

PERSONAL INFORMATION

Dr. Joseph Amruthraj Nagoth



Sex Male | Date of birth 26/11/1982

JOB APPLIED FOR

Post doc fellowship, Post doc Job and Research Associate positions in clinical expermental medicine, nanotechnology in medicine, biosciences and biotechnology

EDUCATION AND TRAINING

01/10/2013–31/10/2016

Doctor of Philosophy

Clinical, Experimental and Medical Sciences, at Second University of Naples, (Universita 'degli Studi della Campania "Luigi Vanvitelli") Campania, ITALY, Naples (Italy)

I have completed Doctor of Philosophy (PhD) in Clinical, Experimental and Medical Sciences, completed at Second University Naples (Universita 'degli Studi della Campania "Luigi Vanvitelli")

Title of the PhD:

"miR-23a regulates NHE1 expression in MTAL of high sodium induced hypertension rats model".

"hands-on" projects:

1) Clinical trials using Biomarkers, to find out **SAH** (S-adenosyl homocysteine) and **SAM** (S-adenosyl methionine) in the cardiovascular diseases (CVD) by HPLC.

2) To find out CKD diseases using Biomarke in the GFR with HPLC.

(Title on Measurement of GFR by plasma clearance of iohexol: evaluation of the data obtained and clinical implications)

Abstract.

The kidney is one of the principal candidate organs involved in the etiology of essential hypertension. In particular, the medullary thick ascending limb (MTAL) of kidney is important in maintaining acid-base balance by reabsorbing most of the filtered HCO_3^- , not reabsorbed by the proximal tubule. Microarray expression profiling studies in human revealed differential expression of microRNAs in hypertensive vs normotensive patients. In this report, we analyzed miRNA expression profiles in isolated MTAL from high sodium intake induced hypertensive rats (HSD) versus normotensive counterparts (NSD). We have identified seven miRNAs, involved in onset of salt sensitive hypertension, and miR-23a was the most strongly down-regulated. By *in silico* analysis, we identified NHE1 mRNA as putative target of miRNA-23a. Our data show that miRNA-23a is downregulated in the MTAL of HSD rats while NHE1 is upregulated, we checked whether the levels of protein NHE1 could be lowered by overexpression of miRNA-23a. To verify this hypothesis we overexpressed miRNA-23a in MTAL cell line, by retroviral infection, and observed a downregulation of NHE1 protein.

2012–2013

Master of Philosophy

CGPA 8.17/10 First Class with Distinction

Department of Plant Biology and Plant Biotechnology, Loyola College (Autonomous and affiliated to the University of Madras), Chennai (India)

Main subject in Post graduate research degree on Anticancer Activity of Gold Nanoparticles Protected

by Phytochemically Extracted(Nano medicine)

2010–2012 Master of Science 70.07%, First Class
A++ grade

Department of Plant Biology and Plant Biotechnology, Loyola College (Autonomous and affiliated to the University of Madras), Nungambakkam, Chennai (India)

Biotechnology

13/05/2011–10/06/2011 Hands on summer training program in "Molecular techniques"
Vidyasagar Institute of Biomedical Technology, a unit of medical research foundation in Microbiology research Centre, Chennai (India)

2007–2010 Bachelor of Science 56%

Department of Plant Biology and Plant Biotechnology, Loyola College (Autonomous and affiliated to the University of Madras), Nungambakkam, Chennai (India)

Plant Biology and Plant Biotechnology

18/12/2009–18/01/2010 Internship in the field of "Immunotechnology and Plant tissue culture"

Shreedhar Bhats Laboratory (K-BITS), Bangalore (India.)

2000–2003 Board of Intermediate education issued by Government of Andhrapradesh 56.35%

Vidhyanikatan Junior College Warangal, Andhrapradesh (India)

1999–2000 Secondary School Certificate, issued by Government of Andhrapradesh 78.3%

Vidhyanikatan High School Warangal, Andhrapradesh (India)

PERSONAL SKILLS

Mother tongue(s) Telugu

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken Interaction	Spoken production	
English	C1	C1	C1	C1	B2
All my university studles are in english medium					
Italian	A2	B1	A2	A2	B1
Tamil	C1	A2	B2	B2	A1

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user
Common European Framework of Reference for Languages

Communication skills

- Oral- Well-developed oral communication skills in English developed through tutoring at the Loyola College.
- Written- Writing skills in English obtained from Technical writing course.

