

BRIEF CURRICULUM VITAE

Dr. RAJESHA.J



Current position

Associate Professor of
Biochemistry and Head

Department of Biotechnology ,

Yuvaraja's College, University of Mysore,

Mysore-570005, Karnataka, INDIA

E. mail : rajeshj11@rediffmail.com

jrajesha66@gmail.com

Mailing address

1087, 1st Main, 1st Cross,

Janathanagar,

Mysuru-570009,
Karnataka, INDIA

Cell phone No. : + **91 9480380022**

Personal details

Date of Birth : May 05th, 1973

Sex & Marital status : Male, Married

Academics

2004 - **PhD - Biochemistry**- University of Mysore, Mysore, Karnataka, India (July).

Title of the thesis :“Studies on Multidimensional Characteristics of Lignans from Flaxseeds of Indian Origin”

1997- **M.Sc. – Biochemistry**- University of Mysore, Mysore, Karnataka, India.

1995 - **B.Sc. - Majors : Biochemistry, Botany, Zoology.** University of Mysore, Mysore, Karnataka, India.

Professional Experience

1) 1999 – Current **Associate Professor**, Department of **Biochemistry, Yuvaraja’s**

College, University of Mysore, Mysore, INDIA.

2) 2000-2003 **Teacher Fellow** (Under Faculty Improvement Program to obtain Ph.D degree), Department of studies in Biochemistry, University of Mysore, Mysore, INDIA.

Department of Biochemistry and Nutrition, and Department of Plant Cell Biotechnology, Central Food Technological Research Institute, Mysore, INDIA.

3) 1997-1998 **Junior Research Fellow**, Department of Plant Cell Biotechnology,

Central Food Technological Research Institute, Mysore, INDIA (Worked on **“Downstream processing of Spirulina for superoxide dismutase and development of antioxidants for food application”**)

4) June-August, 1997 **Research Scholar**, Department of Studies in Biochemistry,

University of Mysore, Mysore, India where I exposed to

(Worked on **“Effects of chromium chloride on hepatic enzymes in mice”**)

Postdoctoral research experience

2005-2006, Worked as a Postdoctoral Researcher at Department of Molecular Cell Biology, National Cancer Institute, National Institutes of Health, Frederick, Maryland, USA

Guide ship

Recognized as a Research guide by the University of Mysore, Mysore, India to supervise students for their M Phil and PhD degrees in Biochemistry, Biotechnology and Food Science and Nutrition.

Phd guidance

No. of students awarded : **01**

No. of students enrolled/registered : **04**

Teaching Interests

M.Sc. : Biochemistry, Molecular Biology, Genetics, Food science and Nutrition, Nutraceuticals, Food Biotechnology, Functional Foods, Metabolic Biology of Foods & Chronic Disease Challenges.

B.Sc. : Biochemistry, food science and nutrition, Inorganic, organic and physical chemistry.

Research Interests

The long term goal of my research program is to elucidate the role of bioactives responsible for their health benefits and/or adverse effects and the molecular, cellular and physiological mechanisms of their action. To investigate the role of phytochemicals, particularly phytoestrogens in disease prevention and health promotion, their various beneficial effects such as antioxidants, anticancerous and antimicrobial in the causation and prevention of chronic diseases, and development of nutraceuticals through value added biotechnological processes.

Projects completed : Include investigating the role of phytochemicals such as Phytoestrogens (lignans, isoflavones and β - carotene) and alpha and gamma- linolenic acids, and their biological potencies as alone and in combination. Molecular and Biochemical bioassay models using bacterial, mammalian and plant cell cultures and mice models to screen antioxidants, anti-microbial, anticancer and immune modulating phenolic phytochemicals and food models such as flaxseed, sesame seed and *Spirulina*.

Awards and Scholarships/Fellowships

1998-1999 - Junior Research Fellowship, University of Mysore, Mysore, INDIA.

2000-2004 - Teacher Fellowship, University of Mysore, Mysore, INDIA.

Member of Editorial Board

International Journal of Nutrition and Food Sciences

Professional Memberships

Society of Biological Chemists, India (*Life member*).

Indian Science Congress Association, India (*Life member*).

