Raghavendra Babu, and Ravi Alvala. Asian Journal of Pharmaceutical and Health Sciences, 2021, 10, 4, 2408-2414.
- 4. Nerella Sridhar Goud, Venkatesh Pooladanda, K Muni Chandra, PS Lakshmi Soukya, Ravi Alvala, Pardeep Kumar, Chandana Nagaraj, Rose Dawn Bharath, Insaf A Qureshi, ChandraiahGodugu, Mallika Alvala. Synthesis, <sup>18</sup>F-radiolabeling & galectin-1 inhibition studies of 4, 7-disubstituted coumarins. Bioorganic Chemistry Sep 2020, Vol 102. Page 104-125.
- 5. T. Sree Ramya, Y. Padmavathi, Venkatesh Sama, Mallika Alvala, Ravi Alvala. Development of new RP-HPLC method for simultaneous estimation of luliconazole and naproxen sodium in the formulated gel. Asian J. Pharm. Hea. Sci. Jul-Sep 2020 Vol-10|Issue-3.
- 6. Development and validation of new microbiological analytical method for analysis of Gemifloxacin mesylate in pharmaceutical formulation. Y Padmavathi, RK Alvala, G Srinitha, NR Babu, S Fathima, A Divya. Asian Journal of Pharmaceutical and Health Sciences. 2020 Vol-10 Issue 3.
- Mirza Noor ullahBaig, Syed BaseeruddinAlvi, Mallika Alvala, Venkatesh Sama, Yenumula Padmavathi, Ramadevi. P, Ravi Alvala. Ranolazine as a protective agent against Lung Cancer: A translational approach. Asian J. Pharm. Hea. Sci. Jan - Mar 2020 Vol-10|Issue-1
- 8. Saranya Reddy.D, Y. Padmavathi, Venkatesh Sama, Mallika Alvala, Ravi Alvala.

Formulation evaluation development and validation of simultaneous equation method for estimation of vitamin C and vitamin D in multivitamin lipstick. Asian J. Pharm. Hea. Sci. | Apr - Jun 2020 | Vol-10 |Issue-2.

- Venkatesh Sama, BalarajuPagilla, Rajeswari Chiluka, Ravi Alvala, Ravi Kumar Pola, Ramesh Mullangi. Bio enhancing effects of naringin on atorvastatin. ADMET & DMPK, 7(3):174-182,2019.
- RamadeviPemmireddy, Ravi kiran Alvala, Venkatesh Sama, Aparna Sriramoju. Effect of Ranolazine on 1, 2 - Dimethyl hydrazine induced colon cancer in mice. Asian Journal of Pharmacy and Pharmacology.2019.
- Nerella Sridhar Goud, Venkatesh Pooladanda, S Ghouse Mahammad, Pranay Jakkula, Santhosh Gatreddi, Insaf A Qureshi, Ravi Alvala, ChandraiahGodugu, Mallika Alvala. Synthesis and Biological evaluation of morpholines linked coumarin-triazole hybrids as anticancer agents. Chemical Biology and Drug Design. 2019, (94)5. 1919-1929 (Impact Factor:2.256)
- Goud NS, Ghouse SM, Vishnu J, Komal D, Talla V, Alvala Ravi. Synthesis of 1-benzyl-1H- benzimidazoles as galectin-1 mediated anticancer agents. Bioorganic Chemistry. May 2019. Impact Factor:3.929.
- 13. Goud NS, Soukya PSL, Ghouse M, Komal D, Alvala Ravi, Alvala M. Human Galectin-1 and its inhibitors: Privileged target for cancer and HIV. Mini Reviews in Medicinal Chemistry. 2019 (Impact Factor:2.5).
- Goud NS, Ghouse SM, Vishnu J, Pranay J, Alvala Ravi, Talla V, Qureshi IA, Alvala M. Synthesis and Biological Evaluation of Novel Heterocyclic Imines Linked Coumarin-Thiazole Hybrids as Anticancer Agents. Anticancer Agents in Medicinal Chemistry. 2019. (Impact Factor:2.55).
- 15. Pratima K, Goud N, Mohammed A, Ramamoorthy G, Ananthathatmula R, Doble M, Rizvi A, Banerjee S, Alvala Ravi, Alvala M. An efficient and facile Green synthesis of BisindoleMethanes as potential MtbFtsZ inhibitors. Chem Biol Drug Des 2018 (Impact Factor: 1.235)
- Nuti R, Goud S, Saraswati AP, Alvala Ravi, Alvala M. Antimicrobial Peptides: A Promising Therapeutic Strategy in Tackling Antimicrobial Resistance. Current medicinal chemistry. 2017. Impact Factor:3.249

