Dr.Ganga .G ****

**Official address: Assistant Professor in Microbiology**

**Sree Ayyappa College,Eramallikkara, Chengannur TDB –University of Kerala**

**Email:** [**gangaprasanth@gmail.com**](mailto:gangaprasanth@gmail.com) **or** [**drgangasac@gmail.com**](mailto:drgangasac@gmail.com)

**WhatsApp 9447425930 Mobile 7012656320**

# Objective

# My career goal is to immaculate the basic research and value of basic science in young talents and establish a social commitment through adopting science for the benefit of the society.

# Thrust Area of Research

Bacterial and Viral diagnostics, Molecular biology and Cell biology, Recombinant Vaccines and Genetic engineering, Microbiology and Virology

# Education

# MSc in Applied Microbiology (University of Madras) & PhD in Biotechnology, ( ICAR)

**Post doctoral Research Associate Inter University Center for Genomics & Gene Technology University of Kerala**

# Skills and Experiences

## TEACHING

* 9 .5 years of teaching experience in Microbiology, Biotechnology and Molecularbiology and Immunology

## Research

* 20 years of research experience
* Take a role in conducting many external funded research Activities
* Guided more 50 students in various student project

**MAJOR RESPONSIBILITIES AND POSITION HELD**

* Worked as NSS program officer
* -BMC & Science club convener
* Member bord of studies in Biotechnology university of Kerala
* Deputy warden
* UBA Cordinator
* NAAC steering Committee member
* Junior Research Fellow- Dept. of Animal Biotechnology, Rabies Unit .Tamilnadu Agriculture and Veterinary University, Chennai, India.June.1999- Oct.2001. -Development of Recombinant vaccine against Rabies
* **Senior Research Fellow**- Indian Institute of Spices Research ,Calicut, Kerala, India-673012. Oct.2001- Dec-2003. -Improvement of Selected Spices Using Biotechnological tools
* **Research Associate**- Central Tuber Crops Research Inst. TVPM-Kerala, India-695017. Dec. 2003- Sept.2004.-Development of transgenic cassava against ICMV-through pathogen derived resistance.
* **Senior Research Fellow Fellow** (Ph.D studentship ICAR FELLOW /GATE 2013)- C TCRI ICAR .TVPM-, India-695017.- Sweet potatoviruses-Development of molecular based methods for detection. (DEPT OF PATHOLOGY VIROLOGY (Ph.D studentship)- Central Tuber Crops Research Inst.TVPM-Kerala, Dec-2004 – Dec 2009.-
* **Research Felleo -**Dept Environmental Science ,University of Kerala, Thiruvanathapuram Mar2010- Jan 2011
* Postdoctoral Research Associate -(PDF) Inter University Center for Genomics and Gene Technology University of Kerala Jan 2011-june 2012
* **Assistant professor in Microbiology** Sree Ayyappa College-TDB,

**PUBLICATION/TRAINING/WORKSHOP**

* 15 Paper published in peer reviewed national and international journals.
* 22 Papers presented in National and International seminars and symposium
* 10 Training/workshop programme attended.
* Two book chapters IGI global ,AKNIK PULICATION
* One book published Bright Publication biotechnology and Biological science VOLUME 1and volume2

ISBN 978-81-952451-61 http://doi.org/10-.22271/bs.book.19

* Lead talks and Chair in International Seminars
* Completed 4 orientation refresher and short term FDP Courses UGCHRDC by A Grade
* Chaired Session and Delivered a Key note speech in International RSP Conference held At Mumbai August 25 2021

**Awards Received and recognitions**

* Recipient of two international best paper award WORLD COFERENCE ON INFECTIUOS DISEASE 2 20213
* Recepient of Best papere Award in Gene to Vial symposium at VIT Velloere 2011
* Receipient best paper award in Naramisharoa memorial ICAR Confererence 2013
* Recipient of ICAR grant fellowship for the completion of PhD
* Recipient of Best NSS PROGRAME officer award from University of Kerala
* Cordinator of national level winning project ECHO project on nature conservation for World Wild life Fund 2020
* Best Volunteer ship From Magical Mangroves program 2021 WWF GODREJ
* Best state Level Winner for Innovative Project on Biopod Technology 2021
* Periyar Science Congress Best Project Award-Alternative Packaging Technology Best project presentation
* Insc Best paper Award .2021.Biomaterials of marine crustaceans -Prospective and perspective.
* Nation Builder Award 2021 -Rotary Club and Inner wheel Club
* Lead Auditor Green AUDIT Nature Science Foundation 2021
* ASPIC club member(Antibiotic stewardship Program)

