

Curriculum Vitae

Rajesh Dabur
Professor,
Department of Biochemistry,
Maharshi Dayanand University,
Rohtak-HR

rajeshdabur@yahoo.com
Mob No: 8607351927



Positions Held

Professor: Department of Biochemistry, MD University Rohtak-HR. April 16, 2015 onward

Associate professor: Department of Biochemistry, MD University Rohtak-HR. April 16, 2012-April 15, 2015.

Assistant Director: NRIBAS, CCRAS, Department of AYUSH, Pune, MH. 06/03/08-15/04/12.

Research Officer: NRIBAS, CCRAS, Department of AYUSH, Pune, MH. 01/01/06-06/03/08

Assistant Professor: Biomedical Sciences, BU, Jhansi-284128. 06/08/2003-01/06/2006.

Post Doctorate Fellow: HIM, Harvard, Boston, MA, US. 02115. 02/01/2001-03/08/2003.

Ph.D.: Institute of Genomics and integrative Biology, Mall Road, DU Campus, Delhi

Awards:

- 1. Best Scientist Award:** Central Council of Research in Ayurveda, Department of AYUSH. Year-2009.
- 2. Prof. M. L. Khorana Memorial Prize:** Best paper in the field of Pharmacology & Clinical Pharmacy. By Indian Pharmaceutical Association (IPA). June 5, 2015.

Extramural Research Projects

Ongoing:

1. In vivo efficacy of 17-O-acetylacuminolide in combination with magnoflorine on oxidative stress and inflammation in sciatic denervation mice model of skeletal muscle atrophy. ICMR
2. Development and pharmaceutical evaluation of polymeric nano-niosomes of S-allyl cysteine and palmatine for targeted treatment of skeletal muscle atrophy. SERB-SURE

Completed:

1. Identification and characterization of Trans actin protein(s) in Tip60:AICD:Fe65 transcriptional complex. SERC FAST Track
2. Studies on functional aspects of human telomeric RNA associated proteins in telomerase. SERC FAST Track
3. Comparative chemo-profiling of *Tinospora cordifolia* (Willd.) in different sessions and with different supporting trees using RRLC-QTOFMS and multivariate analysis to maximize its use to treat diabetes. HSCST, Haryana

Patents Granted:

- 1) Antifungal molecule 2-(3,4-dimethyl-2,5-dihydro-1H-pyrrol-2-yl)-1-methylethyl pentanoate. The **United States Patent 6713504**. <http://www.freepatentsonline.com/6713504.html>.

- 2) A novel antifungal molecule characterized from *D. metel*. European patent, Granted: 02718466.2-2101-IB0201207.
- 3) A process for the isolation of novel antifungal lead molecule. (Indian, Patents No, 220711, NF 343/NF/2001).
- 4) A novel antifungal molecule 2-(3, 4-dimethyl-2, 5-dihydro-1h-pyrrol-2-yl)-1-methylethyl pentanoate. Indian Patent 28-09-01.
- 5) A NOVEL ANTIFUNGAL MOLECULE 2-(3,4-DIMETHYL-2,5-DIHYDRO-LH-, , PYRROL-2-YL)-1-METHYLETHYL PENTANOATE. Patents No 2420952, Canada,
- 6) A PROCESS FOR ISOLATION OF NOVEL ANTIFUNGAL LEAD MOLECULE, Patents No. 2294923, Russian Federation,
- 7) A NOVEL ANTIFUNGAL MOLECULE 2-(3,4-DIMETHYL-2,5-DIHYDRO-LH-, PYRROL-2-YL)-1-METHYLETHYL PENTANOATE, Patents No 1487791, European

Papers Published:

1. Yadav A, Dabur R. Skeletal muscle atrophy after sciatic nerve damage: Mechanistic insights. **European Journal of Pharmacology**. 2024 Mar 15:176506.
2. Yadav, A. and Dabur, R., Ursolic acid restores redox homeostasis and proinflammatory cytokines production in denervation-induced skeletal muscle atrophy. **Appl Biochem Biotechnol**, 2024, In press
3. Yadav A, Yadav SS, Singh S, **Dabur R**. Natural products: Potential therapeutic agents to prevent skeletal muscle atrophy. **Eur J Pharmacol**. 2022 Jun 15;925:174995. doi: 10.1016/j.ejphar.2022.174995. Epub 2022 May 9. PMID: 35523319.
4. Yadav A, Shirolkar A, **Dabur R**. Impact of Ayurvedic drug *Tinospora cordifolia* in hyperlipidemia induced dysbiosis. **Chemical Biology Letters**. 2022 Apr 24;9(3):363-.
5. Yadav A, **Dabur R**. Rapid Identification of 44 Steroids in Human Urine Samples using HPLCESI-QTOF-MS. **Current Pharmaceutical Analysis**. 2022 May 1;18(4):437-48.
6. Yadav A, Yadav S, Dabur R. Higher plants exert interspecific effects on the phytoecdysteroids contents in *Tinospora cordifolia*. **Chemical Biology Letters**. 2022 Feb 1;9(1):312-.
7. Shirolkar A, Yadav A, Nale A, Phogat J, **Dabur R**. Integrated omics analysis revealed the *Tinospora cordifolia* intervention modulated multiple signaling pathways in hypertriglyceridemia patients-a pilot clinical trial. **J Diabetes Metab Disord**. 2022 Feb 1;21(1):379-397. doi: 10.1007/s40200-022-00985-6. PMID: 35673460; PMCID: PMC9167413.
8. Singh A, Yadav A, Phogat J, **Dabur R**. Dynamics and Interplay between Autophagy and Ubiquitin-proteasome system Coordination in Skeletal Muscle Atrophy. **Curr Mol Pharmacol**. 2022;15(3):475-486. doi: 10.2174/1874467214666210806163851. PMID: 34365963.
9. Singh A, Phogat J, Yadav A, **Dabur R**. The dependency of autophagy and ubiquitin proteasome system during skeletal muscle atrophy. **Biophys Rev**. 2021 Mar 4;13(2):203-219. doi: 10.1007/s12551-021-00789-7. PMID: 33927785; PMCID: PMC8046863.
10. Yadav A, Singh A, Phogat J, Dahuja A, Dabur R. Magnoflorine prevent the skeletal muscle atrophy via Akt/mTOR/FoxO signal pathway and increase slow-MyHC production in streptozotocin-induced diabetic rats. **J Ethnopharmacol**. 2021 Mar 1;267:113510. doi: 10.1016/j.jep.2020.113510. Epub 2020 Oct 24. PMID: 33141056.
11. Yadav A, Dahuja A, Dabur R. Dynamics of Toll-like Receptors Signaling in Skeletal Muscle Atrophy. **Curr Med Chem**. 2021;28(28):5831-5846. doi: 10.2174/0929867328666210202113734. PMID: 33530901.
12. Shirolkar A, Yadav A, Mandal TK, Dabur R. Intervention of Ayurvedic drug *Tinospora cordifolia* attenuates the metabolic alterations in hypertriglyceridemia: a pilot clinical trial. **J**

