

## Research articles

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148. Jayachandran P, Koshy L, **Sudhakaran P R**, Nair G M, Gangaprasad A, Nair AJ (2020) Dysregulation of miRNA and its reversal with L-ascorbic acid during AGEBSA induced ER stress in *Mus musculus* neuronal cells. *Gene Reports* 21, 100841 <https://doi.org/10.1016/j.genrep.2020.100841>
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29. Susan Mathew and P.R. Sudhakaran (1993). Stress causes alteration in attachment of rat hepatocytes to matrix protein substratum. *Biochem. Biophys. Acta.* 1178, 146-152.
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15. P.R. Sudhakaran, S.C. Stamatoglou and R.C. Hughes (1986).Substratum adhesion of rat hepatocytes in primary culture – Modulation of protein synthesis and secretion by substratum in primary cultures of rat hepatocytes.*Exp. Cell. Res.* 167, 505-516
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13. V.S. Unnikrishnan and P.R. Sudhakaran (1985).Metabolism of glycosaminoglycans in experimental liver fibrosis.*Ind. J. Biochem. &Biophys.* 22, 304-308.
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8. P.R. Sudhakaran, W. Sinn and K. Von Figura (1980). Regulation of heparan sulfate metabolism by adenosine 3'5' cyclic monophosphate in hepatocytes in culture. *Biochem. J.* 192, 395.
7. W. Sinn, P.R. Sudhakaran and K. Von Figura (1980).Effect of (+) Catechin on the heparan sulfate – proteoglycan metabolism of cultured rat hepatocytes.*Hoppe Seyler Z. Physiol. Chem.* 361. 334.
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heparansulphate and distribution into cellular and extra cellular pools. *Biochem. Biophys. Acta.* 630, 402.

5. P.R. Sudhakaran, R. Prinz, I. Fillipovic, K. Von Figura and E. Buddecke (1980). Homologous low density lipoproteins does not affect proteoglycan metabolism of cultured skin fibroblast and arterial smooth muscle cells. *Hoppe Selver's Z. Physiol. Chem.* 361. 129
4. P.M. Sherif, P. Sreekumar, P.R. Sudhakaran and Kurup, P.A.(1978).Effect of administration of total glycosaminoglycans fraction from bovine aorta, intestinal mucosa and lungs on the concentration of lipids, plasma lipolytic activity and blood coagulation. *Ind. J. Exp. Biol.* 16, 218.
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2. P.R. Sudhakaran and Kurup, P.A. (1974). Vitamin A and lysosomal stability in rats fed normal diet, *J. Nutr.* 104, 1466.
1. P.R. Sudhakaran and Kurup, P.A. (1974).Vitamin A and glycosaminoglycan metabolism, *J. Nutr.* 104, 871.

## CURRICULUM VITAE OF PROF. P R SUDHAKARAN

**Prof.P.R.SUDHAKARAN, M.Sc.,Ph.D.**

Asuthosh Mookerjee Fellow

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E mail [prslab@gmail.com](mailto:prslab@gmail.com) Phone : - 0471-2432514 (R), 09847332514 (Cell)

**Age** :69 years (16-02-1952)

### Education

**B Sc (Special)** :Chemistry, First class, Maharaja's College (1967-70)

**M Sc** :Biochemistry, 2<sup>nd</sup> Rank, University of Kerala (1970-72)

**Ph. D.** :University of Kerala (1972-76)

**Post doctoral** :University of Munster, Germany (1978 -'80)(DAAD Fellow)

: National Institute for Medical Research, London (1984-85)  
(Scientist-Commonwealth Fellow)

: George August University, Gottingen, Germany (93-94)

### Professional Experience

**Teaching** : 37years Post-graduate Teaching in Biochemistry

1. Professor, School of Biological Sciences, Central University of Kerala (2010-12)

2. Professor, Dept of Biochemistry, University of Kerala (1988- 2009, till 31-03-12)

3. Reader, Dept. of Biochemistry, University of Kerala (1982-88)

4. Lecturer, Dept of Biochemistry, University of Kerala (1975-82)

(Superannuated on 31-03-12 as Professor)

**Research** : 43years experience in Labs in India and abroad

**Research Guidance** :49 students have taken research degrees (14 M Phil & 35 Ph D)

**Research Area** : Vascular Biology, Atherosclerosis, Angiogenesis.

**Research Publications** :150 original research articles in peer reviewed National and

International Journals, h index ; 32

Book Chapters-5 , Edited Books -3

### **Research Projects (Externally Funded); Completed ;**

1. Regulation of VLDL Metabolism (DST, Govt of India 1986-90)
2. Heparan Sulphate Metabolism (UGC 1988-91)
3. Hepatocyte Matrix interaction (DST Govt of India, 1989-92)
4. Matrix Macromolecules and their Interaction with Cells in Liver (DST, GoI, 95-99)
5. Omega-3 fatty acids of marine fishes and their nutritional effects (US-India Fund, 95-99)
6. Application of isotopes to study Vit A nutrition (IAEA, Vienna, 1996-2001)
7. Neutral Proteases in Leptospirosis (Co PI) (DST, GOI, 2007-2010)