External Funded Project

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| **Sl No** | **Title of Project** | **Funding Agency** | **Ref Number**  **PI** |
| 1 | Identification and characterizations of chlamydia causing sexually transmitted infection in population of Kerala | UGC | **MRP (s)-0742/13-14/KLKE059/UGC-SWRO** |
| 2 | Isolation of natural pigment producing microorganism and its characterization and exploitation | **KSCSTE SPYTiS** | **NO1013/DIR/2015-2016/KSCSTE DATED 29/2/2016** |
| 3. | Isolation of Microbes from Agriculture farm lands and bio prospecting | **KSCSTE SPYTiS** | Sanctioned and Listed in **KSCSTE** site |
| 4 | YEP Project Kerala Biotechnology Commision Kerala Science and Technology | **Sanctioned** | Amount 28 Laks |

**List of papers published**

**International**

1. R.Jayakumar, K. G. Thirumurugaan, **G. Ganga**, K.P. Sheela, K. Vijayarani, A. M. Nainar *In situ* reverse transcription- polymerase chain reaction: a novel technique for detection of rabies virus in murine neuroblastoma cells.. ***Acta virologica* (2003);47:63-65**
2. R,Jayakumar,K.G.Thirumurugaan, **G.Ganga**, K.Kumanan, A.M.Nainar Characterization of Nucleoprotien gene sequence of an Indian isolate of Rabies virus. ***Acta virologica*** (2004)48: 47 – 50.
3. SandeepV.G, **Ganga.G** ,Johnson.K.G,Mathew,P.A,and Parthasarathy.V.A LParthasarathy.U, Microprpragation of rambutan (*Naphelium lappacuem*)L.***Journal of Applied Horticulture*** 6(2) 106-107 2004
4. Johnson G.K, **Ganga.G**,Sandeep V.R, Anandaraj.M.B,Prthasarathy V.A A methods for isolation of high quality RNA from Piper Species Journal of Spices and Aromatic Crops 2005 10-14 14(1)
5. **Ganga prasanth**,Vinayak Hedge Occurrence of *Sweetpotato featherymottle virus* and *Sweetpotato leafcurl Gorgia virus* on sweetpotato in India ***New disease report****.* ***J.plant disease*** (2008) (92):2311. DOI: 10.1094/PDIS-92-2-0311B
6. Emimol .A, **Ganga.G**, Parvathy. R, Radhika.G, Nair G.M Screening of Microbes producing extracellular hydrolytic enzyme from corporation waste dumping site and house hold waste for the enhancement of bioremediation methods. Accepted for publication ISOR Journal of Pharmacy 2012 July(Ref id 21012) IOSR Journal of Pharmacy and Biological Sciences (IOSR-JPBS) ISSN: 2278-3008.Volume 4, Issue 1 (Nov. – Dec. 2012), PP 54-60 www.iosrjournals.org
7. Rubina.B **Ganga.G**,Meena .B.Shibili S (2013).KEffect of W–TiO2 composite to control microbiologically influenced corrosion on galvanized steel. [http://www.springerlink.com/ openurl.asp?genre=article&id=doi:10.1007/s00253-012-4389-1](http://www.springerlink.com/%20openurl.asp?genre=article&id=doi:10.1007/s00253-012-4389-1)[Appl Microbiol Biotechnol.](https://www.ncbi.nlm.nih.gov/pubmed/22983597) 2013 Jun;97(12):5615-25. doi: 10.1007/s00253-012-4389-1. Epub 2012 Sep 18.