- Diabetes Metab Disord.** 2020 Oct 16;19(2):1367-1379. doi: 10.1007/s40200-020-00657-3. PMID: 33520840; PMCID: PMC7843799.
13. Gupta P, Dutt V, Kaur N, Kalra P, Gupta S, Dua A, Dabur R, Saini V, Mittal A. S-allyl cysteine: A potential compound against skeletal muscle atrophy. **Biochim Biophys Acta Gen Subj.** 2020 Oct;1864(10):129676. doi: 10.1016/j.bbagen.2020.129676. Epub 2020 Jul 7. PMID: 32649980.
 14. Sharma B, Dutt V, Kaur N, Mittal A, Dabur R. *Tinospora cordifolia* protects from skeletal muscle atrophy by alleviating oxidative stress and inflammation induced by sciatic denervation. **J Ethnopharmacol.** 2020 May 23;254:112720. doi: 10.1016/j.jep.2020.112720. Epub 2020 Feb 27. PMID: 32114167.
 15. Sharma B, Dabur R. Role of Pro-inflammatory Cytokines in Regulation of Skeletal Muscle Metabolism: A Systematic Review. **Curr Med Chem.** 2020;27(13):2161-2188. doi: 10.2174/0929867326666181129095309. PMID: 30488792.
 16. Sharma B, Yadav A, Dabur R. Interactions of a medicinal climber *Tinospora cordifolia* with supportive interspecific plants trigger the modulation in its secondary metabolic profiles. **Sci Rep.** 2019 Oct 4;9(1):14327. doi: 10.1038/s41598-019-50801-0. PMID: 31586109; PMCID: PMC6778175.
 17. Soni M, Prakash C, Dabur R, Kumar V. Protective Effect of Hydroxytyrosol Against Oxidative Stress Mediated by Arsenic-Induced Neurotoxicity in Rats. **Appl Biochem Biotechnol.** 2018 Sep;186(1):27-39. doi: 10.1007/s12010-018-2723-5. Epub 2018 Mar 2. PMID: 29497947.
 18. Bhosale JD, Dabur R, Jadhav GP, Bendre RS. Facile Syntheses and Molecular-Docking of Novel Substituted 3,4-Dimethyl-1H-pyrrole-2-carboxamide/carbohydrazide Analogues with Antimicrobial and Antifungal Properties. **Molecules.** 2018 Apr 11;23(4):875. doi: 10.3390/molecules23040875. PMID: 29641457; PMCID: PMC6017109.
 19. Shirolkar A, Chakraborty S, Mandal T, Dabur R. Plasma metabolomics reveal the correlation of metabolic pathways and Prakritis of humans. **J Ayurveda Integr Med.** 2018 Apr-Jun;9(2):113-122. doi: 10.1016/j.jaim.2017.05.002. Epub 2017 Nov 26. PMID: 29183656; PMCID: PMC6033735.
 20. Jain P, Nale A, Dabur R. Antimicrobial metabolites from *Saraca asoca* impairs the membrane transport system and quorum-sensing system in *Pseudomonas aeruginosa*. **Arch Microbiol.** 2018 Mar;200(2):237-253. doi: 10.1007/s00203-017-1435-5. Epub 2017 Oct 9. PMID: 28993916.
 21. Dabur R, Shirolkar A, Mishra V, Yadav BS. Non-invasive Qualitative Urinary Metabolomic Profiling Discriminates Gut Microbiota Derived Metabolites in the Moderate and Chronic Alcoholic Cohorts. **Curr Pharm Biotechnol.** 2017;18(14):1175-1189. doi: 10.2174/1389201019666180308093207. PMID: 29521221.
 22. Rajesh Dabur. Identification of molecular pathways affected by treatment with heartwood water extract of *Pterocarpus marsupium* in MCF 7 cancer cell line. **Herbal Medicine.** Volume 9, September 2017, Pages 42-52 <http://doi.org/10.1016/j.hermed.2017.04.001>.
 23. Gupta, P., Bala, M., Gupta, S., Dua, A.^a, Dabur, R.^b, Injeti, E., Mittal, A. Efficacy and risk profile of anti-diabetic therapies: Conventional vs traditional drugs—A mechanistic revisit to understand their mode of action. 2016, **Pharmacological Research**, 113, pp. 636-674
 24. Amey Shirolkar, Rajesh Dabur. Administration of Fresh Juice of *Tinospora cordifolia* Decreases Levels of Urinary Markers of Peroxisome Proliferator-Activated Receptors in Hyperlipidemic Patients. **Ind J Pharma Edu Res.** 2016, 50,
 25. Amey Shirolkar, Bhawana Sharma, Suman Lata, Rajesh Dabur. Guduchi Sawras (*Tinospora cordifolia*): An Ayurvedic drug treatment modulates the impaired lipid metabolism in alcoholics through dopaminergic neurotransmission and anti-oxidant defense system. **Biomedicine & Pharmacotherapy.** 2016. **83**, 1265–1277.
 26. Phougat, N., Chhillar, A.K., Prasad, A.K., Srivastava, S., Dabur, R. Coumarin derivatives as adjuvants: From in silico physicochemical characterization to in vitro evaluation against gram positive bacteria 2016. **Combinatorial Chemistry and High Throughput Screening** 19 (6), pp. 489-496

