


Faculty Name	Dr. N. Rajeswari	
Designation	Associate Professor	
Educational Qualifications	M. Sc (Zoology) Ph.D (Genetics)	
Experience in Years	23	
Area of Interest	Human Genetics, Cancer Biology Microbial & Environmental Biotechnology, Bioinformatics	
Email Id	nraja7@gmail.com rajeswari-bt@dayanandasagar.edu	

MAJOR GOVERNMENT FUNDED PROJECTS COMPLETED& UNDERWAY:

1. Study of MGMT methylation status in patients with gliomas: (Funded by St John's Research Society, Bangalore, India). Completed.
2. An observational longitudinal prospective study to evaluate genes expressed in Notch pathway, prognosis and treatment response in gliomas (SERC Fast Track Scheme for Young Scientists, Department of Science & Technology, India 0280/2008). Completed. Amount Rs 18.64 Lakhs
3. "DNA Methylation studies on Glioma tissue samples using High resolution melting (HRM) based quantitative analysis" (Funded by Department of Biotechnology, India sanctioned under the "PILOT PROJECTS –YOUNG INVESTIGATORS IN CANCER BIOLOGY". Sanction Number - 6242-P20/RGCB/PMD/DBT/NRWR/2015). Amount Rs 24.24 Lakhs

International/National Journal Publications:

1994

1. M. Jaiswal, G. Anuradha, **N. Rajeswari**, K. N. Raju, N. Balakrishna, K. V. Rao, I. S. Prasad, S. N. Jain and Y.R. Ahuja, "Comet assay on cervical epithelial cells and leukocytes of patients with precancerous and cancerous lesions of the cervix", Med Sci Res, vol 22, pp. 879-881, 1994. **Impact Factor: 0.3. ISSN: 0269-8951.**
2. **N. Rajeswari**, "Biomonitoring individual risk in relatives of breast cancer patients by comet assay", Ind J Hum Genet, vol 1, pp 33-41, 1994. **Impact Factor: None; ISSN: 0971-6866**

1995

1. M. Jaiswal, G. Anuradha, **N. Rajeswari**, and Y.R. Ahuja, "Single cell gel electrophoresis (comet assay): Its importance in human biology", *Int J of Anthropology*, pp. 177-181, 1995. **Impact Factor: None. ISSN: 0393-9383.**
2. Y. R. Ahuja, M. Jaiswal, G. Anuradha and **N. Rajeswari**, "Comet assay in the study of environmental mutagens and carcinogens". *In: Perspectives In Cytology and Genetics (Eds) GK Manna and SC Roy Pub. Kalyani University, West Bengal, India*, vol 8, pp 727-734, 1995.

1997

1. A. Udumudi, M. Jaiswal, **N. Rajeswari**, N. Desai, S.N. Jain, N. Balakrishna, K.V. Rao , Y.R. Ahuja, "Risk assessment in cervical dysplasia patients by single cell gel electrophoresis assay - A study of DNA damage and repair", *Mutat Res*, vol 412, pp195-205, 1997. **Impact Factor: 4.44. ISSN: 0027-510.**

1998

1. N. Desai, **N. Rajeswari**, M. Jaiswal, U. Anuradha and Y.R. Ahuja, "Comet assay as an aid to pap smear test", *J Obs and Gynae of India*, pp. 81-84, 1998. **Impact Factor: None; ISSN: 0022-3190**

2000

1. **N. Rajeswari**, M. Udatha, S. Chandrashekar, N. Balakrishna, K.V. Rao, S.N. Jain, A. Khar and Y.R. Ahuja, "Risk assessment in the first-degree female relatives of breast cancer patients using comet assay", *Carcinogenesis*, vol 21, issue 4, pp 557-561, 2000. **Impact Factor: 5.266. ISSN: 0143-3334.**

2003

1. Y.R Ahuja and **N. Rajeswari**, "What is my risk of Cancer?", *Int J Hum Genet*, vol 3, issue 2, pp109-113, 2003. **Impact Factor: 0.16. ISSN: 0972-3757.**