8.Ganga.G Biomaterials of Marine Crustaceans – Prospects and Perspectives IOSR Journal of Pharmacy and Biological Science (IOSR-JPBS) with following link:<http://www.iosrjournals.org/iosr-jpbs/pages/11(6)Version-6.html> p-ISSN:2319-7676. Volume 11, Issue 6 Ver

**9.G. Ganga** Metal Nano Particles Synthesized from ***Riccia fluitans*** and its Application as Antimicrobial Agent 2021 International Journal of Trends in Bioscience ISSN 0974-8431 Online ISSN0976-2485 Volume7 1721

**10. Ganga .G Screening** **and Characterisation of Alkaliphiles from Sewage effluents** JOURNAL LIST ANDZOOLOGICAL RECORDS included in (UGC CARE I **E-ISSN 2277-1808**Bulletin of Environment, Pharmacology and Life Sciences Volume 10 (2)Jan 2021 UGC CARE Bulletin of Environment, Pharmacology and Life Sciences Bull. Env. Pharmacol. Life Sci., Vol 10 [2] January 2021 : 99-104 ©2021 Academy for Environment and Life Sciences, India Online ISSN 2277-1808 Journal’s URL:http://www.bepls.com CODEN: BEPLAD

11**.Ganga.G** Larvicidal Activity of Silver Nanoparticles Synthesized from Azadirachta indica Leaf Extract Against Oryctes rhinoceros (L.) Beetle Asian Journal of Biological and Life Sciences,2021,10,4,407-412.**DOI:**[10.5530/ajbls.2021.10.54](http://dx.doi.org/10.5530/ajbls.2021.10.54)**Published:**September 2021

e-ISSN : 2278-5957: P-ISSN: 2278-747X(UGC CARE LIST II)

12. A. Neena , V. Udhaya,\*, K.K. Prasobh and **Ganga,G** Prevalence of Chlamydia Trachomatis IgM Antibody among the Pregnant Women Attending a Tertiary Care Hospital at Kerala - South India / Elixir Bio Sci. 128 (2019) 52825-52828

14 **Ganga.G** .Sreelekshmi.S.R1 and Prasanth Rathinam2Anti-virulence potential of Allium Cepa against multi- drug resistant biofilm forming Pseudomonas strainsAdvances in Bioresearch Adv. Biores., Vol 12 (5) September 2021: 135-142 ©2021 Society of Education, India Print ISSN 0976-4585; Online ISSN 2277-1573 Journal’s URL:http://www.soeagra.com/abr.html CODEN: ABRDC3 DOI: 10.15515/abr.0976-4585.12.5.135142

15.Sobha V,Hashim.K.A,Santhosh S,**Ganga.G** Qualitative analysis of water sample of Vellayani lake-A fresh water lake insouthern Kerala. Indian ***J.Environ&Ecoplan***.18(1):171-176 2011

16.Johnson G.K, **Ganga.G**,Sandeep V.R, Sasikumar.B,Saji.K.V Identification ofhybrid in black pepper(Piper nigrum L.) using male specific RAPD markers **Curre.Sci** 88 (2)

17 . Genetic diversity analysis in spices using ISSR markers Johnson George K sandeep Varma R, **Ganga**.**G** **1CAR News** 2004 10(2)-Scopes

18. Sweety Gopinath, Hridya Vijay and Ganga G Isolation and Characterization of Effective Microbes for Biodegradation, Bioremediation and Plant Growth Promotion Indian Journal of Natural Sciences www.tnsroindia.org.in ©IJONS Vol.12 / Issue 69 / December / 2021 ISSN: 0976 – 0997

19. **Suchithra K.R.**[**\***](https://indianjournals.com/ijor.aspx?target=ijor:jer&volume=46&issue=2&article=027#cor001)**, Sreekumari C.**[**1**](https://indianjournals.com/ijor.aspx?target=ijor:jer&volume=46&issue=2&article=027#aff001)**, Ganga G. Characteristic study for identification of honey bees and screening of its bee bread for therapeutic property** Journal of Entomological Research Year : 2022, Volume : 46, Issue : 2  
First page : **( 374)**Last page : **( 377)**Print ISSN : 0378-9519. Online ISSN : 0974-4576.  
Article DOI : [10.5958/0974-4576.2022.00067.6](http://dx.doi.org/10.5958/0974-4576.2022.00067.6" \t "_blank)

