

RESOURCE PERSONS:

Dr. Jagadeesh Gopalan
Chairman, Centre of Excellence and Professor,
Dept. of Aerospace Engg., IISc, Bengaluru.

Dr. Kshitish Acharya
Faculty Scientist, IBAB, Bengaluru

Dr. Prabhakar B. T.

Professor, Molecular Biomedicine Lab, Sahyadri
Science College, Shivamogga.

Dr. Anit Singh

Assoc. Professor, Dept. of Micro Biology and Cell
Biology, Centre for Infectious Disease and
Research, IISc, Bengaluru.

Dr. S. J. Patil

Consultant Clinical Genetics
Narayana Hrudayalaya Hospital, Bengaluru.

Prof. Ajith P. V.

Indian Institute of Science and Education and
Research, Thiruvananthapuram.

Prof. G. Narayan Murthy

Principal, National College of Pharmacy,
Shivamogga.

Dr. Ganga Prasad S.

Professor, Dept. of Genetics & Plants Breeding,
AG College, Shivamogga.

Dr. S. Shishupal

Professor, Dept. Of Microbiology, Davangere
University, Shivagangotri, Davangere.

Dr. Vidya Niranjana

Professor, Dept. of Biotechnology,
RVCE, Bengaluru.

Dr. Amrutesh

Professor, Principal, Investigator (DBT)
Applied Plant Pathology Laboratory
Department of Studies in Botany,
Mysore University, Mysuru.

Chief Patrons

Sri A S Vishwanatha, President, NES

Sri T R Ashwathnarayana Setty, Vice President, NES

Sri S N Nagaraja, Secretary, NES

Sri Amarendra Kireeti, Joint Secretary, NES

Sri C R Nagaraj, Treasurer, NES

Patrons

Dr. P. Manjunatha, Incharge Principal, JNCE.

Dr. M. Rajath Hegde, Dean Infrastructure, JNCE.

Organizing Chair

Dr. Poornima K.M., HOD, Dept. of CSE, JNCE

Coordinator

Dr. Nirmala Shivanand, Professor, Dept. of CS&E, JNCE

Co-Coordinator

Dr. Shivaraj Gowda, Associate Prof.,

Dept. of Biochemistry, Subbiah Institute of Medical Science,
Shivamogga

Organizing Committee

All Teaching and Non-Teaching staff of Computer
Science and Engineering Department, JNCE.

Address for Communication:

Dr. Nirmala Shivanand,
Professor, Dept. of CSE, JNCE,
Shivamogga. Ph: 9448977026

Email: nirmala_gse@jnnc.ac.in

Dr. Shivaraj Gowda,

Associate Prof.,
Dept. of Biochemistry
Subbiah Institute of Medical Science,
Shivamogga. Ph: 9845719181
Email: drshivaraj@yahoo.com

National Education Society®



**J N N College of Engineering
Shivamogga – 577 204**

(Approved by AICTE, New Delhi, Certified by UGC 21 & 12B, Accredited by
NAAC -'B', UG Programs :CE, ME, EEE, ECE, CSE, ISE, TCE accredited by
NBA:1, 7, 2019 to 30.6.2022.

Recognized by Govt. of Karnataka and Affiliated to VTU, Belagavi)

Internal Quality Assurance Cell



AICTE
Sponsored

Online Short Term Training Programme (STTP)

On

**RESEARCH AVENUES IN
GENOMICS**

23.11.2020 to 28.11.2020

Organized by
Department of
Computer Science & Engineering

J N N College of Engineering, Shivamogga

About The JNCC

JNCC was established in the year 1980 by the National Education Society. The college is affiliated to Visvesvaraya Technological University (VTU), Belagavi and recognized by AICTE, New Delhi and Government of Karnataka. JNCC offers B.E., M.Tech., MBA and MCA programmes, as well as M.Sc. (Engg. by Research) and Ph.D. Programmes. JNCC has emerged as one of the most sought-after education destinations for technical and Management education by students and parents from all over India.

JNCC is accredited with NAAC – B grade also All 7 UG programmes are Accredited by NBA and is now declared fit to receive central assistance in terms of rules framed under section 2(f) & 12(B) of the UGC act, 1956 under the head 'Non-Government Self-Financed colleges up to Master's degree. JNCC has emerged as one of the institutions espoused to the cause of professional education, training and research. A New Initiative "Transformation for Excellence 2.0" has been launched for making JNCC as one of the top engineering, research, innovation and enterprising institutes in next few years.