2005

1. K.S. AL Khuraya, A.K. Siraj, F.A. AL Dayel, A.A. Ezzat, N.A. AL Johnmah, V.L. Atizado, **N. Rajeswari**, "Epigenetic changes and their clinical relevance in Saudi diffuse B-cell lymphoma, Molecular and Tissue micro array analysis of 100 cases", *Saudi Med J*, vol 26, issue 7, pp1099-1103, 2005. **Impact Factor: 0.554; ISSN: 0379-5284.**

2006

1. K. AL Khuraya, R. **Narayanappa**, F. Al-Dayel , H. El-Solh, A. Ezzat, H. Ismail, A. Belgaumi, P. Bavi, V. Atizado, G. Sauter, R. Simon, “Epstein-Barr virus infection is not the sole cause of high prevalence for Hodgkin's lymphoma in Saudi Arabia”, *Leuk Lymphoma* vol 47, issue 4, pp707-713, 2006. **Impact factor: 2.605; ISSN: 1042-8194.**
2. K. Al-Kuraya, R. **Narayanappa**, A. K. Siraj, F. Al-Dayel, A. Ezzat, H. El Solh, N. Al-Jommah, G. Sauter, R. Simon, “High frequency and strong prognostic relevance of O6-methylguanine DNA methyltransferase silencing in diffuse large B-cell lymphomas from the Middle East”, *Hum Pathol*, vol 37, issue 6, pp 742-748, 2006. **Impact factor: 3.024; ISSN: 0046-8177.**

2011

1. V. Usha, V. Shilpa, Y. Anuradha and **N. Rajeswari**, “Biomonitoring genetic instability in normal healthy population using a simple cytogenetic marker – micronucleus test”. *International Multidisciplinary Research Journal*, vol 1, issue 2, pp. 01-09, 2011. **ISSN: 2250-1630.**
2. S. Ambur, G.D. D’ Souza, **N. Rajeswari**, U. Neogi and A.S. Shet, “Associations between HPV and bronchiogenic carcinoma”, *Journal of carcinogenesis*, vol 10, issue 1, pp S1. 2011. **Impact factor: None; ISSN: 0974-6773**
3. **N. Rajeswari**, “Genotoxic effect of cancer patient’s serum on normal blood leukocytes evaluated by comet assay”, *Journal of carcinogenesis*, vol 10, issue 1, pp S13, 2011. **Impact factor: None; ISSN: 0974-6773**

2012

1. S. Sinosh, B.M. Arpitha, S. Narasimha, K. Shraddha, R. Shruthi and **N. Rajeswari**, “Structure based virtual screening of novel inhibitors against multidrug resistant superbugs”, *Bioinformation*, vol 8, issue 9, pp 420-425, 2012. **Impact Factor: 0.5. ISSN: 0973-2063.**

2013

1. S. Sinosh, L. Priyanka, R. Reshma, U. K. Arushi, and **N. Rajeswari**, “A pilot study on water pollution and characterization of multidrug resistant superbugs from Byramangala tank, Ramanagara district, Karnataka, India”, *Environmental Monitoring and Assessment*, vol 185, issue7, pp 5483-95, 2013. **Impact Factor: 1.68. ISSN: 0167-6369.**
2. S. Sinosh, J. Nisha , B. Navya , and **N. Rajeswari**, “Exploring insights for virulent gene inhibition of multidrug resistant Salmonella typhi, Vibrio cholerae, and Staphylococcus aureus

by potential phytoligands via in silico screening”, **Journal of Biomolecular Structure & Dynamics**, vol 32, issue 9, pp 1379-1395, 2013. **Impact Factor: 2.98. ISSN: 0739-1102.**

3. A. Madhuri, and N. **Rajeswari Narayanappa**, “Role of notch signaling pathway in cancer and its association with DNA methylation” **Journal of Genetics**, vol 92, issue 3, pp 667-75, 2013. **Impact factor 0.88. ISSN: 0022-1333.**

2014

1. S. Sinosh, N.S. Narayan, T.S. Aggimath, S. Nagaraj, M.S. Reddy, and N. Rajeswari, “Molecular modeling on streptolysin-O of multidrug resistant *Streptococcus pyogenes* and computer aided screening and in vitro assay for novel herbal inhibitors” **Curr Comput Aided Drug Des**, vol 10, issue 1, pp 59-74, 2014. **Impact Factor: 1.942; ISSN 1573-4099.**
2. A. Madhuri and N. **Rajeswari**, “Selection of suitable housekeeping genes for gene expression analysis in glioma using quantitative real-time PCR. **Molecular Cytogenetics** vol, 7(Suppl 1), pp 18, 2014. **Impact Factor: 2.14. ISSN: 2151-1942.**
3. **N. Rajeswari**, M.G.S. MGS. Expression of notch signaling pathway genes in human astrocytic gliomas of different WHO grades. **J Cancer Sci Ther** 2014; **6(9):P106. Impact Factor: 4.203. ISSN: 2151-1942.**