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BOOK CHAPTER PUBLISHED

1. Green Audit for the Environmental Sustainability Source Title: [Green Public Procurement Strategies for Environmental Sustainability](https://www.igi-global.com/book/green-public-procurement-strategies-environmental/202761) Copyright: © 2019 |Pages: 14DOI: 10.4018/978-1-5225-7083-7.ch003 PP45-58

2.Book published

Hanumanthappa Makari and Ganga.G.Current Research in Biotechnology and Biological Science volume 1

**Seminars and Symposium Paper Presented**

1. ISSR and RAPD markers in diversity analysis of Piper species.**Ganga.G**,Sandeep varma.R,Johson G.K Sixteenth Kerala Science Congress 2004(29-31) Kozhikode.

2. ISSR-PCR, a potential tool for genetic diversity analysis in spices. Johnson K.G,**Ganga.G**,RenukaM,Shiju.K.C,UtpalaP,Sasikumar.B,SajiK.V,Parthasarathy.V.A National seminar on New Perspective in spices, Medicinal and Aromatic Plants 2003 27-29 Organised by ICAR,Goa

3. Development of diagnostics for *Sweetpotato feathery mottle virus*. Paper presented in 14th International Symposium of the International Society for tropical tuber crops, 20-26 th, November 2006. Thiruvananthapuram. **Ganga, P.**, Hedge, V., Makesh Kumar, T., Jeeva, M.L, and Edison, S.

4. Cloning and sequencing partial coat protein of *Sweetpotato feathery mottle virus* .**Ganga P**, Hegde.v International Seminar on tropical tuber crops. Feb 2007-Thiruvanathapuram India.

5 Development of diagnostics for *Sweetpotato feathery mottle virus*. Paper presented in 14th International Symposium of the International Society for tropical tuber crops, 20-26 th, November 2006. Thiruvananthapuram. **Ganga, P.**, Hedge, V., Makesh Kumar, T., Jeeva, M.L, and Edison, S.

6 Cloning and expression of coat protein gene of *Sweetpotato feathery mottle virus* in *E.coli*. Paper presented in 10th International plant virus Epidemiology Symposium on controlling epidemics of Emerging and Established Plant virus Disease-the way forward held at ICRISAT, Hyderabad during 15-19 th October 2007. Hedge, V., **Ganga, P.** Makeshkumar, T., Jeeva, M.L, and Edison, S

7. Development of molecular diagnostics for *Sweetpotato feathery mottle virus*. Paper presented in 10th International plant virus Epidemiology Symposium on controlling epidemics of Emerging and Established Plant virus Disease-the way forward held at ICRISAT, Hyderabad during 15-19th October 2007. Hedge, V., **Ganga, P**., Makesh Kumar, T., Jeeva M.L, and Edison, S.

8. Molecular based detection and identification of Sweetpotato leaf curl virus Paper presented for National symposium on “Biotechnology for Human developments” November 2009. SBT1 09, vellore.India **Ganga.G** and Hegde.V.

9.Detection and Molecular Characterization *Sweetpotato feathery mottle virus* and *Sweetpotato leaf curl virus* in India Ganga.G and Hegde.V 97th Indian Science Congress held at Kariyavattam campus TVM.3-7th January 2010 .

10. Comparative analysis of the effects of Metal composites on Biofilm and Biocorrosion Shibili S.M, Meena .B.N, Rubina. B, Krishnachandran C ,**Ganga.G**,NairG.M International Conference on Climate change Forest Resource and Environment (ICCFRE-2011) 9-11 December 2011 held at Department of Environmental Science University of Kearala, Thiruvanathapuram &National Environmentalist Association Ranchi

10. Presented a paper on “ Microbes a potential source of Therapeutics” International Symposium on Genomics of Crops Medicinal plants and Microbes” May 29-31 2011

11. Effect of biocidal coating on biofilm formation and biocorrotion by bacteria on ship hulls. Rubina.B **Ganga.G**,Meena .B.Shibili S.K , Nair, G.M 2012**,** International Conference on Advances in Biological Sciences (ICABS) during March 15- 17 at Kannur, Organised by Department of Biotechnology&Microbiology, InterUniversity Centre for Bioscience, Kannur University Kerala, India

12.IC-RT PCR for the detection of SPFMV using plolyclonal antiserum against Clone and expressed SPFMV-CP national symposium on pathogenomics for diagnostics and management of plant disease Octo 24-25 2013.