Association of Food Scientists and Technologists, India (*Life member*).

American Society for Biochemistry and Molecular Biology (Member)

Administrative experience / Professional services

- 1) The Chairman/Head, Department of Biochemistry, Yuvaraja's College, University of Mysore, Mysuru.
- 2) Member, Academic Council, Yuvaraja's College, University of Mysore, Mysuru.
- 3) Chief Superintendent of Examinations, Outreach Programmes, University of Mysore, Mysuru.

- 4) The Chairman of the Board of Studies (BoS) in Biochemistry, Yuvaraja's College, University of Mysore, Mysuru.
- 5) Member of the Board of Studies (BoS) in Biochemistry, Yuvaraja's College, University of Mysore, Mysuru.
- 6) The Chairman of the Board of Examiners (BoE) in Biochemistry, Yuvaraja's College, University of Mysore, Mysuru.
- 7) Member of the Board of Examiners (BoE) in Biochemistry, Yuvaraja's College, University of Mysore, Mysuru.
- 8) Member of the Board of Examiners (BoE) in Biochemistry, University of Mysore, Mysuru.
- 9) Examiner, J.S.S College for Arts, Science and Commerce, Ooty Road, Mysuru.
- 10) Examiner, J.S.S College for Women, Saraswathipuram, Mysuru.
- 11) Examiner, St.Philomena's College, Mysuru.

Conferences Attended/ Papers Presented at Conferences / Symposia

1) Proteins in Biology-Structure and Function.

Sept-2000.Department of studies in Biochemistry.University of Mysore, Mysore,INDIA.

2) **Indian Convention of Food scientists and Technologists.** 12 & 13 Dec, 2002, Central FoodTechnological Research Institute, Mysore. INDIA.

a)Flaxseed in designer / diet / omega egg production.

b)Antibacterial activity of flaxseed fractions.

3) **The Brain Lipids Conference-2008.** 08-11 Sept, 2008. Oslo, **Norway.** "Effect of dietaryflaxseed and *spirulina* on lipid profile and quality characteristics of egg in laying hens"

4) "**1st World Congress on Oxidative stress, Infertility & Degenerative diseases : Recent advances and Controversies.** 29th& 30thApril, 2010, Lyon, **France.** "Hepato protective Potential of Extracts from Hull Fraction of Indian flaxseeds"

5) **3rd ISANH Middle East World Congress-AMMAN ANTIOXIDANTS-2018, 3rd& 4th,** May, 2018 at Royal Scientific Society, **Jordan.** "Nephroprotective potential of Flaxseed and its lignan Secoisolariciresinol diglucoside against HgCl₂- induced toxicity in Rats" .

6) **4thInternational Conference on "Nutraceuticals and Chronic Diseases",** 23 to 25, September, 2019 IIT Guwahati, Assam, **INDIA.** "Prevention of the renal dysfunction by the Secoisolariciresinol diglucoside- A lignan nutraceutical of Indian flaxseed".

Invited Lectures and Seminars

1)**National Symposium on Bioactive Molecules : From Discovery to Industry.** 6 & 7 Apr, 2009, Department of Studies in Biochemistry. University of Mysore, Mysore, **INDIA.** "**Flaxseed and *Spirulina* as Bioactive Functional Foods**"

3) **22nd Annual Conference of ISAR on "Cardiovascular Diseases Secondary to the Metabolic Disorder : Mechanisms & Therapy.** 17-19 Dec, 2009, Department of Studies in

Biochemistry. **University of Mysore, Mysore, INDIA.** “Flaxseed as a Nutraceutical : Endosperm Fraction of **Flaxseed in the Production of “Diet Eggs” or “Designer Eggs”**”.

3) Poster presentation on the topic ‘**Flax Seed: Food Ingredients**’ held during 18-19 February, 2015, at University of Mysore, **International Symposium on Chemical Biology Approach to Metabionics, Chemical Genomics and Epigenomics and Second Annual Meeting of Chemical Biology Society, India.**

4) Poster presentation on **Science & Technology : Future challenges and solutions** on the topic ‘**Flaxseed and Sesameseed: Synergistic lignans**’ held during 8th to 9th August, 2016, at Vignana Bhavan, University of Mysore. International Symposium on Chemical Biology Approach to Metabionics, Chemical Genomics and Epigenomics and Second Annual Meeting of Chemical Biology Society, India.