Coordinator; UGC SAP Programme, Dept. of Biochemistry, University of Kerala, 04-09

Coordinator DST FIST Programme, Dept of Biochemistry, University of Kerala, 04-09

### **Awards:**

1. Career Award in Science UGC (1988-91)
2. **J C Bose Award for Research in Life Science, (2000)**
3. Kudumbiah Endowment Oration Madras University (2001)
4. ISAR Endowment Oration (2002)
5. Fellow, Kerala Academy of Sciences (2002)
6. **Fellow National Academy of Medical Sciences (2012)**
7. KSCSTE Emeritus Scientist award (2013)
8. Fellow, Indian Society For Atherosclerosis Research (2017)
9. Endowment Oration, Kerala Academy of Science (2018)
10. **Asuthosh Mookerjee Fellowship (2019-)**

### **Fellowships & Scholarships**

1. German Academic Exchange Service Fellowship (1978-'80)
2. Commonwealth Academic Staff Fellowship (1984-'85)
3. UGC National Associateship (1977, 83)
4. CSIR Fellowship (1972-74)

### **Other Research Assignments :**

- National Associate (U.G.C) B.A.R.C, Trombay (1978 Feb-Apr)
- Visiting Scientist, Dept of Biochemistry, IISc, Bangalore (1983 June-Sep)
- Visiting Scientist, USDA, Beltsville, Maryland, USA (1995 Dec)
- Guest Professor, Inst. für Arteriosclerosforschung, Munster, Germany (1997 sept)
- Visiting Scientist, IARC, Lyon, France (1997 Oct)
- Visiting Scientist, National Food Research Institute, Tsukuba, Japan (1999)
- Visiting Professor, University of Alberta, Edmonton, Canada (2002 Feb)

- Guest Professor ,George August University ,Gottingen Germany (2006 May)
- Senior Scientist,Inter University Centre for excellence in Bioinformatics,Dept of Computational Biology&Bioinformatics ,Univ. of Kerala Trivandrum,(2012-)
- **Technical Advisor,Inter University Centre For Genomics& Gene Technology ,University of Kerala ( 2013- till date)**

### **Administration and Management**

- Director,Kerala Biotechnology Commission,KSCSTE,Govt.of Kerala(2012-13)
- Dean, School of Biological Sciences, Central University of Kerala, Kasaragod (Mar 2010- Feb2012).
- Head of the Department of Biochemistry and Molecular Biology, Central University of Kerala, Kasaragod (2010-2012 Feb)
- Head of the Department of Biochemistry, University of Kerala (1993-95, 1998 till 31-03-2009)
- Director of Research, University of Kerala ( 2009)
- Coordinator,UGC Special Assistance Programme (SAP) (2004-2009)
- Coordinator, DST FIST Programme (2004-2009)
- Dean, Faculty of Science, Kerala University (2002-2004)
- Vice-Chairman,Academic Committee,(responsible for co-ordination& monitoring of post-graduate programs in 39 P.G Depts of the University of Kerala (97-2001)

### **Curriculum Development**

- Convenor,PG Semesterisation in Colleges affiliated to the University of Kerala (2000) Report accepted and implemented in 2001
- Member/Chairman Board of Studies in Biochemistry( 1983-2009) ,Faculty of Science (1985- 09), Academic Council (1994 - 09) of Kerala University,
- Member, Board of Studies in Biotechnology (2004-12, 17-), CUSAT, Kochi
- Member, Academic Council (2004-2006) and Senate (1995-99) of Cochin University of Science &Technology,Kochi.
- Chairman, Board of Studies in Biochemistry and member, Academic Council(SCAA), MS University Tirunelveli (2004-11),
- Member, Board of Studies in Biochemistry , University of Madras (2002-2005), Member Board of Studies in Biochemistry, Annamalai University (93-96,2003-2006)

- Member Board of Studies in Biochemistry Central University Pondicherry (2004-2007 )
- Chairman / member of Board of examiners for adjudication of Doctoral thesis of Universities of Madras, Pune, Mysore, Pondichery, Hyderabad, ,PGIMER,Chandigarh, Jadavpur University, JNU, MKU, SV University ,and Osmania University.