13.Ganga.G Radhika and G.M Nair Isolation of Medicinal Plants Endophytes and Bio-Prospecting of Bioactive Compounds. WICD 2013 Chennai 18 to 22nd December 2013.

14. Ganga.G Presented a paper on International conference organized by Dept of Chemistry held at Cristian College, Kattakkada, Thiruvanathapuram Phyto chemical analysis of *Cassia alata 2015*

15.Presented a paper in “Antimicrobial Activity of Adalodakam” at national seminar held at St.Gregoroius Collge ,Kottarakkara,Organised by Depertment of Botany 17th Jan2014.

16.Ganga.G “SMG marker Free Transgenics –The Grandeur of Invention over Biosafety Concern “ In Modern Biotechnology:Perpective and Challenges .Presented a paper at UGC Sponsored Seminar organized by KKTM College, Kodungallore Organized by Department of Botany 2015

17 Ganga..G .Prodigiosin-A promising Green Pigment-Biosynthesis Characterisation and Applications. Sustainability , Seminar on Challenges and Advances in Biological Science. 18th and 19TH Dec 2015 organised by Applied Microbiologist association Rasipuram

18. Ganga.G Phytochemical Analysis of *Cassia alata* and its potential Application in Dermatitis .International Seminar on STATE –OF –The Art OF Instrumental Techniques in Compound Analysis SITCA -2016 On. 19th and 20th July 2016.

19. Ganga.G Marine waste product –Its prospective in Synthesis of Biomaterials. UGC Sponsored National seminar on Advances in the frontier areas of Chemical Science NSAFC-2016 9th &10 th

20. Ganga.G Anu Gopinath Lakshmibalan and Nitha.B International Conference on Biodiversity Evaluation perspective and Paradigm Shift Isolation and Characterization of Natural pigment producing bacteria and its exploitation in Industrial application. Biodiversity.

21.Sreeprabha.s a, reshmi.r a\*, latha M.S a, Ganga G a green synthetic route to silver nanoparticles from bacopamonnieri leaf extract and their potential biomedical application infofest national semainar April 2018

22.Production of bioactive compounds and plant promoting ability of endophytes from medically

important plants of sacred grooves. A symposium on Endophytes ane application in agriculture Ganga.G Philip. K. Merlin, Mohemmed Anshad University of Agricultural Sciences, Bengaluru, under the auspicesof the World Bank sponsored ICAR-Centre of AdvancedAgricultural Science & Technology (CAAST) program September 24-26th 2019

**Participation in seminar**

1.Participated in One day seminar Frontiers in Microbiology organized by Dept of Microbiology Govt College,Thiruvananthapuram

2.Participated in Jainatural Fitness health club competitions and won Best student Award with grade A 14/4/2013

3. Emerging Infectious disease auses management and Prevension. Dpt of Microbiology Womes College Thiruvanathapuram 12th dec 2013.

4.14th Triennial Symposium on Root Crops 20-26 Nov 2006.

5.Indian Society for Spices “New Perspectives in Spices Medicinal and Aromatic Plants 27-29 2003 held at IISR Calicut

6.Kerala State Council For Science Technology &Environment Held at Kozhikode 2004

7. One day seminar on Ozone layer Protection through Biodiversity Southern Kerala Action Center National Safety Council (KC)

8.National Sminar on Industrial Microbiology-Trends and Perspective Organised by Dept of Microbiology Govt College for Women Thiruvananthapuram

9. Attended A seminar on Conducted by Pushpagiri medical College on 2015

**Training /workshop/Orientation/Refresher**

1.Particiapted in UGC sponsored Orientation Course organized by Academic staff College Univerisity of Kerala IT-Oriented Orientation Programe 30/1/2015-26/02/2015.

2. Participated in UGC sponsored Orientation Course organized by Academic staff College University of Kerala Environmental Science ( Multidisciplinary) Orientation Programme o5/1/2015-25/01/2016.