Organisational / managerial skills

(2012 - 2013) Loyola Class Representatives
 (2010 - 2013) Member of Loyola Outreach Program
 (2009 - 2010) Member of Loyola Student Union
 (2008 - 2009) Member of Loyola Outreach Program
 (2007 - 2008) Member of Loyola Quality Circle Association
 (2007 - 2008) Loyola Class Representative

Job-related skills

■ **Teamwork-** Fostered through teaching, volunteer and extra-curricular environments, public speaking, debating and convening roles in workshops and seminars

1)Molecular Biology and Genetic Engineering:

■ **RT-PCR**
 ■ **RNA Isolation**

■ Isolation of Genomic DNA, Agarose Gel Electrophoresis, Polymerase Chain Reaction and Restriction Enzyme Digestion.

■ Immunoblotting
 ■ Molecular medicine

2)Animal Cell Biotechnology

■ cell culture
 ■ Single cell suspension and Monolayer Preparation Cell Counting and Cell Viability, Trypsinisation and subculturing, Cryopreservation and thawing Microfiltration Assay and Cytotoxicity Studies.

■ **Renal tubule Isolation**

3)Biochemistry – Protein Studies

■ HPLC
 ■ Isolation and Estimation of Proteins Chromatography – Thin Layer.

4)Immunotechnology

■ Ouchterlony Double Diffusion Test Latex Agglutination Method Rocket Immuno-electrophoresis ELISA and Dot Blot Assays

5)Microbiology

■ Isolation of Bacteria, Fungi and Actinomycetes, Pure culture Technique, Morphological Characterization, Staining Technique, Culture Preservation, Antimicrobial Screening and MIC Mass Production and extraction of bioactive compound separation technique.

6)Nanotechnology

■ Nano particles preparation
 ■ Nano based drugs
 ■ Preparation of Nano vectors PEG
 ■ Nano medicine

7)Plant Tissue Culture and Plant Biology

Digital competence

■ **Technical-** Conversant in terminology and competent in the use of modern office technologies such as Microsoft Word, Excel, PowerPoint.

ADDITIONAL INFORMATION

Publications

□

- Antonio Barbieri , Vincenzo Quagliarino , Vitale Del Vecchio , Michela Falco ,Antonio Luciano , Nagoth Joseph Amruthraj , Guglielmo Nasti , Alessandro Ottaviano ,Massimiliano Berretta , Rosario Vincenzo Iaffaioli , and Claudio Arra 1, Anticancer and Anti-Inflammatory Properties of Ganoderma lucidum Extract Effects on Melanoma and Triple-Negative Breast Cancer Treatment,Nutrients 2017, 9,210; doi:10.3390/nu9030210, www.mdpi.com/journal/nutrients
- Joseph Amruthraj,N., Preetam Raj,J.P., and Antoine Lebel,L. Capsaicin-capped silver nanoparticles: its kinetics, characterization and biocompatibility assay 2014 Appl Nanosci, DOI 10.1007/s13204-014-0330-5.
- Joseph Amruthraj,N., Preetam Raj,J.P., M. Gabriel Paulraj and Antoine Lebel,L. "Report on Micro moth Phthorimaea operculella (Lepidoptera: Gelechiidae) Infestation in Capsicum chinense Bhut Jolokia fruit" IOSR Journal of Agriculture and Veterinary Science 2014, 7(8), 41-45 DOI 10.9790/2380-07824145
- Joseph Amruthraj,N., Preetam Raj,J.P., and Antoine Lebel,L. In Vitro Studies On Anticancer Activity Of Capsaicinoids From Capsicum Chinense Against Human Hepatocellular Carcinoma Cells. International Journal of Pharmacy and Pharmaceutical Sciences 2014 6(4), 254-258, (Impact factor- 1.59).
- Joseph Amruthraj,N., Preetam Raj,J.P., and Antoine Lebel,L ". Isolation and molecular characterization of plant growth promoting rhizobacterium paenibacillus illinoisensis strain nagoth jar 007 from seeds of capsicum chinensis bhut jolokia" J Microbiol Biotech Food Sci . 20143 (5) 391-394. (Impact factor- 0.388)
- Joseph Amruthraj,N., Preetam Raj,J.P., and Antoine Lebel,L. "Impact of Organic Solvents in the Extraction Efficiency of Therapeutic Analogue Capsaicin from Capsicum Chinense Bhut Jolokia Fruits". International Journal of Pharmaceutical and Clinical Research 2014; 6(2): 159-164 (Impact factor- 1.117).
- Joseph Amruthraj,N., Preetam Raj,J.P., and Antoine Lebel,L. "Effect of vegetable oil in the solubility of capsaicinoids extracted from Capsicum Chinense Bhut Jolokia". Asian J Pharm Clin Res, 2014, 7(1), 48-51 . (Impact factor- 0.7)
- Joseph Amruthraj,N., Preetam Raj,J.P., and Antoine Lebel,L. Comparative study on the extraction of capsaicinoids from Capsicum chinense and their analysis by phosphomolybdic acid reduction and HPLC. International Journal of Pharmaceutical Sciences Review and Research, 2014, Accepted manuscript.
- Joseph Amruthraj,N., Preetam Raj,J.P., and Antoine Lebel,L. "Polar aprotic extraction of Capsaicinoids from Capsicum chinense Bhut Jolokia fruit for antimicrobial activity". International Journal of Biological & Pharmaceutical Research. 2013; 4(12): 959-964.(Impact factor 1.34).