#### **Institutional Evaluation/committees**

- Member, IX<sup>th</sup> plan review team of UGC (1997)
- Member,Calicut University Commission ,appointed by Govt. of Kerala to assess the performance of Calicut University for the preceding 10 years (submitted report to the Govt. of Kerala )(2000)
- Chairman,Committee to evaluate the Self Financing Programmes of M G University (Submitted report to MG University) (2001 July)
- Coordinator of NAAC assessment of Kerala University (02-03)
- Member, UGC-NAAC Team Jamia Hamdard University,New Delhi(2003),KarpagamCollege, Coimbatore (2003),SIESCollegeBombay (2004), RP College Coimbatore (2014) M G University, Telengana (2016) Agra University(2017)
- Member Coordinator,NAAC Team , Devchand College,Kohlapur,(2004) Degree College Doda ,Jammu,(2019)

#### **Science & Technology Promotion & Management**

- Member,Governing Council,,Kerala University of Health Sciences (2010-14,2014-18)
- Member, Scientific Advisory Council, ICMR Regional Medical Research Centre, Port Blair (2005-2010 )
- Member,State Council for Science Technology and Environment(2008-2011)
- Member , Executive Committee, Kerala State Council for Science, Technology and Environment(2008-2011)
- Member ,Research Council, Kerala State Council for Science Technology and Environment (2004-08)

#### **Editorial work & Reviewing**

Guest Editor Special Issue **Glycoconj J 2014,31 (6-7) ( Springer USA)**  
 Editor,Perspectives in Cancer Prevention ;Translational Cancer Research (2014) Springer India (ISBN978-81-322-1532-5)  
 Editor, Biochemical Role of Cell surface Macromolecules (Advances in Experimental Medicine &Biology,series, )Springer USA 2012

- Referee for 1) J Cell Physiology ,2) J Cell Biochemistry ,3) Tissue Engineering ,4)Biochem BiophysActa, 5) Ind J Biochem Biophys 6) Ind J ClinBiochem7) Int J Parasitol 8) Hepatol Res 8)Curr Bioinformatics 9) Sci Reports 10)Food & Function 11)Cell Communication and Signaling(12)J Nutr Biochem.

### **Association with Professional Societies and Other Bodies**

- Member of Professional Societies- International Atherosclerosis Society; New York Academy of Sciences, Indian Society for Atherosclerosis Research, Indian Society for Cell Biology, SBT(I),
- Royal Society of Medicine (UK) ( Retd.Fellow)
- Convener, SBC(I) Kerala Chapter and member EC(98-2010)
- **President, Kerala Academy of Sciences(2005--08)**
- **President- ,Indian Society for Atherosclerosis Research (2007-2009)**
- **President -New Biology Section 95<sup>th</sup> Indian Science Congress( 2007-08)**
- Chairman ,Institutional Animal Ethics Committee(1998-2009)
- Member Secretary, Institutional Ethics Committee(2004-2009)

### **Organization of Conference/Seminar/Symposium**

1. Convener ,1Xth International Symposium on Eukaryotic Cell Surface Macromolecules ,Jan 2011,Trivandrum
2. Chairman,International Workshop on Functional Glycomics Feb 2-4, 2011,Nileswar,Kasargod
3. Chairman,National Seminar on Genomics&proteomics,March08,Trivandrum
4. Finance Convener& Member Org Committee,2nd International Symposium on Translational Cancer research –Natural Products &Cancer,2007 Dec,Lonavala
5. Chairman ,Symposium on Drugs Affecting Lipid Metabolism ,March 20 07, Trivandrum
6. Finance Convener& Member Org Committee,Int Sym on Translational Cancer Research :Apoptosis &Cancer 2005 Dec, Trivandrum (Inauguratedby President of India, Dr. A P J Abdul Kalam)
7. Organizing Secretary, National Seminar on Molecular Diagnostics, 23-24 March 06,Trivandrum
8. Member Organizing committee, International Symposium on Glycans on Proteins and Lipids,21-27 February 2006,I I Sc, Bangalore
9. Chairman, Workshop on Bioinformatics, Oct 4-9 2004, Trivandrum
10. Organizing Secretary, International Symposium on Atherosclerosis 20-23<sup>rd</sup>Dec 2004 Trivandrum
11. Organizing Secretary, conference on Genomics and Society,4-6<sup>th</sup> Feb04

12. Organizing Secretary, International Symposium on Extracellular Matrix in Health and Disease 17- 19<sup>th</sup> January 2003, Trivandrum
13. Member Organizing Committee, International Glycoconjugate Symposium 11-16<sup>th</sup> January 2003, IISc, Bangalore.
14. Organizing Secretary, Human Genome Seminar, 19-20<sup>th</sup> July 2002, Trivandrum
15. Organizing Secretary, Workshop on Molecular Diagnostics, 27-31<sup>st</sup> March 2000, Trivandrum
16. Organizing Secretary, National conference on Molecular Diagnostics, 27- 29<sup>th</sup> June 1998 Trivandrum
17. Convener, International Symposium on Alcohol Micronutrients and Cell Function, 23-28<sup>th</sup> February 92, Trivandrum
18. As President, New Biology Section, Organized Symposium on Interface between Biology & Medicine during 95<sup>th</sup> Indian Science Congress, Vizag 3-7<sup>th</sup> Jan 08
19. Organized a series of workshops (10nos) on Formulation of Research Projects for Funding from external agencies for college teachers and mid career scientists during 2006-07