- AzmathUnnisa B, Sama Venkatesh, Rajesh B, Ravi Alvala, Jaya Praksh D. (2017). Mechanistic evaluation of antinociceptive effects of bioactive guided fractions of Barleriaprionitis. International Journal of Pharm Sciences Nanotechnology 10(3):3715-3718.
- AzmathUnnisa B, Sama Venkatesh, Jaya Prakash D, Ravi Alvala (2016). Evaluation of glucose utilization capacity of bioactivity-guided fractions of Balrleriaprionitis Linn and Hyptissuaveolens (L) Poit in isolated rat hemidiaphram. AYU. 37(2):145-150
- Alvala Ravi, Mallika Alvala, Ramya Nuti, MalasalaSatyaveni, JageshwariSahu, Srinivas Bandaru, Overview Of Mycobacterium Tuberculosis Chorismate Mutase: A Potential Target, Curr Trends Pharm Sci 2,2-3(2014)55-63.
- Reddy Raghunath Babu, K. Naresh, Ravi Alvala, B. Madhava Reddy, V. Harinadha Babu. (2014): Synthesis of novel isoniazid incorporated styryl quinazolinones as anti-tubercular agents against INH sensitive and MDR M. tuberculosis strains. Medicinal Chemistry Research. Impact Factor:1.612.
- Ravi Alvala, Mallika Alvala, Venkatesh Sama, Sriram Dharmarajan, JeankumarVariamUllas, Madhava Reddy B (2013). Scientific evidence for traditional claim of anti-obesity activity of *Tecomellaundulata* bark: Journal of Ethnopharmacology 148: 441-448. Impact Factor:3.014.
- 22. Sama V, Rajesh B, Krishnaiah A, Ravikiran A, Reddy BM, Mullangi R (2013). Evaluation of antioxidant potential of *Carallumaattenuata*: Indian Drugs 50:26-33.
- Alvala Ravi, A. Mallika, Venkatesh Sama, Arunasree.M.Kalle, Vamshi. K. irlapati, B. Madhava Reddy (2012). Anticancer activity of *Pupalialappacea*on chronic myeloid leukemia K562 cells: DARU journal of Pharmaceutical sciences- Biomed central 5: 20-86. Impact Factor:0.63
- 24. LingappaMallesha, Kikkeri N. Mohana, BantalVeeresh, Ravi Alvala, and Alvala Mallika., Synthesis and In Vitro Antiproliferative Activity of 2-Methyl-3-(2-piperazin-1-yl-ethyl)pyrido[1,2-a]pyrimidin-4-one Derivatives Against Human Cancer Cell Lines, Arch Pharm Res Vol 35, No 1, 51-57, 2012 Springer. Impact factor:1.588.
- 25. Mallika Alvala, Shubhmita Bhatnagar, Alvala Ravi, VariamUllasJeankumar, Thimmappa H Manjashetty, Perumal Yogeeswari, Dharmarajan Sriram, Novel acridinedione derivatives: Design, synthesis, SIRT1 enzyme and tumor cell growth inhibition studies. Bioorganic & Medicinal Chemistry Letters 22 (2012) 3256–3260. Impact factor:2.661.

- 26. Sama Venkatesh, Bhasker Babu N., Latha K., Ravi Alvala, Madhava Reddy B, Mullangi R (2012): Evaluation of *Trapa bispinosa*starch as an alternative tablet excipient to maize starch: assessment by preformulation and formulation studies. Indian Drugs 49:27:32.
- 27. Srikanth AV, Ravikiran. A, Ravi kumar P, Lakshmi Narsu M, Madhava Reddy B (2011): Cytotoxic activity of *Gymnemasylvestre*. Pharma ScienceMonitor
- Alvala Ravi, A. Mallika, Venkatesh Sama, Sajeli Begum, Rukaiyya Khan, Madhava Reddy (2011): Antiproliferative activity and standardization of *Tecomellaundulata*bark extract on lami. Journal of Ethnopharmacology 137: 1353-1359. Impact Factor:3.014.
- 29. SamaV,RajkumariP,AlvalaR,ReddyBM,RameshM(2010):Antinociceptiveeffectof *Caralluma attenuate* in mice: A possible mechanism. Indian Drugs 47: 23-27.
- 30. Sama Venkatesh, Nabeela, Ravi Alvala, Madhava reddy B, Mullangi Ramesh (2010): Antidiabetic potential of *Strobilanthesmeeboldii* alloxan-induced diabetic rats. Asian Journal of Pharmacodynamics and Pharmacokinetics 10(1):65-69.
- 31. Y Padmavathi\*, Ravi Alvala, Jaya SravaniGarige, N RaghavendraBabu, Elluri Soumya. Simultaneous estimation of Tenofovirdisoproxilfumarate, Efavirenz and Lamivudine in fixed dose combination tablets by ultraviolet spectrophotometry in multicomponent mode and its application in rat plasma. Asian J. Pharm. Hea. Sci. | Apr - Jun 2020 | Vol-10 | Issue-2.
- 32. Sama Venkatesh, ShilpikaNagula, Rajeswari Chiluka, Yenumula Padmavathi, Ravi Alvala, Rajesh Bolleddu. Effect of Piperine on Antihyperlipidemic Activity and Pharmacokinetic Profile of Simvastatin. 2019. Inventi Rapid: Pharmacokinetic and pharmacodynamics. Vol 2019, issue 1.
- 33. Rajesh Bolleddu\*1,3 , Sama Venkatesh1 , Azmathunnisa Begum1 , Ravi Alvala1 , RachamallaShyamsunder. Bioguided extraction and Evaluation of Antioxidant studies of Abutilon indicum fruits. Journal of Biomedical and Pharmaceutical Research. Volume 5, Issue 6: November-December; 2016, 68-74.

#### Dr. A. RAVI KIRAN