27. Dabur, R., Mittal, A. Detection and qualitative analysis of fatty acid amides in the urine of alcoholics using HPLC-QTOF-MS. 2016 **Alcohol** 52, pp. 71-78
28. Bhosale, Jitendra, Umesh Fegade, Banashree Bondhopadhyay, Simanpreet Kaur, Narinder Singh, Anupam Basu, **Rajesh Dabur**, Ratnamala Bendre, and Anil Kuwar. "Pyrrole-coupled salicylimine-based fluorescence "turn on" probe for highly selective recognition of Zn²⁺ ions in mixed aqueous media: Application in living cell imaging." **Journal of Molecular Recognition** (2015), 28(6):369-75. doi: 10.1002/jmr.2451.
29. Dutt Vikas, Gupta Snjeev, **Dabur Rajesh**, Injeti Elisha and Mittal Ashwani. Skeletal muscle atrophy: Potential therapeutic agents and their mechanisms of action. **Pharmacological Research** (2015), 99: 86–100.
30. Kumari, Suman, Preeti Jain, Bhawana Sharma, Preeti Kadyan, and **Rajesh Dabur**. "In Vitro Antifungal Activity and Probable Fungicidal Mechanism of Aqueous Extract of *Barleria Grandiflora*." **Applied Biochemistry and Biotechnology** (2015): 1-14. DOI: 10.1007/s12010-015-1527-0
31. Mittal, Ashwani, and **Rajesh Dabur**. Detection of New Human Metabolic Urinary Markers in Chronic Alcoholism and Their Reversal by Aqueous Extract of *Tinospora cordifolia* Stem. **Alcohol and Alcoholism** (2015): agv012.
32. Sharma, B., Dabur, R. Protective effects of *Tinospora cordifolia* on hepatic and gastrointestinal toxicity induced by chronic and moderate alcoholism. 2015 **Alcohol and Alcoholism** 51 (1), agv130, pp. 1-10.
33. Gahlaut, A., **Dabur, R.** Proteomic analysis of *Escherichia coli* in response to catechins rich fraction (2014) **International Journal of Pharmacy and Pharmaceutical Sciences**, 6 (1), pp. 784-787.
34. Phougat, N., Khatri, S., Singh, A., Dangi, M., Kumar, M., **Dabur, R.**, Chhillar, A.K. Combination therapy: The propitious rationale for drug development (2014) **Combinatorial Chemistry and High Throughput Screening**, 17 (1), pp. 53-67.
35. Singh, Seema, **Rajesh Dabur**, Madhumanjiri M. Gatne, Bharat Singh, Shilpi Gupta, Sharad Pawar, Sunil K. Sharma, and Gainda L. Sharma. "In Vivo Efficacy of a Synthetic Coumarin Derivative in a Murine Model of Aspergillosis." **PloS one** 9, no. 8 (2014): e103039.
36. Mittal, A., Kadyan, P., Gahlaut, A., Dabur, R. Nontargeted identification of the phenolic and other compounds of *Saraca asoca* by high performance liquid chromatography-positive electrospray ionization and quadrupole time-of-flight mass spectrometry . **ISRN Pharm.** 2013 pp. 11.
37. Bhosale, J.D., Shirolkar, A.R., Pete, U.D., Zade, C.M., Mahajan, D.P., Hadole, C.D., Pawar, S.D., Patil, U.D., **Dabur, R.**, Bendre, R.S. Synthesis, characterization and biological activities of novel substituted formazans of 3,4-dimethyl-1Hpyrrole-2-carbohydrazide derivatives (2013) **Journal of Pharmacy Research**, 7 (7), pp. 582-587.
38. Gahlaut, A., **Dabur, R.**, Chhillar, A.K. Anti-Aspergillus activity of selected medicinal plants (2013) **Journal of Pharmacy Research**, 6 (4), pp. 419-422.
39. Gahlaut, A., Gothwal, A., Hooda, V., **Dabur, R.** RAPD patterns of some important medicinal plants and their substitutes used in Ayurveda to identify the genetic variations (2013) **International Journal of Pharmacy and Pharmaceutical Sciences**, 5 (1), pp. 239-241.
40. Gahlaut, A., Sharma, A., Shirolkar, A., **Dabur, R.** Non-targeted identification of compounds from regenerated bark of *terminalia tomentosa* by HPLC- (+) ESI-QTOFMS (2013) **Journal of Pharmacy Research**, 6 (4), pp. 415-418.
41. Gahlaut, A., Shirolkar, A., Hooda, V., **Dabur, R.** A rapid and simple approach to discriminate various extracts of *saraca asoca* [Roxb.], De. Wild using UPLC-QTOFMS and multivariate analysis (2013) **Journal of Pharmacy Research**, 7 (2), pp. 143-149. Cited 5 times.