Poster Presentation Poster Presentation at XV Congress of the Society of Nephrology Campano Sicilian Trapani 22-23 May 2015

Title on Measurement of GFR by plasma clearance of iothexol: evaluation of the data obtained and clinical implications Cristina Masella, Patrizia Lumbar, Joseph Amruthraj Nagoth, Annarita Di Nunzio, Diego Ingrosso, David Viggiano, Giovanbattista Capasso

Genbank submission

- Joseph Amruthraj,N., Preetam Raj,J.P., Mercy Margaret,B. and Antoine Lebel,L. Isolation of microorganism present in Capsicum chinense seeds and its resistance to its high pungent. Paenibacillus illinoisensis strain Nagoth JAR 007 16S ribosomal RNA gene, partial sequence. GenBank: KC886309 13-MAY-2013.
- Sebastian Sarath Kumar,R., Joseph Amruthraj,N., Elizabeth Amalarasi,L. and Kingsley,S.J. Isolation of Alkaline Protease producing bacteria from soya bean. (Glycine max) - Klebsiella pneumoniae strain SebaVilla 6 16S ribosomal RNA gene,partial sequence. KC894842 (6-July-2013)
- Sebastian Sarath Kumar,R., Joseph Amruthraj,N., Elizabeth Amalarasi,L. and Kingsley,S.J. Isolation of Alkaline Protease producing bacteria from soya bean. (Glycine max) - Escherichia coli strain speloyolapbt 15 16S ribosomal RNA gene, partial sequence. KC894843 (6-July-2013)
- Sebastian Sarath Kumar,R., Joseph Amruthraj,N., Elizabeth Amalarasi,L. and Kingsley,S.J. Isolation of Alkaline Protease producing bacteria from soya bean. (Glycine max) - Klebsiella pneumoniae strain sebastianvr 91 16S ribosomal RNA gene, partial sequence. KC894844 (6-July-2013)

- Sebastian Sarath Kumar,R., Joseph Amruthraj,N., Elizabeth Amalarasi,L. and Kingsley,S.J. Isolation of Alkaline Protease producing bacteria from soya bean. (Glycine max) - Klebsiella pneumoniae strain Mscblo 15 16S ribosomal RNA gene, partial sequence KC894845 (6-July-2013)
- Sebastian Sarath Kumar,R., Joseph Amruthraj,N., Elizabeth Amalarasi,L. and Kingsley,S.J. Isolation of Alkaline Protease producing bacteria from soya bean. (Glycine max) - Bacillus tequilensis strain sebastianloyola11pbt 16S ribosomal RNA gene, partial sequence. KC894846 (6-July-2013)

Projects

- During PhD Projects
- 1)clinical trials using with markers to find out SAH and SAM by HPLC in the cardiovascular diseases (CVD).during 2014 to 2016
- 2) Measurement of GFR by plasma clearance of Iohexol : evaluation of accuracy and implications for clinical trials.during 2014 to 2016
- Master of Philosophy Dissertation on Anticancer Activity of Gold Nanoparticles Protected by Phytochemically Extracted Capsaicin from *Capsicum chinense* Bhut Jolokia during 10 Aug 2012 to 16 Aug 2013.
- Master of Science Project on "Standardization of In house-ELISA for the detection of IgG antibodies to *Toxoplasma gondii*" during 12 Dec 2011 to 31 Mar 2012

International and National Conferences and Educational course

- IV National Congress of Nutrition and cancer care: prevention and treatment under the patronage of "ASMO (Association for Multidisciplinary Studies in Oncology) and Mediterranean diet" "Culture and the Mediterranean Diet" Aula Faculty of Biotechnology at the University Federico II - 12 and 13 May 2016.
- Participate in the seminar about Chromatin,epigenome and drug discovery at Second University of Naples on 21 to 23 march 2016.
- AICC 28th Annual Conference of Italian Association of Cell Cultures (ONLUS-AICC) on Approaching the new era of molecular medicine:from target based agents to Nucleic acids in the treatment of tumours and neurodegenerative diseasesNaples, November 16th - 17 th 2015 Second University of Naples, Medical School.ITALY
- Italian Society of Nephrology attended the educational course on dialysis in Naples on 12 and 13 May 2014. ITALY
- Conference on Role of Traditional Knowledge in Biodiversity Conservation,Livelihood&Sustainable Development at Department of Botany,Stella Maris College in collaboration with C.P.R.Environmental Education Centre on 5-6th Feb2013.INDIA