5) Participated in One day state level seminar on “**Innovations and Challenges in Nuclear, Chemical and Biochemical Sciences**” held on 24/7/2017 at St.Philomena’s College, an Autonomous college of University of Mysore, Mysuru, India.

Article published

Flaxseed :A Smart Food Choice. **Science and Technology ; Deccan Herald(National leading news paper, INDIA) Sept.18, 2007.**

Projects undertaken

1) Role : Principal Investigator (PI)

Title : Synthesis and biological activities of Secoisolariciresinoldiglucoside—**University of Mysore, Mysore, India**

2) Role : Principal Investigator (PI)

Title : Isolation And Purification of Nutraceuticals and Functional Food Ingredients From Indian Flaxseed Cultivars : Elucidation of Synergistic Effects of Bioactives—

Department of Science and Technology, New Delhi, India.

3) Role : Principal Investigator (PI)

Title : Bioactives from Seeds of Indian Flax and Sesame cultivars : Critical investigations For Comprehensive Phytoestrogens - **University Grants Commission, New Delhi.**

Research Grants

1) Total as PI from 2009-2011: **INR. 1,000,00/**

2) Total as -PI from 2011-2014 : **INR.17,25,200/**

3) Total as -PI from 2012-2015 : **INR.13,78,800/**

Articles Published in Peer-Reviewed Journals

- 1) Tareq Aqeel , Sunil C.G , SaeedMujahidHashimi , Naif Al Qurashi and **Rajesh Javaraiah** : Evaluation of Protective efficacy of Flaxseed lignan-Secoisolariciresinoldiglucoside against Mercuric chloride-induced Nephrotoxicity in Rats. **Molecular Biology Reports (46) 2019 : 6171-6179.**
- 2) Tareq Aqeel , Sunil C.G , Saeed Mujahid Hashimi , Naif Al Qurashi, Ashwini Bhaskar and **Rajesh Javaraiah** Flaxseed lignan-Secoisolariciresinol diglucoside ameliorates lead acetate-induced nephrotoxicity in Rats. **Molecular Biology Reports (Under review), 2019.**
- 3) Ashwini Bhaskar , Shailasree Sekhar and **Rajasha Javaraiah** : Flax and sesame seed lignans as antimicrobial sources with biofilm inhibition properties. **Archives of Microbiology (Under review), 2019.**
- 4)Sunil C.G ,Tareq A, Ashwini B and **Rajasha J** : Bioactives-Molecules with multidimensional characteristics: Combinatorial potency in disease prevention and health promotion. **Journal of Food Science and Technology 2019 (Under review)**
- 5) Sunil C.G ,Tareq A, Ashwini B and **Rajasha J** : Bioactives-Molecules with multidimensional characteristics: Combinatorial potency in disease prevention and health promotion. **Journal of Food Science and Technology 2019 (Under review).**
- 6) Sadiq S. Mareai, Khalid M Naji, KavishankarGawli and **RajashaJ** : Protective effect of secoisolariciresinoldiglycoside in carbon tetrachloride induced hepatotoxicity in rats. **Journal of Clinical and Cellular Immunology 9 (5), 2018 : 567**
- 7) Sunil Gand **J. Rajasha** :Flaxseed: A Treasure Trove of Potential Bioactives for Disease Prevention and Health Promotion.**International Advanced Research Journal in Science, Engineering and Technology 4(9), 2017: 54-63.**
- 8) Sadiq S. Mareai, KavishankarGawli and **RajashaJ** :Evaluation of the anti-inflammatory properties of secoisolariciresinoldiglucoside in a rodent model of joint inflammation. **International Journal of Pharma and Bio Sciences 7(4):(B), 2016 : 427-434**
- 9) Sadiq Moree, Kavishankar and **J.Rajasha** :Antidiabetic effect of Secoisolariciresinoldiglucoside in normal and streptozotocin-induced diabetic rats. **Phytomedicine 20, 2013: 237–245**
- 10) Sadiq S. Moree and **J. Rajasha** : Investigation of in vitro and in vivo antioxidant potential of secoisolariciresinoldiglucoside. **Molecular and Cellular Biochemistry 373, 2013: 179-187**
- 11)Sadiq S Moree, SaukatharaKhanum and **Rajasha. J** :SecoisolariciresinolDiglucoside– A Phytoestrogen nutraceutical of flaxseed : Synthesis and evaluation of Antioxidant potency. **Free Radicalsand Antioxidants 1(4), 2011 : 31-38.**
- 12)Sadiq S Moree and **Rajasha. J** SecoisolariciresinolDiglucoside (SDG): A potent multifarious bioactive phytoestrogen from flaxseed. **Research and Reviews in Biomedicine and Biotechnology2(3), 2011 :1-24.**