42. Gahlaut, A., Shirolkar, A., Hooda, V., **Dabur, R.** β -Sitosterol in different parts of *Saraca asoca* and herbal drug ashokarista: Quali-quantitative analysis by liquid chromatography-mass spectrometry (2013) **Journal of Advanced Pharmaceutical Technology and Research**, 4 (3), pp. 146-150.
43. Gahlaut, A., Vikas, Dahiya, M., Gothwal, A., Kulharia, M., Chhillar, A.K., Hooda, V., **Dabur, R.** Proteomics & metabolomics: Mapping biochemical regulations (2013) **Drug Invention Today**, 5 (4), pp. 321-326.
44. Mittal, A., Gahlaut, A., Sharma, G.L., **Dabur, R.** Antifungal treatments delineate a correlation between cathepsins and cytokines in murine model of invasive aspergillosis (2013) **Indian Journal of Pharmaceutical Sciences**, 75 (6), pp. 688-699.
45. Shirolkar, A., Gahlaut, A., Chhillar, A.K., **Dabur, R.** Quantitative analysis of catechins in *Saraca asoca* and correlation with antimicrobial activity (2013) **Journal of Pharmaceutical Analysis**, 3 (6), pp. 421-428.
46. Shirolkar, A., Gahlaut, A., Hooda, V., **Dabur, R.** Phytochemical composition changes in untreated stem juice of *tinospora cordifolia* (W) Mier during refrigerated storage (2013) **Journal of Pharmacy Research**, 7 (1), pp. 1-6.
47. Gahlaut, A., Gothwal, A., **Dabur, R.** TLC based analysis of allelopathic effects on tinosporoside contents in *Tinospora cordifolia* (2012) **Journal of Chemical and Pharmaceutical Research**, 4 (6), pp. 3082-3088. Cited 6 times.
48. Gahlaut, A., Pawar, S.D., Mandal, T.K., **Dabur, R.** Biochemical analysis of lithiasis patients and treatment study using *Bryophyllum pinnatum* salisb (2012) **International Journal of Pharmacy and Pharmaceutical Sciences**, 4 (4), pp. 505-507.
49. Gahlaut, A., Taneja, P., Shirolkar, A., Nale, A., Hooda, V., **Dabur, R.** Principal component and partial least square discriminant based analysis of methanol extracts of bark and re-generated bark of *Saraca Asoca*(2012) **International Journal of Pharmacy and Pharmaceutical Sciences**, 4 (4), pp. 331-335.
50. Mittal, A., Mandal, T.K., Bindal, R., Dabur, R Cathepsin B is a negative regulator in pulmonary aspergillosis **Int J Biosci Biochem Bioinforma** 2011. 1, pp. 125-130
51. Bhosale, J.D., Khond, M., Mandal, T.K., Bendre, R.S., **Dabur, R.** Identification and characterization of two novel antimicrobial compounds from *jasminum grandiflorum* L. (2011) **World Applied Sciences Journal**, 13 (1), pp. 47-51.
52. **Dabur R**, Mandal TK, Gurav AM, Tasleem Arif, Singh DD. Bajpai V, Chandra K. (2009). Antibacterial and Antifungal Potential of two *Blumea* species used in folkloric medicine. **Journal of Drug Research in Ayurveda and Siddha**. Vol: XXX (3-4), 77-82.
53. Mangesh Khond, **J.D. Bhosale**, Tasleem Arif, T.K. Mandal, M.M. Padhi and Rajesh Dabur. Screening of Some Selected Medicinal Plants Extracts for *In-vitro* Antimicrobial Activity. **Middle-East Journal of Scientific Research** 4 (4): 271-278, 2009.
54. Rajesh Dabur, **J. D. Bhosale**, Mangesh Khond, TK Mandal, MM Padhi. Identification and characterization of two new antimicrobial compounds from *Jasminum grandiflorum*. **Middle-East Journal of Scientific Research**. 2009. 4 (4), pp. 271-278.
55. **Tasleem Arif**, JD Bhosale, Naresh Kumar, TK Mandal, RS Bendre, GS Lavekar, Rajesh Dabur, (2009). Natural Products- Anti-Fungal Agents Derived from Plants. Asian Journal of Natural Product and Research. **Journal of Asian Natural Products Research**. Vol. 11 (7), 621-638.
56. **Tasleem Arif**, T.K. Mandal, Naresh Kumar, J.D. Bhosale, Archana Hole, G.L. Sharma, M.M. Padhi, G.S. Lavekar, Rajesh Dabur, (2009). *In vitro* and *in vivo* antimicrobial activities of seeds of *Caesalpinia bonduc* (Lin.) Roxb. **Journal of Ethanopharmacology** 123, 177-180.
57. Piyush Bihari Lal, Naresh Kumar, **Tasleem Arif**, Akhilesh K. Verma, Sharma GL, Rajesh Dabur. (2008). In vitro anti-bacterial activity of a novel isoquinoline derivative

and its post antibacterial effects on *Pseudomonas aeruginosa*. **African Journal of Microbiology**. 2: 126-130.

