

Dr. Rajeshwari H. Patil

Permanent address:

215, 'Nesara' 3rd Cross, Balaji Layout
Mallathahalli, Bangalore, Pin: 560056, Karnataka.
Mobile-+91-9482224923
Email: rajeshwarihpatil2@gmail.com
rajiravi02@yahoo.co.in

Professional Objective:

I aspire to be the part of dynamic, progressive and learning organization, where I can continuously acquire skills and knowledge to serve the organization and to broaden my horizon.

Career Interest:

Molecular Biology, Cell biology and Genetics, Immunology, Cancer Biology, Genetic Engineering, Environmental Biotechnology, Animal Biotechnology and Phytochemistry.

Education:

Sl. No.	Qualification	Duration	College/ University	Remarks
1	Ph.D. (Biotechnology)	2010-2016	Dept. of Microbiology & Biotechnology, Bangalore University, Bengaluru	Cancer Biology and Inflammation
2	M.Sc. (Biotechnology)	2001-2003	Dept. of Biotechnology, Karnatak University Dharwad	First class with distinction (70%)
3	B.Sc. (Chemistry, Botany, Zoology)	1998-2001	Karnatak University, Dharwad	First class with distinction (79.5%)

Academic Achievements:

- ♦ Awarded with **UGC B.S.R. Meritorious fellowship** during the tenure of Ph.D. Dept. of Microbiology and Biotechnology, Bangalore University, Bangalore.
- ♦ **Junior research fellow** from 2012-2014 Dept. of Microbiology and Biotechnology, Bangalore University, Bangalore.
- ♦ **Senior research fellow** from 2014-2015 Dept. of Microbiology and Biotechnology, Bangalore University, Bangalore.

Ph.D. Title: "*In vitro* evaluation of anti-inflammatory activity of plant extracts and Apigenin".
Guide: Prof. S. Chidananda Sharma, Bangalore University, Bengaluru.

M.Sc. Project: “Raising antibodies in Rabbit and purification of monoclonal antibody using Protein-A column”.

Project Supervisor: Prof. B.B. Kaliwal, Dept. of Biotechnology, Karnatak University, Dharwad.

Work / Research Experience:

Sl. No	Position of Work	Organization	Duration
1.	Associate Professor	Department of Biotechnology, The Oxford College of Science, HSR Layout, Bengaluru	August 2016 – Till date
2.	Ph.D.	Department of Microbiology & Biotechnology, Bangalore University, Bengaluru.	April 2010 – July 2016
3.	Guest Lecturer	Department of Molecular Biology, Bangalore University, Bengaluru.	July 2007 – April 2010
4.	Guest Lecturer	Department of Microbiology & Biotechnology, Bangalore University, Bengaluru.	July 2003 – June 2007

Technical Skills possessed:

- ♦ **Mammalian Cell Culture Techniques:** Culture and maintenance of cell lines, Cell based assays, Toxicology evaluation, and imaging techniques.
- ♦ **Molecular Biology techniques:** DNA (genomic and plasmid) isolation & purification, RNA isolation and purification, cloning, restriction digestion analysis, enzyme assays.
- ♦ **Electrophoresis Techniques:** Agarose, Native, SDS PAGE.
- ♦ **Polymerase chain reaction (PCR)** – Semi-quantitative RT-PCR and Real Time PCR
- ♦ **Blotting Techniques :** Western Blotting.
- ♦ **Immunocytochemical studies**
- ♦ **General microbiological skills:** Culturing microorganisms, plating and Biochemical tests.
- ♦ **Plant tissue culture.**
- ♦ **ELISA.**
- ♦ **Chromatographic techniques:** Column Chromatography and Thin Layer Chromatography.
- ♦ **Phytochemistry.**

Research experience:

- 7 Years research experience in **Cancer Biology and Inflammation** in Bangalore University, Bangalore. Responsibilities were to maintain cancer cell lines, toxicology study, Gene expression study by RT-PCR and Western Blotting.
- Extraction and identification of secondary metabolites from medicinal plants and their anti-inflammatory, antioxidant and anticancer activity.

- Guided in house project entitled “**Phytochemical Analysis and Biological Activities of *Piper betel***” for M.Sc. student.