2015

1. A. Madhuri, and N. **Rajeswari**, “Validation of Housekeeping Genes for Gene Expression Analysis in Glioblastoma Using Quantitative Real-Time Polymerase Chain Reaction” **Brain Tumor Research and Treatment**”, vol 3, pp 24-29, 2015. **Impact Factor: None; ISSN: 2288-2405.**
2. S. Sinosh, M.A. Arpitha, J.G. Nisha, P. Akshatha, S. Ballari, S. Narasimha, S. Kiran, and N. Rajeswari, “Environmental monitoring of bacterial contamination and antibiotic resistance patterns of the fecal coliforms isolated from Cauvery River, a major drinking water source in Karnataka, India”, **Environ Monit Assess**, vol 187, issue 5, 1-13, 2015. **Impact Factor: 1.68. ISSN: 0167-6369.**
3. S. Sinosh, B. Archana, S. Saumya, B. Sumangala, K. Shruthi, and N. Rajeswari, “Secondary metabolites extracted from marine sponge associated *Comamonas testosteroni* and *Citrobacter freundii* as potential antimicrobials against MDR pathogens and hypothetical leads for VP40 matrix protein of Ebola virus: an *in vitro* and *in silico* investigation”, **J Biomol Struct Dyn**, Vol 18, pp 1-19, 2015. **Impact Factor: 2.919**

4. A. Madhuri, and **N. Rajeswari**, “Notch signalling in cancer”, In: eLS. John Wiley & Sons Ltd, Chichester. <http://www.els.net> (Invited Article), 2015.

2016

1. **N. Rajeswari**, R. Priti, A. Madhuri, and A.k. Chand, “Aberrant expression of Notch1, HES1, and DTX1 genes in glioblastoma formalin-fixed paraffin-embedded tissues”, *Tumor Biology*, vol 37, issue 5, pp 6935-6942, 2016. **Impact Factor: 2.926**

2017

1. S. Skariyachan, S. Garka, S. Puttaswamy, S. Shanbhogue, R. Devaraju, **R. Narayanappa**, “Environmental monitoring and assessment of antibacterial metabolite producing actinobacteria screened from marine sediments in south coastal regions of Karnataka, India” *Environ Monit Assess.* vol. 189: pp. 283. doi: 10.1007/s10661-017-5999-y, 2017, **Impact Factor: 1.68**

Title of abstracts accepted and presented in professional meetings:

2016

- **Invited Talk: Rajeswari N.** “FFPE based Assay Development for Disease Identification and diagnosis” SelectBio Advanced Diagnostics 2016” **held on** May 26-27, 2016 **at Sheraton Grand Bangalore Hotel at Brigade Gateway, Bengaluru, India.**
- **41st Indian Society of Human Genetics Annual Meeting & Conference” held at Chennai 3rd-5th March, 2016**

2015

- Aithal MGS, **Rajeswari N.** Analysis of gene expression and DNA methylation profiles of Notch signaling pathway genes in human glioblastoma. **34th Annual Convocation of Indian Association for Cancer Research. Cancer Research: From Bench to the Bedside** 19th - 21st February, 2015, Jaipur, India.
- Rajeswari N, Aithal MGS. “Analysis of gene expression and DNA methylation profiles of Notch signaling pathway genes in human glioblastoma”. at **EMBL Conference “Cancer Genomics” to be held at Heidelberg, Germany** from November 1st - 4th 2015.