58. **Dabur R**, Mandal TK, Gurav AM, Singh DD, Bajpai V, GS Lavekar. (2007). Antibacterial and Antifungal Potential of some Indian medicinal plants **Afr J Trad CAM**. 4(3):319-322.
59. **Dabur R**, Mandal TK, Sharma GL (2007). Post antifungal effects of antifungal compound 2-(3,4-dimethyl-2,5-dihydro-1H-pyrrol-2-yl)-1-methylethyl pentanoate. **J Med Microbiol**. 56: 815-818.
60. Gupta, J; Chattopadhyaya, D; Bhadoria, D P; Pasha, MAQ; Gupta, Vijay; Kumar, M; **Dabur, R**; Yadav, V; Sharma, GL (2007). T-lymphocyte subset profile and serum alpha-1-antitrypsin in pathogenesis of chronic obstructive pulmonary disease. **Clinical and Experimental Immunology**. 149(3):463-9.
61. V. Yadav, R Mandhan, Q Pasha, S. Pasha, A Katyal, AK Chhillar, J Gupta, **R Dabur** and GL Sharma (2007). Isolation and characterization of an antifungal protein from *Escherichia coli*. **J. Med Microbiol**. 56: 637-644.
62. Chhillar AK, Arya P, Mukherjee C, Kumar P, Yadav Y, Sharma AK, Yadav V, Gupta J, **Dabur R**, Jha HN, Watterson AC, Parmar VS, Prasad AK, Sharma GL. Microwave-assisted synthesis of antimicrobial dihydropyridines and tetrahydropyrimidin-2-ones: novel compounds against aspergillosis. **Bioorg Med Chem**. 2006 Feb 15; 14(4):973-81. Epub 2005 Oct 7. PMID: 16214352 [PubMed - indexed for MEDLINE].
63. Tiwari RK, Singh D, Singh J, Yadav V, Pathak AK, **Dabur R**, Chhillar AK, Singh R, Sharma GL, Chandra R, Verma AK. Synthesis and antibacterial activity of substituted 1,2,3,4-tetrahydropyrazino[1,2-a] indoles. **Bioorg Med Chem Lett**. 2006 Jan 15; 16(2):413-6. Epub 2005 Oct 21. PMID: 16246547 [PubMed - indexed for MEDLINE].
64. Ashok K. Prasad, Vineet Kumar, Pragya Arya, Sarvesh Kumar, **Rajesh Dabur**, Naresh Singh, Anil K. Chhillar, Gajinder L. Sharma, Balaram Ghosh, Jesper Wengel, Carl E. Olsen, and Virinder S. Parmar. Investigations toward new lead compounds from medicinally important plants. **Pure Appl. Chem**. 77(1), 25-40, 2005. DOI: 10.1351/pac200577010025.
65. Clark J, Shevchuk T, Swiderski PM, **Dabur R**, Crocitto LE, Buryanov YI, Smith SS. Construction of ordered protein arrays. **Methods Mol Biol**. 2005; 300:325-48. Review. PMID: 15657490 [PubMed - indexed for MEDLINE].
66. **Dabur R**, Chhillar AK, Yadav V, Kamal PK, Gupta J, Sharma GL. In vitro antifungal activity of 2-(3,4-dimethyl-2,5-dihydro-1H-pyrrol-2-yl)-1-methylethyl pentanoate, a dihydropyrrole derivative. **J Med Microbiol**. 2005 Jun; 54(Pt 6):549-52. PMID: 15888463 [PubMed - indexed for MEDLINE].
67. **Dabur R**, Diwedi SK, Yadav V, Mishra V, Singh R, Singh H, Sharma GL. Efficacy of 2-(3,4-dimethyl-2,5-dihydro-1h-pyrrole-2-yl)-1-methylethylpentanoate in a murine model of invasive aspergillosis. **Antimicrob Agents Chemother**. 2005 Oct; 49(10):4365-7. PMID: 16189123 [PubMed - indexed for MEDLINE]
68. Gupta J, Bhadoria DP, Lal MK, Kukreti R, Chattopadhyaya D, Gupta VK, **Dabur R**, Yadav V, Chhillar AK, Sharma GL. Association of the PIM3 allele of the alpha-1-antitrypsin gene with chronic obstructive pulmonary disease. **Clin Biochem**. 2005 May; 38(5):489-91. PMID: 15820782 [PubMed - indexed for MEDLINE]
69. Sawaya MR, Zhu Z, Mersha F, Chan SH, **Dabur R**, Xu SY, Balendiran GK. Crystal structure of the restriction-modification system control element C.BclI and mapping of its binding site. **Structure**. 2005 Dec; 13(12):1837-47. PMID: 16338412 [PubMed - indexed for MEDLINE]
70. Yadav V, Gupta J, Mandhan R, Chhillar AK, **Dabur R**, Singh DD, Sharma GL. Investigations on anti-Aspergillus properties of bacterial products. **Lett Appl Microbiol**. 2005; 41(4):309-14. PMID: 16162136 [PubMed - indexed for MEDLINE]

71. Yadav V, Mandhan R, **Dabur R**, Chhillar AK, Gupta J, Sharma GL. A fraction from *Escherichia coli* with anti-*Aspergillus* properties. **J Med Microbiol.** 2005 Apr; 54(Pt 4):375-9. PMID: 15770023 [PubMed - indexed for MEDLINE]
72. **Dabur R**, Ali M, Singh H, Gupta J, Sharma GL. A novel antifungal pyrrole derivative from *Datura metel* leaves. **Pharmazie.** 2004 Jul; 59(7):568-70. PMID: 15296098 [PubMed - indexed for MEDLINE]
73. A.K. Ashok, V. Kumar, P. Arya, S. Kumar, **R. Dabur**, N. Singh, A.K. Chhillar, G.L. Sharma, B. Ghosh, J. Wengel, C.E. Olsen and V.S. Parmar: Investigations towards new lead compounds from medicinally important plants. **In Proceedings of bioresources towards drug discovery and development** (2004), p. 213-235, ISBN No: 99903-73-16-7.
74. Balendiran GK, **Dabur R**, Fraser D. The role of glutathione in cancer. **Cell Biochem Funct.** 2004 Nov-Dec; 22(6):343-52. Review. PMID: 15386533 [PubMed - indexed for MEDLINE]
75. Clark J, Shevchuk T, Swiderski PM, **Dabur R**, Crocitto LE, Buryanov YI, Smith SS. Mobility-shift analysis with microfluidics chips. **Biotechniques.** 2003 Sep; 35(3):548-54. PMID: 14513560 [PubMed - indexed for MEDLINE]
76. **Dabur R**, Singh H, Chhillar AK, Ali M, Sharma GL. Antifungal potential of Indian medicinal plants. **Fitoterapia.** 2003 Jun; 75(3-4):389-91. PMID: 15159003 [PubMed - indexed for MEDLINE]
77. **Rajesh** and Sharma G L (2002). Studies on antimycotic properties of *Datura metel*. **J Ethanopharmacol** (80) 193-197. [PubMed - indexed for MEDLINE]