**Presentation in Conferences/Seminar/Symposia(select ones, )**

1. 98<sup>th</sup> Indian Science Congress Jan 2011, SRM Madras ) (Invited Lecture)
2. IACR Satellite Meeting on Inhibition of Tumor Progression, Amala Cancer Research Centre, Thrissur, Kerala, February 11-12, 2011 (Inv. Lecture)
3. .IX<sup>th</sup> International Symposium on Biochemical roles of Eukaryotic Cell Surface Macromolecules, Thiruvananthapuram, 27<sup>th</sup>-30<sup>th</sup> January, 2011 (Invited lecture)
4. ISARCON 2010, Delhi, November 14, 2010 (Invited lecture)
5. Annual Meeting of the ACBI, Cochin Dec 2009 (Invited Lecture)
6. Society of Biotechnologists Symposium 2009 VIT Vellore
7. 96<sup>th</sup> Indian Science Congress 3<sup>rd</sup>-7<sup>th</sup> Jan 2009 NEHU Shillong (Invited Lecture)
8. International Symposium on Emerging Challenges and approaches to Cancer Biology & IISc Centenary Conference, 21-24 Feb 2009, I I Sc Bangalore (Invited Lecture)
9. 77<sup>th</sup> Annual Meeting of Society of Biological Chemists (India), IIT Chennai 18-20 Dec 08 (Invited lecture)
10. ISARCON 08 Annamalai, Chidambaram 7-10 Dec 08 ( Invited Lecture)
11. 8<sup>th</sup> International Symposium on Eukaryotic Cell Surface Molecules, 23-28<sup>th</sup> Jan 08, CCMB, Hyderabad, (Invited Lecture)
12. Society of Biotechnology Symposium on New Frontiers in Biotechnology 18-19<sup>th</sup> Oct 08 Chennai (Invited Lecture)
13. Presidential Address, New Biology Section 95<sup>th</sup> Indian Science Congress, 3-7<sup>th</sup> Jan 08, Vizag
14. 2<sup>nd</sup> International Symposium on Translational Cancer research 9-13<sup>th</sup> Dec 2007, Lohnawala

15. ISARCON 07,19-20<sup>th</sup> Dec 07 Tirupati (Invited Lecture)
16. 14<sup>th</sup> International Symposium on Atherosclerosis 22-26<sup>th</sup> June06, Rome, Italy
17. ISARCON06 Symposium on Atherosclerosis 16-17<sup>th</sup>Dec06, Chennai (Invited Lecture)
18. International Symposium on Glycans on proteins and lipids,21-27 Feb06, IISc, Bangalore (Invited Lecture)
19. 93<sup>rd</sup> Indian Science Congress,3-7<sup>th</sup> Jan06,Hyderabad (Invited lecture)
20. CarboXX, Carbohydrate conference Nov 2005 Lucknow (Invited lecture)
21. Symposium on Atherosclerosis, Nov 2005 New Delhi (Invited lecture)
22. International Symposium on Eukaryotic cell surface molecules, Feb 2005, Puri,Orissa(Invited lecture)
23. Annual Conference of the Indian Association for Cancer Research, 23-25<sup>th</sup> Jan2004, Tata Cancer Research Centre, Mumbai (Invited lecture).
24. 91<sup>st</sup> Indian Science Congress 3-7<sup>th</sup> Jan 2004, Chandigarh(Invited lecture)
25. Carbohydrate Conference Nov2003 Indian Institute of Cell Biology Kolkata (Invited lecture)
26. International Symposium on Glycocojugates 9-16, Jan03, I .I Sc, Bangalore (Invited lecture)
27. International Carbohydrate Symposium (27<sup>th</sup>) Jan14 -17 ,2014 I ISc Bangalore (Session Chair)
28. ISAR CON 2014 Lucknow (Invited Lecture)
29. Carbo XXX Pondichery University Dec 2015 ( Invited Lecture)
30. 6<sup>th</sup>STCR Int Symposium Ahammedabad 2016 (Session chair)
31. Indian Science Congress Tirupati Jan 2017 ( Invited Lecture )
32. ISARCON2017 AIIMS Patna Nov 2017 ( Invited lecture )
33. 7<sup>th</sup> STCR Int Symposium IIT Madras Feb 2018 (Session chair)
34. ISAR CON 2019 Lady Harding Med Coll.New DelhiNov 2019 (Invited Lecture)
35. 8<sup>th</sup> STCR Int Symposium BHU,Varanasi 2020 Feb (session Chair)