2014

- Madhuri Aithal and **Rajeswari Narayanappa** (2014). Expression of Notch signaling pathway genes in Human astrocytic gliomas of different WHO grades. **Global cancer conference & Medicare Summit 2014-Recent Advances in Cancer Diagnosis and Therapy by Omics Group in Hyderabad.** 15-17 Sept, 2014.
- Apoorva Prasanna, Sirisha PM, Jyothsna S, Savitri SN, Sinosh Skariyachan, **Rajeswari Narayanappa** (2014). Prioritizing the Biopreservation Efficiency of *Lactobacillus* sps. over Chemical Preservatives and Study of their Inhibitory Potential Against Food-borne

Pathogens, **National Conference on Recent Advances, Carrier Prospects & Entrepreneurial Opportunities in Bioengineering and Biotechnology, 24-28 March 2014, Sir MVIT, Bangalore, Sponsored by AICTE, New Delhi.**

- Sinosh Skariyachan, Kiran Vasist, **Rajeswari Narayanappa** (2014). Prevalence of Multidrug Resistant Bacteria in River Cauvery and Computational Virtual Screening for Natural Inhibitors against MDR Genes. **Two Day Seminar cum workshop on Computational Biology Applications. Sponsored by DBT, Jointly Organized by Maharani Lakshmi Ammanni College for Women, Bangalore and Forum for Excellence in Education, Bangalore. February 14 & 15, 2014.**

2013

- Sinosh Skariyachan, Kiran S, **Rajeswari Narayanappa** (2013). Selection of Potential Inhibitors against Multidrug Resistant Pathogens By Structure Based Virtual Screening, **38 the Annual Conference of Environmental Mutagen Society of India (EMSI), National Conference on "Current Perspectives on Environmental Mutagenesis and Human health" Radiation Biology & Health Sciences Division, BARC, Trombay, Mumbai, 26-30 January 2013 (Awarded the Best Poster Award).**
- Nisha GJ, Sinosh Skariyachan, Narasimha Sharma, Arpitha BM, Navya CP, Reshma Rao, Priyanka L, Kiran S, **Rajeswari Narayanappa** (2013). Structure Based Rational Design of Novel Herbal Inhibitors Towards Multidrug Resistant Pathogenic Bacteria Present in River Cauvery, Biotech for a Better Tomorrow". **13th Bangalore India Bio: International conference cum Trade show: Organized by Vision Group on Biotechnology, Govt. of Karnataka, February 4-6, 2013. (Awarded Special Recognition Award).**
- Reshma Rao, Sinosh Skariyachan, Arpitha BM, Narasimha Sharma, Shruthi Rao, Shraddha Karanth, Nisha GJ, Navya CP, Priyanka L, Sagar Goyal, Akshatha Prasanna, Ballari Sen, Lamiya Ali, Kiran S, **Rajeswari Narayanappa** (2013). Cauvery River Has Become Cesspool of Multidrug Resistant Pathogenic Coli forms: A Major Health Concern in Karnataka State. Biotech for a Better Tomorrow". **13th Bangalore India Bio: International conference cum Trade show: Organized by Vision Group on Biotechnology, Govt of Karnataka, February 4-6, 2013.**
- Sinosh Skariyachan, Kiran S Vasist, **Rajeswari Narayanappa** (2013). Prevalence of Multidrug Resistant Bacteria in River Cauvery and Computational Virtual Screening for Natural Inhibitors against MDR Genes. 54th Annual Conference of Association of Microbiologists of India (AMI-2013). Platinum Jubilee Celebrations for Association of Microbiologists of India (AMI) & International Symposium on 'Frontier Discoveries and innovations in Microbiology and its Interdisciplinary relevance' (FDMIR-2013), November 17-20, 2013, Maharshi Dayanand University Rohtak, Haryana, INDIA.

2012

- Sinosh Skariyachan, Kiran S, **Rajeswari Narayanappa** (2012). A study on the prevalence of multidrug resistant pathogens in River Cauvery: a major health concern in Karnataka, South India. **53rd Annual Conference of Association of Microbiologists of India (AMI), International Conference on "Microbial World: Recent Innovations**

and Future Trends” November 22-25, 2012, KIIT University, Bhubaneswar, Odisha, India.