13) **J.Rajesha**, A. Rangarao, B. Madhusudhan, G.A. Ravishankar and M. Karunakumar. Hematological and Histopathological studies of endosperm-rich fraction of Flaxseed in Chicks. **International Journal of Pharmaceutical sciences and Research** 2(6), 2011 : 1455-1459.

14) **J. Rajesha**, A. RangaRao, M. Karuna Kumar and G. A. Ravishankar: Hepatoprotective Potential of Hull Fraction from Indian Flaxseed Cultivar. **Asian Journal of Medical Sciences** 1, 2010 : 20-25.

15) **J. Rajesha**, A. RangaRao, B. Madhusudhan and M. Karunakumar : Antibacterial Properties of Secoisolariciresinol Diglucoside Isolated from Indian Flaxseed Cultivars. **Current Trends in Biotechnology and Pharmacy** 4, 2010 : 551-560.

16) **Rajesha J**, Madhusudhan B, MahadevaSwamy M, JagannathaRao R, Ravishankar G A, Rangarao A and Karunakumar M: Effects of flaxseed and *spirulina* biomass in layer diet on lipid profile and quality characteristics of egg yolk. **Journal of Food Science and Technology**. 46(6), 2009 : 509-514.

17) **J.Rajesha** and Basavaraj Madhusudhan. An approach to determine the content of SDG in flaxseed chutney powder by RP-HPLC method. **The Bioscan** 3(2), 2008 : 231- 234.

18) **J. Rajesha**, MA Harish Nayaka, Basavaraj Madhusudhan, MD Shylaja M Karunakumar and GA Ravi Shankar : Antioxidant Potential of Secoisolariciresinol Diglucoside Isolated from Different Fractions of Flaxseeds. **Seed Science and Biotechnology** 2(2), 2008 : 83- 87.

19) **Rajesha. J**, Kotamballi N. Chidambara Murthy, M. Karunakumar, Basavaraj Madhusudhan and Gokare A. Ravishankar : Antioxidant potentials of flaxseed by *in vivo* model. **Journal of Agricultural and Food chemistry** 54, 2006 : 3794-3799.

20) K.N. Chidambara Murthy, **J. Rajesha**, A. Vanitha, M. MahadevaSwamy and G.A. Ravishankar : Protective effect of *Dunaliella salina*—A marine micro alga, against carbon tetrachloride-induced hepatotoxicity in rats. **Hepatology Research** 33, 2005 : 313–319.

21) K.N. Chidambara Murthy, **J. Rajesha**, M. MahadevaSwamy and G.A. Ravishankar : Comparative valuation of hepatoprotective activity of carotenoids of microalgae. **Journal of Medicinal Food** 8 (4), 2005 : 523-528.

22) Kotamballi N. Chidambara Murthy, A. Vanitha, **J.Rajesha**, M. Mahadevaswamy, P.R. Sowmya and G.A. Ravishankar : *In vivo* antioxidant activity of carotenoids from *Dunaliella salina*- a green microalga. **Life Sciences** 76, 2005 : 1381-1390.

Conference Proceedings : 2009

- **J.Rajesha**, B. Madhusudhan, M. Mahadevaswamy, R. JagannathaRao, Gokare A. Ravishankar and M. Karunakumar. Flaxseed and Spirulina in Designer Eggs: a Potent Blended Functional Food and a Smart Food Choice. **IN BOOK "functional foods for**

chronic diseases, Volume 4” Edited by Dr. Danik M. Martirosyan, D&AInc./FF Publishing, 2009, 124-123-139.