3.Particiapated in Two Day Training Programe for on “First Medical Responder” organized by Indian Red Cross Society. Alappuzha District branch at District Medical Office at Alappuzha.18/6/2016 to 19/6/2016.

4. Participated in two day workshop in Agriculture Bioinformatics Organised by Bioinformatics center during the 29-30 October 2003 Bioinformatics Center IISR Kozhikode .

5.Particippated in Research Methodology workshops ,writing and Language skills for women Scientist Conducted by Kerala Sate Council for Science Technology and Environment 2012

6.Particiapted in 6TH International Workshop on Plant Growth promoting Rhizobacteria during 5-10 Oct 2003.

7.Particapated One day workshop on Patent Information Drafting for R&D industries organized by Macfast and Kerala Science technology NAD Environment on 22nd Dec 2016

8.4TH Practical Summer training on chromography Molecular Biology and Biophysics 1-9 June 2011at Vellore Institute of Technology

9.Latec Work shop 2020

**Award Received**

**International Award**

1.Received an International award for the best paper for Gene to Vial International symposium held at VIT ,Vellore India Feb7th -10th 2010 .Cloning, expression and purification sweetpotato leaf curl virus CP (AV1) gene (SPLCV) and development of diagnostic methods for the early and reliable detection of the virus. **Ganga.G** and Hegde.V

2.Best paper award on Endophytes of plants and its exploitation for pharmacological application World conference on Infectious disease 18-22nd December 2013 (WICD 2013) held at Chennai Trade Convention (CCTC) India

**National Award**

1. Best paper award at ICAR Indian Phtopathological Society seminar Nasimha memorial conference held at CTCRI-Indian Council of Agriculture research Institute Thiruvanathapuram Octo 24-25 2013 National symposium on pathogenomics

**Membership in Association**:

Membership Indian Association of Applied Microbiologist Life Membership Lm:321

Membership in WWF organisation

**Gene Accession Numbers published in** [**National Center for Biotechnology Information**](http://www.google.co.in/url?q=http://www.ncbi.nlm.nih.gov/&sa=U&ei=fssOUNPDEMrSrQeaxoGYAQ&ved=0CBIQFjAA&usg=AFQjCNF5b2EFJYpqMv6HC2ukK_tn01ichQ) **DATA BASE Total :25**

1. **Ganga, P**., Vinayaka.H, Makeshkumar.T, Jeeva. M.L, and Edison. S *Sweetpotato feathery mottle virus* isolate Trivandrum coat proteingene, partial cds. **EF015398** VRL 11-December 2009<http://www>. ncbi.nlm .nih.gov/site.
2. **Ganga, P.**, Hedge.V, Makeshkumar.T, Jeeva.M.L. and Edison. S *Sweetpotato feathery mottle* isolate CT 1 coat protein gene, partial cds **DQ285628** VRL 01 May 2006.
3. **Ganga, P**., Vinayaka .H, Makeshkumar.T, Jeeva. M.L and Edison.S *Sweetpotato feathery mottle viru*s isolate Thiruvananthapuram coat protein gene, partial cds **EF031540** VRL 05 February 2007<http://www>. ncbi.nlm .nih.gov/site.
4. **Ganga, P**., Vinayaka, H., Makeshkumar.T, Jeeva. M.L, and Edison. S Sweetpotato feathery mottle virus isolate Bhuveneswar coat protein **EF031539**VRL 05 February 2007<http://www>. ncbi.nlm .nih.gov/site.
5. **Ganga, P.**, Vinayaka, H., Makeshkumar,T., Jeeva, M.L, and Edison.S *Sweetpotato feathery mottle virus* isolate Andra Pradesh coat protein **EF031541**VRL 05 February 2007<http://www>. ncbi.nlm .nih.gov/site.
6. **Ganga, P**. and Vinayaka, H*Sweetpotato feathery mottle* virus isolate Tvm1 polyprotein gene, partial **FJ597645** VRL 08-FEB-2009 <http://www>. ncbi.nlm .nih.gov/site

**7.Ganga, P**. and Vinayaka, H *Sweetpotato feathery mottle viru*s isolate Tvm2 polyprotein gene, partial cds **FJ597646** VRL 08-FEB-2009 <http://www>. ncbi.nlm .nih.gov/site.