- Akshatha Prasanna, Ballari Sen, Sinosh Skariyachan, Kiran S , **Rajeswari Narayanappa**, Jagannatha Rao GS (2012). Computer Aided Virtual Screening and in vitro Evaluation of Herbal Therapeutics against Streptococcal Infections. **UGC and DBT sponsored National conference on “Computational Biology, Pharmaceutical & life Sciences**, 23 – 24 November, Maharani Lakshmi Ammanni College for Women, Bangalore. (**Awarded Second Prize in Poster Presentation**)
- Naik Soumyalaxmi Narayan, Monika S, Sushmitha N, Tejaswini S, Sinosh Skariyachan, Kiran S, Rajeswari Narayanappa, **Jagannatha Rao GS** (2012). Structure Based Virtual Screening of Natural Therapeutics against Streptococci Mediated Outbreaks and Inhibition of Their Virulence Potential. 5th Annual KSTA Conference-2012, State Level conference ob “Science and Technology for Societal Transformation” Jointly organized by Karnataka Science and Technology Academy and Dayananda Sagar Institutions, 19-20 December 2012.

2011

- Ambur S, D’ Souza GD, **Narayanappa R**, Neogi U and Shet A. Associations between HPV and bronchiogenic carcinoma. **2nd International Conference: Frontiers in Carcinogenesis and cancer prevention scientific advances and public health initiatives**. Feb 16-18, 2011, Bangalore, India.
- Naryanappa R. Genotoxic effect of cancer patient’s serum and plasma on normal blood leucocytes evaluated by Comet assay. **5th International congress of chemistry and environment**. 27th -29th May, 2011, **Malaysia**.

2009

- 13th ADNAT Convention. International Symposium on Epigenetic Modifications of Genome: Mechanisms and Implications. Feb 23-24, 2009, CCMB, Hyderabad, India.

2008

- International Conference on Genetic and Molecular Diagnosis in Modern Medicine. Jan 7-9, 2008, Kamineni Hospitals Pvt. Ltd, Hyderabad, India.
- International Symposium on "Model Organisms and Stem Cells in Development, Regeneration and Disease". Feb 23-25, 2008, NCBS, Bangalore, India.
- 6th Conference on Evidence Based Management of Cancers in India. Feb 29-Mar 2, 2008, Tata Memorial Hospital, Mumbai, India
- Workshop at University of Windsor for Indo-Canadian Shastri’s Foundation fellowship. Aug 2008, University of Windsor, Canada.

2004

- Khawla S. Al-Kuraya, **Rajeswari Narayanappa**, Fouad Al-Dayel, Hassan El-Solh, Adnan Ezzat, Hoda Ismail, Asim Belgaumi, Valerie Atizado, Kishor Bhatia, Guido Sauter, and Ronald Simon. **Epstein - Barr virus Infection Is Not the Sole Cause of High Prevalence for Hodgkin's Lymphoma in Saudi Arabia**. Blood (ASH Annual Meeting Abstracts), Nov 2004; 104: 3120.
- Al-Kuraya, Khawla S., Siraj, Abdul Khalid, **Narayanappa, Rajeswari**, Al-Dayel, Fouad, Ezzat, Adnan, Al-Jommah, Naif, Sauter, Guido, Simon, Ronald. **Prognostic Molecular Features in Diffuse Large B-Cell Lymphoma from Saudi Arabia**. Blood (ASH Annual Meeting Abstracts) Nov 2004; 104: 4609.

2000

- **N Rajeswari**, Arun Kumar and YR Ahuja. Genotoxic study of breast cancer patient's serum and plasma on normal individual's leucocytes. *50th Annual Meeting of the American Society of Human Genetics. Pennsylvania October 3-7, 2000.*

1998

- **N Rajeswari**, SN Jain, A Khar and YR Ahuja. Animal model to biomonitor individual susceptibility to cancer using comet assay. *4th International Symposium on Genetics, Health and Disease. Guru Nanak Dev Univ, Amritsar, India, 1998.*

1995

- YR Ahuja, **N Rajeswari**, G Anuradha and M Jaiswal. Biomonitoring individual risk of cancer in relatives of breast cancer patient by comet assay. *2nd International conference on Environmental Mutagens in Human populations. Prague Czech, Republic (1995).*
- **N Rajeswari**, G Anuradha, M Jaiswal and YR Ahuja. Heterogeneity of cancer risk in the first degree relatives of breast cancer patients- Evaluated by comet assay. *45th Annual Meeting of the American Society of Human Genetics. Minneapolis USA (1995). (Could not attend).*

1994

- **N Rajeswari**, G Anuradha, M Jaiswal and YR Ahuja. A study of DNA damage and repair in normal and breast cancer individuals by comet assay. *XI Annual Conference of Environmental Mutagens Society of India (EMSI). Hyderabad, India (1994).*
- G Anuradha, **N Rajeswari**, M Jaiswal, KN Raju, SN Jain and YR Ahuja. DNA Damage and repair study in patients with cervical dysphasia. A new approach by SCGE. *XI*

Annual Conference of Environmental Mutagen Society of India. Hyderabad, India (1994).