Conferences Attended/ Papers Presented at Conferences / Symposia

1) Proteins in Biology-Structure and Function.

Sept-2000. Department of studies in Biochemistry. University of Mysore, Mysore, INDIA.

5) Indian Convention of Food scientists and Technologists. 12 & 13 Dec, 2002, Central Food Technological Research Institute, Mysore. INDIA.

- a) Flaxseed in designer / diet / omega egg production.
- b) Antibacterial activity of flaxseed fractions.

6) The Brain Lipids Conference-2008. 08-11 Sept, 2008. Oslo, Norway. “Effect of dietary flaxseed and *spirulina* on lipid profile and quality characteristics of egg in laying hens”

7) “1st World Congress on Oxidative stress, Infertility & Degenerative diseases : Recent advances and Controversies. 29th & 30th April, 2010, Lyon, France. “Hepato protective Potential of Extracts from Hull Fraction of Indian flaxseeds”

8) Poster presentation on Science & Technology : Future challenges and solutions on the topic ‘*Flax Seed and Sesame seeds: Synergistic lignans*’ held during 8th to 9th August, 2016, at Vignana Bhava, University of Mysore. International Symposium on Chemical Biology Approach to Metabionics, Chemical Genomics and Epigenomics and Second Annual Meeting of Chemical Biology Society, India.

9) Participated in One day state level seminar on “*Innovations and Challenges in Nuclear, Chemical and Biochemical Sciences*” held on 24/7/2017 at St.Philomena’s College, an Autonomous college of University of Mysore, Mysuru, India.

10) 3rd ISANH Middle East World Congress- AMMAN ANTIOXIDANTS-2018, 3rd & 4th, May, 2018 at Royal Scientific Society, Jordan, “*Nephroprotective potential of Flaxseed and its lignan Secoisolariciresinol diglucoside against HgCl₂- induced toxicity in Rats*”

Invited Lectures and Seminars

1) National Symposium on Bioactive Molecules : From Discovery to Industry.

6 & 7 Apr, 2009, Department of Studies in Biochemistry. University of Mysore, Mysore, INDIA. “*Flaxseed and Spirulina as Bioactive Functional Foods*”

2) 22nd Annual Conference of ISAR on “Cardiovascular Diseases Secondary to the Metabolic Disorder : Mechanisms & Therapy. 17-19 Dec, 2009, Department of Studies in Biochemistry. University of Mysore, Mysore, INDIA. “*Flaxseed as a Nutraceutical : Endosperm Fraction of Flaxseed in the Production of “Diet Eggs” or “Designer Eggs”*”.

Article published

Flaxseed : A Smart Food Choice. **Science and Technology ; Deccan Herald**
(National leading news paper, INDIA) Sept.18, 2007.

Editorial Board

- 2017- Till date – *CPQ Microbiology*
- 2018-Till date- *International Journal of Nutrition and Food Sciences.*

REFERENCES :

1. Dr.B.S.VISHWANATH

Professor and Chairman,
Department of Biochemistry, University of Mysore,
Manasagangotri, Mysore-570 006, INDIA.
Ph: +91-821-2419623 (Off)
Cell Phone No.+ 91 9845893634
E-mail : vishmy@yahoo.co.uk

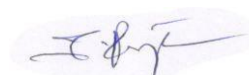
2. Dr. V.BASKARAN, Msc, Mphil, M.Ed, Ph.D,

JSPS Fellow, UNU-KIRIN Fellow (Japan)
Chief Scientist & Head, Department of Biochemistry & Lipid Science
Central Food Technological Research Institute (CFTRI), Mysuru-570013
Ph.No.; Off: 0821 2514876; Mob. No.- 9448939056
E-mail: baskaranv@cftri.res.in

3. Dr. K.KEMPARAJU

Professor
Department of Biochemistry, University of Mysore,
Manasagangotri, Mysore-570 006, INDIA.
Ph: +91-821-2419623 (Off)
Cell Phone No.+ 91 9945996543
E-mail : kemparajuom@gmail.com

Yours sincerely



(J.Rajesha)