Books:

1. Jarrod Clark; Taras Schevchuk; Piotr M Swiderski; **Rajesh Dabur**; Laura E Crocitto; Yaroslav I Buryanov and Steven S Smith (2003). **Construction of Ordered protein Arrays.** Academic Press, Inc. A Division of Harcourt Brace & Company, 525 B Street, Suite1900, San Diego, California, 92101-4495.
2. K. Chandra, BG Choudhary, **Rajesh Dabur**, TK Mandal, AM Gurav, MB Yelne (2007). **Database of Important Medicinal Plants Volume-VIII.** CCRAS Press, Govt of India, New Delhi.
3. **Rajesh Dabur**, Vikas Hooda and Anjum Gahlaut. Secondary Metabolites to Combat Diabetes: Natural Medicine. 6 September 2012. Publisher: LAP Lambert Academic Publishing (6 September 2012) SBN-10: 365923656X; ISBN-13: 978-3659236563
4. Mandal, T., Bhosale, J., Rao, G., Padhi, M.M., **Dabur, R.** Antimicrobial Activities of Gray Nickerbean (*Caesalpinia bonduc* Linn.) (2011) **Nuts and Seeds in Health and Disease Prevention**, pp. 561-567. *Edited by: Victor R. Preedy, Ronald Ross Watson and Vinood B. Patel.* ISBN: 978-0-12-375688-6. Elsevier.
5. Jarrod Clark; TarasSchevchuk; Piotr M Swiderski; **Rajesh Dabur**; Laura E Crocitto; Yaroslav I Buryanov and Steven S Smith (2003). Construction of ordered protein Arrays. Academic press, Inc. A Division of Harcourt Brace and Company, 525 B Street, Suite1900, San Diego, California, 92101-4495.
6. K. Chandra, BG Choudhary, **Rajesh Dabur**, TK Mandal, AMGurav, MB Yelne (2007). Database of Important Medicinal Plants Volume-VIII. CCRAS Press, Govt. of India, New Delhi.
7. **Rajesh Dabur**, TK Mandal, AMGaurav, GB Rao (2011). Database of Important Medicinal Plants Volume-IX. CCRAS Press, Govt. of India, New Delhi.
8. Tasleem Arif, T.K. Mandal and **Rajesh Dabur** (2011). Natural Products: Antifungal agents derived from plants. **Opportunity, Challenge and scope of Natural Products in Medicinal Chemistry** Research Signpost 37/661 (2), Fort P.O. Trivandrum-695023 Kerala, India; ISBN: 978-81-308-0448-4.

9. **Rajesh Dabur (In Press)** Database of important medicinal plants Volume-X, CCRAS Press, Govt. of India, New Delhi; ISBN: 92 41545178.

Thesis Guided:

1. Thesis entitled "Identification and characterization of DNA binding protein in Tip60 complex" was awarded for Ph.D. Degree from Bundelkhand University, Jhansi.
2. Thesis entitled "Combination study of antibacterial agents against pathogenic bacteria" awarded of Ph.D. Degree MD University, Rohtak-HR. Nitu Phogat
3. Thesis entitled "Identification and characterization of biomarker (proteins and metabolites) in hyperlipidemic patients" awarded of Ph.D. Degree awarded by Savitri bai Phule University, Pune-MH.
4. Thesis entitled "In vitro assessment of an antidiabetic ayurvedic" Ph.D. Degree awarded by Savitri bai Phule University, University, Pune-MH.
5. Thesis entitled "Synthesis, characterization and biological activity of Ester derivatives of 1-(3, 4-dimethyl-2, 5-dihydro-1Hpyrrol-2-yl) propan-2-ol" Ph.D. Degree awarded by Jalgaon University, Pune-MH

Conference Papers:

1. Rajesh Dabur. International conference on Drug Design. 7-9 April 2017. Convention Centre , JNU, Delhi. Organized by Schrodinger.
2. Amey Shirolkar, Rajesh Dabur. Pterocarpus marsupium decrease insulin resistance through modulation of mTOR and NF- κ B signaling pathways. International Congress of the Society for Ethanopharmacology (SFEC-2017). Feb 23-25, 2017. UKA Tarsadia University, Bardoli, Gujrat.
3. Dr. Rajesh Dabur, TK Mandal. Identification and Characterization of Two Novel Antimicrobial Compounds from *Jasminum grandiflorum* 4th World Ayurved Congress, Bangalore. 11-13th December, 2010
4. Dr. Rajesh Dabur, Dr. T K Mandal, JD Bhosale, Tasleem Arif, RS Bendre, GB Rao. Gray Nickerbeans: Antimicrobial activities of *Caesalpinia bonduc* (Linn.) Roxb. 4th World Ayurved Congress Bangalore. 11-13th December, 2010
5. Gajendra Rao, TK Mandal & Rajesh Dabur *In vitro* propagation of Important Medicinal Plants (R.E.T. and Dashmula) through Tissue Culture Techniques 4th World Ayurved Congress. 11-13th December, 2010
6. Dabur R, Tasleem, Arif, Mandal TK, Gurav AM, Chandra K. (2007). The Allelopathic effects of *Azadirachta indica* A. Juss. increases the tinosporaside contents in *Tinospora cordifolia* (Willd.) Miers. **International Seminar on "Present trends on future prospects of angiosperms taxonomy"**. Pune. 4-6 October, 2006
7. Vistas in diabetics. **2nd International Conference on "Recent Advances in Biomedical and Therapeutic Science"** held at Bundelkhand University, Jhansi. January 6-8, 2005.
8. Desh Deepak Singh, Ambika Garg, Shiva Kant Diwedi, Rambir Singh, Akhilesh Verma, GL Sharma, **Rajesh Dabur** (2005). Antimicrobial potential and partial mechanism of action of 1-(4-chloro-phenyl)-6,7-dimethoxy-1,2,3,4-tetrahydro-isoquinoline. **2nd International Conference on "Recent Advances in Biomedical and Therapeutic Science"** held at Bundelkhand University, Jhansi. January 6-8, 2005.
9. Shivakant Dwivedi, Manish Gupta, Desh Deepak Singh, Ambika Garg, G L Sharma and **Rajesh Dabur**. (2005). Expression analysis of antigens of *A. fumigatus* at different time intervals. **2nd International Conference on "Recent Advances in Biomedical and Therapeutic Science"** held at Bundelkhand University, Jhansi. January 6-8, 2005.
10. **Rajesh Dabur**, Ajay Pathak, Shiv Kumar, Manish Gupta, Vijender Mishra, Rambir Singh, GL Sharma. Evaluation of *Lantana indica* Roxb., a weed of Bundelkhand region, India, for its antimicrobial activity. **International conference on "Chemistry Biology Interface: Synergistic new frontiers"**. November 21-26, 2004. P 25-49
11. **Rajesh Dabur**, Singh HS and Sharma GL. Evaluation of plant products for antimycotic potential. **26th Annual Conference of Association of Clinical Biochemists of India** held at Vellore on February 9-12, 2000.