Publications in peer-reviewed journals:

1. K. Kavya , M. Naveen Kumar, **Rajeshwari H. Patil**, Shubha M. Hegde, K. M. Kiran Kumar, Rashmi Nagesh, R. L. Babu, Govindarajan T. Ramesh, S. Chidananda Sharma. **2017**. “Differential expression of AP-1 transcription factors in human prostate LNCaP and PC-3 cells: role of Fra-1 in transition to CRPC status.” **Mol Cell Biochem**. DOI 10.1007/s11010-017-3012-2.
2. Rashmi Nagesh., Kiran Kumar K. M., Naveen Kumar M., **Rajeshwari H. Patil**, Kavya K., Babu R. L., Govindarajan T. Ramesh and S. Chidananda Sharma. **2017**. “Aqueous areca nut extract induces oxidative stress in human lung epithelial A549 cells: Probable role of p21 in inducing cell death.” **Gene Reports**. 6, 103-111.
3. **Rajeshwari H. Patil**, Babu R L, Naveen Kumar. M, Kiran Kumar K. M, Shubha M. Hegde, Rashmi Nagesh, Govindarajan T. Ramesh and S. Chidananda Sharma. **2016**. “Anti-inflammatory effect of apigenin on LPS induced pro-inflammatory mediators and AP-1 factors in human lung epithelial cells”. **Inflammation**, 39(1):138-147.
4. Shubha M. Hegde, Naveen Kumar M., Kavya K., Kiran Kumar K. M., Rashmi Nagesh, **Rajeshwari H. Patil**, Babu R. L., Govindarajan T. Ramesh and S. Chidananda Sharma. **2016**. “Interplay of nuclear receptors (ER, PR and GR) and their steroid hormones in MCF-7 cells”. **Molecular Cell Biochemistry**. 8;422(1-2):109-120
5. Kiran Kumar K. M., Naveen Kumar M., **Rajeshwari H. Patil**, Rashmi Nagesh, Shubha M. Hegde, Kavya K., Babu R. L., Govindarajan T. Ramesh and S. Chidananda Sharma. **2016**. “Cadmium Induces Oxidative Stress and Apoptosis in Lung Epithelial Cells.” **Toxicology mechanism and method**, 26:9, 658-666.
6. **Rajeshwari H Patil**, Babu R L, Naveen Kumar. M, Kiran Kumar K. M, Shubha M. Hegde, Govindarajan T. Ramesh and S. Chidananda Sharma. **2015**. “Apigenin inhibits PMA induced expression of pro-inflammatory cytokines and AP-1 factors in A549 cells”. **Molecular Cell Biochemistry**, 403: 95-106.
7. **Rajeshwari H. Patil**, Naveen Kumar. M, Babu R L., and S. Chidananda Sharma. **2015**. “Anti-inflammatory activity of *Vitex negundo*, *Boswellia serrata* and *Aegle marmelos* leaf extracts in LPS treated A549 cells”. **International Journal of Phytopharmacy**, 5 (2) 12-20.
8. Shubha M. Hegde, Babu R L, Vijayalakshmi E, **Rajeshwari H Patil**, Naveen Kumar. M, Kiran Kumar K. M, Rashmi Nagesh, Kavya K and S. Chidananda Sharma. **2015**. “Biosorption of hexavalent chromium from aqueous solution using chemically modified *Spirulina Platensis*: an ecofriendly approach”. **Desalination and Water Treatment**, 57,18, 8504-8513.
9. Babu RL, Naveen Kumar M, **Rajeshwari. H. Patil**, Devaraju KS, Ramesh GT & Sharma SC, **2013**. “Effect of estrogen and tamoxifen on the expression pattern of AP-1 factors in

MCF-7 cells: role of c-Jun, c-Fos, and Fra-1 in cell cycle regulation". *Molecular Cell Biochemistry*, 380: 143-151.

10. Babu R L, Vijayalakshmi E, Naveen Kumar. M, **Rajeshwari H. Patil** and S. Chidananda Sharma, **2013**. "Blocking of CDK4 gene expression by antisense oligos induce apoptosis and decreases the proliferation of A549 cells". *International Journal of Scientific Research*, 8: 51-53.
11. Babu R.L, Vijayalakshmi.E, Naveen Kumar M, **Rajeshwari. H. Patil**, Devaraju. K.S and S. Chidananda Sharma, **2013**. "Biosorption of Chromium (VI) and Lead (Pb II): Role of *Spirulina platensis* in the treatment of industrial effluent". *Bioremediation Journal*, 17: 4, 231-239.