8. Jayakumar R,,.Thirumurugaan K.G,**.Ganga**, **G**.Kumanan K,.Nainar A.M. Partail nucleotide coding sequence for rabies virus isolate.**NCBI** AY259841- AY259854

9. Jayakumar R,,.Thirumurugaan K.G,**.Ganga**, **G**.Kumanan K,.Nainar A.M. Partail nucleotide coding sequence for rabies virus isolate.**NCBI** AY259842

10. Jayakumar R,,.Thirumurugaan K.G,**.Ganga**, **G**.Kumanan K,.Nainar A.M Partail nucleotide coding sequence for rabies virus isolate.**NCBI** AY259843

11. Jayakumar R,,.Thirumurugaan K.G,**.Ganga**, **G**.Kumanan K,.Nainar A.M Partail nucleotide coding sequence for rabies virus isolate.**NCBI** **AY259844**

12. Jayakumar R,,.Thirumurugaan K.G,**.Ganga**, **G**.Kumanan K,.Nainar A.M. Partail nucleotide coding sequence for rabies virus isolate.**NCBI** **AY259845**

13. Jayakumar R,,.Thirumurugaan K.G,**.Ganga**, **G**.Kumanan K,.Nainar A.M Partail nucleotide coding sequence for rabies virus isolate.**NCBI AY259846**

14. Jayakumar R,,.Thirumurugaan K.G,**.Ganga**, **G**.Kumanan K,.Nainar A.M. Partail nucleotide coding sequence for rabies virus isolate.**NCBI** **AY259847**

15. Jayakumar R,,.Thirumurugaan K.G,**.Ganga**, **G**.Kumanan K,.Nainar A.M. Partail nucleotide coding sequence for rabies virus isolate.**NCBI** **AY259845**

16. Jayakumar R,,.Thirumurugaan K.G,**.Ganga**, **G**.Kumanan K,.Nainar A.M. Partail nucleotide coding sequence for rabies virus isolate.**NCBI** **AY259845**

17. Jayakumar R,,.Thirumurugaan K.G,**.Ganga**, **G**.Kumanan K,.Nainar A.M. Partail nucleotide coding sequence for rabies virus isolate.**NCBI** **AY259846**

18. Jayakumar R,,.Thirumurugaan K.G,**.Ganga**, **G**.Kumanan K,.Nainar A.M. Partail nucleotide coding sequence for rabies virus isolate.**NCBI** **AY259847**

19 .R,Jayakumar,K.G.Thirumurugaan, **G.Ganga**, K.Kumanan, A.M.Nainar. Partail nucleotide coding sequence for rabies virus isolate.**NCBI** **AY259848**

20. Jayakumar R,,.Thirumurugaan K.G,**.Ganga**, **G**.Kumanan K,.Nainar A.M. Partail nucleotide coding sequence for rabies virus isolate.**NCBI** **AY259849**

21. R,Jayakumar,K.G.Thirumurugaan, **G.Ganga**, K.Kumanan, A.M.Nainar. Partail nucleotide coding sequence for rabies virus isolate.**NCBI** **AY259850**

22. Jayakumar R,,.Thirumurugaan K.G,**.Ganga**, **G**.Kumanan K,.Nainar A.M. Partail nucleotide coding sequence for rabies virus isolate.**NCBI** **AY259851**

23. Jayakumar R,,.Thirumurugaan K.G,**.Ganga**, **G**.Kumanan K,.Nainar A.M. Partail nucleotide coding sequence for rabies virus isolate.**NCBI** **AY259852**

24. Jayakumar R,,.Thirumurugaan K.G,**.Ganga**, **G**.Kumanan K,.Nainar A.M. Partail nucleotide coding sequence for rabies virus isolate.**NCBI** **AY259853**

25. Jayakumar R,,.Thirumurugaan K.G,**.Ganga**, **G**.Kumanan K,.Nainar A.M. Partail nucleotide coding sequence for rabies virus isolate.**NCBI AY259854**

26 Ganga G Assiatant professor Sree Ayyappa college Eramallikara NCBI sequence submission spingobacterium SUB10032017 Sphingobacterium    MZ572936Dr.Ganga.G