1993

- **N Rajeswari**, G Anuradha, M Jaiswal and Y R Ahuja. In vitro genotoxicity of MNNG in human lymphocytes using SCGE. *XVI All India Cell Biology Conference. Banaras Hindu Univ., India (1993).*
- M Jaiswal, G Anuradha, **N Rajeswari** and Y R Ahuja. In vitro genotoxicity of crystal violet in human lymphocytes using SCGE. *International Symposium on Environmental Mutagens and Human Health (EMSI). Madras, India (1993).*
- YR Ahuja, **N Rajeswari**, G Anuradha and M Jaiswal. Molecular mechanisms in individual risk of cancer. *The 2nd International Symposium of Human Genetics, Health and Disease, Amritsar, India (1993).*
- M Jaiswal, **N Rajeswari**, G Anuradha, KN Raju, SN Jain and YR Ahuja. Quantitation of DNA damage in the cervical epithelial cells in the patients with cervical dysphasia and carcinoma of cervix by SCGE technique. *XIII Annual Conference of India Association for Cancer Research. Hyderabad, India (1994).*
- G Anuradha, M Jaiswal, **N Rajeswari**, KN Raju, SN Jain and YR Ahuja. Comet assay to quantitate DNA damage and repair in leukocytes of precancerous and cancerous stages of the cervix. *XIII Annual conference of Indian Association of Cancer Research. Hyderabad India (1994).*
- YR Ahuja, G Anuradha, **N Rajeswari** and M Jaiswal. Single cell gel electrophoresis assay (comet assay), Its principle and utility. *National Symposium on "Genes and Human Environment". Hyderabad, India (1994).*
- G Anuradha, M Jaiswal, **N Rajeswari** and YR Ahuja. A study of DNA damage and repair in cervical epithelial cells and leukocytes of patients with precancerous and cancerous lesions of the cervix by comet assay. *Annual meeting of International Association of Cancer Registries. Bangalore, India (1994).*
- **N. Rajeswari**. Biomonitoring individual risk in the female first degree relatives of breast cancer patients. *Indian Society of Human Genetics. Hyderabad, India (1994).*
- YR Ahuja, G Anuradha, M Jaiswal and **N Rajeswari**. Biomonitoring of individual susceptibility to cervical cancer among patients with precancerous lesions using comet assay. *26th Annual Meeting of Environmental Mutagen Society. St. Louis, Missouri USA (1995).*

AWARDS & HONOURS:

2016:

- **Star Achiever Award winner** in honor contribution for exemplified excellence in academics, and led from the front to show the way to the young, bright minds of the future at the *Red Carpet – Your Step into the Future* on 21st September, 2016 in Bangalore conferred by Accenture India.

2015:

- **Awarded Travel grant from DST (ITS/4470/2015-16)** to present paper entitled. **“Analysis of gene expression and DNA methylation profiles of Notch signaling pathway genes in human glioblastoma”**. at EMBL Conference **“Cancer Genomics”** to be held at Heidelberg, Germany from November 1st - 4th 2015.

2000:

- **Awarded Travel grant from DST (Ref No SR/PF/674- B/2000) and COSTED to present a paper entitled “Genotoxic study of breast cancer patient’s serum and plasma on normal individual’s leucocytes” at 50th Annual Meeting of the American Society of Human Genetics. Pennsylvania October 3-7, 2000.**

1998-2001:

- Council of Scientific & Industrial Research, India - **Research Associate**

1994-1997:

- Council of Scientific & Industrial Research, India - **Senior Research Fellowship.**

1995:

- **Awarded Travel grant from CSIR to attend 45th Annual Meeting of the American Society of Human Genetics. Minneapolis, MN October 24-28, 1995.**

1994:

- **Young Scientist Award** Conferred by Indian Society of Human Genetics.

1993-1994:

- Lady Tata Memorial Trust, India - **JRF Fellowship.**