Papers presented at National and International Conferences:

1. **Rajeshwari H. Patil**, Naveen Kumar. M and S. Chidananda Sharma. "*Apigenin inhibits LPS induced expression of pro-inflammatory mediators and AP-1 factors in A549 cells.*" Oral presentation in the International conference on Bioactive Chemicals for Reproduction and Human Health, **26th–28th February 2015**. Organized by Life Science Dept. Davangere University Shivangothri, Davangere.
2. **Rajeshwari H. Patil**, Naveen Kumar. M and S. Chidananda Sharma. "*Anti-inflammatory and antiproliferative effect of flavonoid apigenin on human lung epithelial cells.*" Poster presentation in the National conference on Secondary metabolites of endophytic fungi/medicinal plants and their anticancer properties, **5th and 6th March, 2015**. Organized by UGC-SAP Dept. of Microbiology and Biotechnology Bangalore University, Bangalore.
3. **Rajeshwari H. Patil**, Naveen Kumar. M and S. Chidananda Sharma. "*Effect of apigenin on LPS induced pro-inflammatory mediators in A549 cells.*" poster presentation in the Symposium on Healthy Life style and Human Welfare, **18th and 19th November, 2014**. Organized by the UGC-CPEPA and Department of Zoology, Bangalore University, Bangalore.
4. **Rajeshwari H. Patil**, Babu. R.L, Naveen Kumar. M and S. Chidananda Sharma "*Expression pattern of AP-1 factors in inflammation induced A549 cells and anti-inflammatory effect of apigenin on it.*" Poster presentation in the national conference on NCCMI. **30th and 31st August 2013**, Bangalore University, Bangalore.
5. **Rajeshwari H. Patil**, Babu. R. L, Vijayalakshmi. E, Naveen Kumar. M, Kiran Kumar. K. M and S. Chidananda Sharma "*In vitro evaluation of anti-inflammatory activity of plant extract on A549 cells*". Oral presentation in the national conference on Environmental Science and Health Hazards. **19-21st November 2012**, Dept. of Biotechnology and Microbiology, Karnatak University, Dharwad.

Symposium(s)/Workshop attended:

1. Workshop on '**Gas Chromatography**' conducted by Analysis Sciences at the Indian Institute of World Culture, Basavanagudi, Bangalore, **Feb 2013**.
2. National Workshop on '**Frontiers In Cell Biology And Biotechnology**' from Dept. of Microbiology and Biotechnology, Bangalore University, Bangalore, **December 2012**.
3. Seminar on '**Recent Trends in Microbial Biotechnology**' organized by Dept. of Microbiology and Biotechnology, Bangalore University, Bangalore, **May 2012**.
4. Conference on '**Recent Trends in Genomics and Proteomics**' organized by Indian Academy Degree College Center for Research and PG Studies. **May 2011**.
5. Two days Lecture series on the theme '**Genes, Genomics and Gene Technology**' organized at Bishop Cotton Women's Christian College, **October, 2008**.
6. Workshop on '**Fermentation Technology**' at Wingene Biotech Research Lab, JP Nagar, Bangalore, **2007**.
7. Trained the facilitators in "**Hands on training in Modern Biotechnology**" held at the Department of Biotechnology / Biotechnology Finishing School, The Oxford College of Science, Bangalore, 2017.
8. Organizer for workshop on "**Commercial production of Mushrooms and Biofertilizer**" Organized by "The Oxford Biotechnologists Society" under the entrepreneurship development cell, 2016.

Personal Information:

Sex: Female

DOB: 16th July 1979

Marital Status: Married

Declaration:

I hereby declare that the above-furnished information is correct as per my knowledge.

Reference:**1. Dr. K. Manjunath**

Professor and Chairman
Department of Microbiology & Biotechnology,
Bangalore University, Bengaluru
Phone: 080-22961461
e-mail: ushamanjunath@rediffmail.com