Workshops

- Workshop On" Frontiers in Quantum Nanoscience" at Department of Plant Biology and Biotechnology, Loyola College on 12thDec -2011
- Workshop On"Nanotechnology"at Quantum Nanoscientific Pvt.Ltd., Jointly organised with Department of Plant Biology and Biotechnology, Loyola College on 28 Feb 2011

Seminars

- Seminar on Clinical Nanomedicine –An Overview at The Sankara Nethralaya Academy, (A unit of Medical Research Foundation), Vision Research Foundation, Sankara Nethralaya, Chennai-6 on 2-3rd Aug 2013
- Second International Seminar on "Frontiers of stem cell &biotechnology in human& veterinary medicine" at Madras veterinary college, Chennai 600007, Tamil Nadu, India. Jointly organized by Virginia Maryland Regional College of Veterinary Medicine, USA. on July 18 – 19 2011.
- Seminar on "Modern trends in biotechnology" Sponsored by Tamil Nadu State council for science and Technology, Department of Plant Biology and Plant Biotechnology, Loyola College on 14 Feb 2011
- Opportunities for Biotechnologist in Food Processing Industries at Center for International Programme (CIP),Loyola College on 18 July 2010
- Entrepreneurship Skills in Biotechnology Department of Plant Biology and Plant Biotechnology, Loyola College on11–12 May-2010

Honours and awards

- **Loyola Best Outreach Award**, for the academic year 2012 - 2013.
- **Excellence in Leadership Award**, for academic year 2009 – 2010 in Loyola College, Chennai.
- **Loyola Best Outreach Award**, for the academic year 2008 – 2009.
- **Certificate of Merit awarded First place in Oratorical on Manasulo in Maata on 2010** by Chaitanya mega inter collegiate fest.
- **Andhra Bhashabhivardhimi awarded First Place in Inter Collegiate Debate in Telugu Paravastu Chinnaya Suri Memorial Silver Rolling cup** conducted by Presidency College (2009-2010).
- **Andhra Bhashabhivardhimi awarded First Place in Inter Collegiate Debate in Telugu Paravastu Chinnaya Suri Memorial Silver Rolling cup** conducted by Presidency College (2008-2009).
- **Certificate of Merit awarded First place in Oratorical on Manasulo in Maata on 2009** by Chaitanya mega inter collegiate fest.
- **Certificate of Merit awarded First place in Elocution** conducted by Andhra Bhashabhiranjani Sanghamu, Madras Christian College on 12 Nov 2008.
- **Certificate of Appreciation awarded First place in Quiz** conducted by Oriental Language Association, Loyola College during 2008.
- **Certificate of Completion in Human Universal Energy and Spiritual Yoga** on 2003.
- **Received Second place in Javelin throw in Intra mural Tournaments in Athletics** conducted by Vidya Niketan High School, Warangal in the year 2000.

References

Dr. Patrizia Lombardi**Guide for PhD and Researcher (Department of Nephrology)**

Second University of Naples

Dip. Biochimica Biofisica, Patologi

Via L. DE CERCCIO, 7

2 piano lab-2B

80138 NAPOLI, ITALY

patrizia.lombardi@gmail.com

Prof. Giovambattista Capasso**Director**

Department of Nephrology

Clinical, Experimental and Medical Sciences

Second University of Naples

Naples-Italy

email: gb.capasso@gmail.com,

gb.capasso@unina2.it

Dr. S. JAYASURYA KINGSLEY**Director**

Madras Christian College, Tambaram, India.

Residential Address:

147/4, Pallavi Apartments,

F Block, Annanagar East,

Chennai – 600 102.

Tel: 26223480 Mobile: 9962854445 Email – ID: kingsleyvidi@yahoo.co.in kingsleyvidi@gmail.com

Dr. R. RAVINDHRAN**Associate Professor & Deputy Dean of Research**

Department of Plant Biology and Biotechnology

Loyola College (Autonomous), Chennai 600 034, INDIA

E-mail: raviloyola1998@gmail.com / ravi_/c1998@yahoo.com

Tel: +91-44-28178304

(Off)/ Mobile: 09840486271 /

Fax: 044-28175566

Prof. ANTOINE LEBEL.L**Head of the Department**

Department of Plant Biology and Biotechnology, Loyola College, Chennai

Residential Address:

No :17/9, Neelakandan Street,

Choolaimedu,

Chennai – 600 094

Mobile: + 91 94445 68404

Email – ID: antonest12@gmail.com

ANNEXES

-
- Carta D Identita 1.compressed.pdf