12. **Rajesh Dabur**, Singh HS, Ali M and Sharma GL. Characterization of a novel antifungal molecule from. *Datura metel* **70th Annual Conference of Society of Biochemists of India** held at Hyderabad, December, 2001.
13. Sharma GL, Pasha S, Singh HS and **Rajesh Dabur**. Fungal protein targets of a novel antifungal molecule. **9th Asian Pacific Congress of Clinical Biochemistry** held at Delhi, March, 2002.
14. **Rajesh**, Singh HS, Mittal A and Sharma GL. Effect of a novel antifungal molecule on interleukin profile. **9th Asian Pacific Congress of Clinical Biochemistry** held at Delhi, March, 2002.
15. Yadav Vibha, **Dabur Rajesh**, Jyotsana Gupta and Sharma GL. Inhibitory effect of *Escherichia coli* on *Aspergillus fumigatus*. **Indian college of Allergy and Applied Immunology Conference** held at Chennai on December 13-15, 2002.
16. Jyotsana Gupta, **Dabur Rajesh**, Yadav Vibha, Vaibhav Saini and Sharma GL. Study of α -antitrypsin in respiratory disorders. **Indian college of Allergy and Applied Immunology Conference** held at Chennai on December 13-15, 2002.
17. **Dabur, Rajesh**, Singh, H, Yadav and Sharma, GL. Studies on efficacy of a lead bioactive molecule against *Aspergilli* pathogenic to humans. **International conference on "Recent Advances in Biomedical and Therapeutic Sciences"** held at Bundelkhand University, Jhansi. January 13-15, 2004.
18. Jyotsana Gupta, GL Sharma, DP Bhadauria, Mahesh Lal, D hattopadhaya Ritushree Kukreti, Vibha Yadav, AK Chhillar, **Rajesh Dabur** and VK Gupta. Alpha-1-antitrypsin gene polymorphism in patients with Chronic Obstructive Pulmonary Disease. **International Conference on "Recent Advances in Biomedical and Therapeutic Science"** held at Bundelkhand University, Jhansi. January 13-15, 2004.
19. V Yadav, AK Chhillar, J Gupta, R Mandhan, **Rajesh Dabur** and GL Sharma. A fraction from *Escherichia coli* having anti- *Aspergillus* properties. **International Conference On "Recent Advances in Biomedical and Therapeutic Science"** held at Bundelkhand University, Jhansi. January 13-15, 2004.
20. AK Chhillar, G. L. Sharma, Vibha.Yadav, □□, J. S. Yadav, □Jyotsana Gupta, J. Rana, and **Rajesh Dabur**. Studies on Genotoxicity of Benzene. **International Conference on "Recent Advances in Biomedical and Therapeutic Science"** held at Bundelkhand University, Jhansi. January 13-15, 2004.
21. Sachin Kunal, Ravindra P Singh, Pradeep K Kamal, **Rajesh Dabur**, Sunil Babu G. AN UP-SURGE OF AIDS IN INDIA. **International Conference on "Recent Advances in Biomedical and Therapeutic Science"** held at Bundelkhand University, Jhansi. January 13-15, 2004.
22. **Rajesh Dabur**. Interaction of aldose reductase with anticancer drugs. National conference on "**Recent advances in Biochemical techniques**" held at Bundelkhand University, Jhansi. May 13, 2004.
23. A. K. Chhillar, G.L.Sharma, Ashok K. Parsad, Virender S. Parmar, V. Yadav, **Rajesh Dabur**, J.Gupta. Antimicrobial activity of 4 (p-Methoxyphenyl), 3, 5, diethylcarbonyl, 2, 6- dimethyl- 1,4-dihydropyridine. IUPAC "**International Conference on Biodiversity and Natural Products: Chemistry and Medical Application**" held at New Delhi from 26th Jan 2004 to 31st Jan 2004.
24. G. L. Sharma, A.K. Chhillar, Ashok K. Parsad, Virender S. Parmar, V. Yadav, J. Gupta. Dihydropyridine derivatives as potent antifungal molecule. IUPAC "**International Conference on Biodiversity and Natural Products: Chemistry and Medical Application**" held at New Delhi from 26th Jan 2004 to 31st Jan 2004.
25. V. Yadav, A. K. Chhillar, J. Gupta, R. Mandhan, **Rajesh Dabur** and G. L. Sharma. Investigations on anti-*Aspergillus* properties of bacterial products. IUPAC "**International Conference on Biodiversity and Natural Products: Chemistry and Medical Application**" held at New Delhi from 26th Jan 2004 to 31st Jan 2004.
26. J. Gupta, D.Chattopadhaya, D.P.Bhadoria, Mahesh K. Lal, V.K.Gupta, Ritushree Kukreti, V. Yadav, A.K.Chhillar, **Rajesh Dabur** and G.L.Sharma. Studies on polymorphism of Alpha- 1-antitrypsin gene in chronic obstructive pulmonary disease patients vis-a-vis profile of CD4⁺/CD8⁺ cells. IUPAC "**International Conference on Biodiversity and Natural Products: Chemistry and Medical Application**"held at New Delhi from 26th Jan 2004 to 31st Jan 2004.

27. V. Yadav, A. K. Chhillar, J. Gupta, R. Mandhan, **Rajesh Dabur** and G. L. Sharma. A fraction from *Escherichia coli* having anti- *Aspergillus* properties. **International Conference on "Recent Advances in Biomedical and Therapeutic Sciences"** held at Bundelkhand University Jhansi from 13th Jan 2004 to 15th Jan 2004.
28. Jyotsana Gupta, G.L. Sharma, D.P. Bhadoria, Mahesh K. Lal, D. Chattopadhaya, Ritushree Kukreti, Vibha Yadav, A.K. Chhillar, **Rajesh Dabur** and V.K. Gupta. Association of an intronic mutation combined with PIM3 allele of α_1 -AT with pathogenesis of chronic obstructive pulmonary disease. **International Conference on "Recent Advances in Biomedical and Therapeutic Sciences"** held at Bundelkhand University Jhansi from 13th Jan 2004 to 15th Jan 2004.
29. Nagendra Kumar Kaushik, Rambir Singh, Rajesh Dabur, G.L. Sharma, Ramesh Chandra (2005). Anti - inflammatory role of seabuckthorn. **2nd International Conference on "Recent Advances in Biomedical and Therapeutic Science"** held at Bundelkhand University, Jhansi. January 6-8, 2005.
30. Gurav, A.M., Dhanorkar, V., Mandal, T.K., **Dabur, R.**, Chandra, K. (2006). Low cost, Efficient Protocol for *in vitro* Propagation of an important medicinal plant *Uraria picta* (JACQ.) DESV, **International Seminar on Present Trends and Future Prospects of Angiosperm Taxonomy**. p. 122.
31. Dharmendra Kumar Yadav, **Rajesh Dabur**, Neelmani Murty (2005). Study of estrogen receptor and progesterone in breast cancer by immunohistochemistry. **2nd International Conference on "Recent Advances in Biomedical and Therapeutic Science"** held at Bundelkhand University, Jhansi. January 6-8, 2005.
32. Shiv Kumar, Abha Sachan, Yogendra PS Rathore, Usha Kumari, Bhanu Uday Tyagi, V Mishra, Ramesh Chandra, Rambir Singh, GL Sharma, **Rajesh Dabur** (2005) screening of some plants of bundelkhand region for their antimicrobial potential. **2nd International Conference on "Recent Advances in Biomedical and Therapeutic Science"** held at Bundelkhand University, Jhansi. January 6-8, 2005.
33. Vinay Kumar, Desh Deepak Singh, Rajesh Trivedi, Virendra Prasad, **Rajesh Dabur**, R Singh, G L Sharma, R P Tripathi, V K Tiwari, and Ramesh Chandra (2005). Synthesis and bioevaluation of 2- (1', 4')-phenylene-bis-5-substituted aryl amino-[1,2,4] thiadiazol-3-one. **2nd International Conference on "Recent Advances in Biomedical and Therapeutic Science"** held at Bundelkhand University, Jhansi. January 6-8, 2005.
34. A.K. Chhillar, V. Yadav, **Rajesh Dabur**, J. Gupta, G. L. Sharma, Pragya Arya, Chandrani Mukherj, Ashok K. Prasad and Virinder S. Parmar (2005). n-heterocyclic compounds as potential antifungal molecules. **2nd International Conference on "Recent Advances in Biomedical and Therapeutic Science"** held at Bundelkhand University, Jhansi. January 6-8, 2005.
35. Rambir Singh, Ajay K Pathak, Akhilesh Verma, Shiv Kumar, **Rajesh Dabur**, GL Sharma, Ramesh Chandra (2005). Antimicrobial activity studies on some piperazine and isoquinoline derivatives **2nd International Conference on "Recent Advances in Biomedical and Therapeutic Science"** held at Bundelkhand University, Jhansi. January 6-8, 2005.

Visits:

- December, 2001** : State University of New York (SUNY) at Stony Brook, New York.
- March, 2001** : Beckman Research Centre, Duarte, California, USA.
- June-August 2002** : Stanford University, Stanford, California, USA.
- January, 2003** : Harvard Institute of Medicine, Boston, MA, USA.

Organization of Symposia

1. **Organizing Secretary: 2nd International conference on "Recent Advances in Biomedical and Therapeutic Sciences"**. Organized by Bundelkhand University, Jhansi from Jan6-8, 2005.

2. **Joint Organizing Secretary: *International conference on “Recent Advances in Biomedical and Therapeutic Sciences”***. Organized by Bundelkhand University, Jhansi from Jan12-15, 2004.
3. **Convener, Internet committee: *International conference on “Recent Advances in Biomedical and Therapeutic Sciences”***. Organized by Bundelkhand University, Jhansi from Jan12-15, 2004.
4. As a **member of organizing committee** contributed to the organization of ***International Symposium on Mycoses***. 1997. CSIR, Centre for Biochemical Technology, Delhi, India.
5. As a **member of organizing committee** contributed to the organization of ***International Symposium on Catalytic Super-antibodies*** in a series to International Conference of Immunology, Oct. 1998. Delhi, India.
6. Chairman, Poster session. International Congress of the Society for Ethnopharmacology (SFEC-2017). Feb 23-25, 2017. UKA Tarsadia University, Bardoli, Gujrat.

(Dr Rajesh Dabur)