About the Department

The department of Computer Science and Engineering was started in the year 1991. Since then the department has held a position of pride in JNCC. The Department offers UG - B.E., (CSE), one PG - M.Tech., (CSE) programme. The Department has a recognized research center by VTU- Belagavi. The Department is accredited by National Board of Accreditation (NBA) for the period 2019 to 2022. The department has well qualified, experienced and dedicated faculty to provide quality industry tuned education to the students. The Department Infrastructure fulfils the requirements of academics, supports research and learning skills on the latest technology in the industry. Many research related activities such as conferences, workshops and training programs are organized by the department for both faculty and students.

Department Vision

To be one of the Pre-Eminent departments to provide technical and knowledge based education, Utilizing the potential of Computer science and Engineering to meet the ever changing needs of Industry and Society.

Department Mission

Would the students to meet the emerging challenges of the industry and society, emphasizing on research and effective industry interaction for the development of state of art technical infrastructure and faculty component.

About the STTP:

This online STTP is organized for 6 days. The training programme provides a platform for research scholars and faculty of various backgrounds (Pharmacy, Medical, Computer Science and Information Science Engg. Bio Informatics) to understand the concepts of Genomics (Plant, Animal and Human), processing of Gene data. It also provides insight into research challenges in solving complex genomic problems. STTP focusses on demo sessions using tools. The STTP covers demo sessions in using tools to process NGS data. Research outcomes carried by researchers in the field of Genomics are explored.

Topics Covered:

- Genomics as an area of integrated discipline for Research and Introduction to NGS Technology
- GWAS & functional genomics for plant, animal, microbial & human genomics & a review of relevant databases & tools.
- Gene therapy.
- Current trends in clinical genomics and its application in clinical practice.
- Genes and Cancer.
- Genomic selection and use of molecular tools in Breeding Programs
- Study of COVID-19 Indian isolates gaining insights into mutation frequencies, Protein stability and prospective effect on pathogenecity.
- and many more topics related to Genomics.

IMPORTANT DATES AND TIMES:

Last Date for Registration : 19th November, 2020
Intimation of Selection : 20th November, 2020
AICTE-STTP Programme Date: 23rd -28th November 2020
Time : 10.00 AM to 1.00 PM and 2.30 PM to 4.00 PM

Registration:

No Registration FEE
Registration Link:
<https://forms.gle/4XBa26cKk4wIjBEA>

Online Google-meet link will be provided through Mail or Whatsapp.

Who can attend:

Eligibility to attend the STTP is all Department faculties (Engineering (CSE / ISE / Biotech) / Medical / Agricultural / Pharmacy) from AICTE approved Institutions / University / PG Students / Research Scholars / R&D / Industry

Guidelines:

E-Certificate will be provided.
100% Attendance is mandatory to issue E-Certificate.
Registration selection process is based on first come first serve.

Contact details:

Dr. Nirmala Shivanand,
Email: nirmala_cse@jncc.ac.in
Ph. 9448977026

Dr. Shivaraj Gowda,
Email: dshivaraj@yahoo.com
Ph. 9845719181



Please visit the webpage for STTP
Website: jncc.ac.in/genomics



National Education Society (R.)

J N N College of Engineering, Shivamogga

(Approved by AICTE, New Delhi, Certified by UGC 21 & 12B, Accredited by NAAC - 'B')

Recognized by Govt. of Karnataka and Affiliated to VTU, Belagavi

UG Programs : CE, ME, EEE, ECE, CSE, ISE, TCE accredited by NBA: 1.7.2019 to 30.6.2022)

Department of Computer Science and Engineering INVITATION

Cordially invites you for the Inauguration function of



AICTE Sponsored

Online Short Term Training Programme (STTP)

on

RESEARCH AVENUES IN GENOMICS

On Monday 23.11.2020 at 10.00 AM

Chief Guest : **Dr. Jagadeesh Gopalan**
Chairman , Centre of Excellence and
Professor, Dept. of Aerospace Engg., IISc, Bengaluru.

Guest of Honor : **Sri S N Nagaraja,**
Secretary, NES, Shimoga

Presided by : **Dr. P. Manjunatha**
Incharge Principal, JNNCE, Shimoga

Presence : **Dr. M. Rajath Hegde**
Dean Infrastructure, JNNCE, Shimoga

Dr. Poornima K.M.
HoD, Dept. of CS&E, JNNCE, Shimoga

Dr. Nirmala Shivanand
Professor, Coordinator -STTP , Dept. of CS&E,
JNNCE, Shimoga

HOD, Faculty & Staff, Dept. of CS&E

Google-meet link of Inauguration function: <https://meet.google.com/kym-zbuf-hwx>

JNN College of Engineering
Dept. of Computer Science and Engg.

AICTE STTP(online) on "Research Avenues in Genomics"

Schedule(November 23th – 28th, 2020) :

Days	10:00am-11:300am	11.30-1.00pm	2.30pm- 4:00pm
Monday 23/11/2020	KeyNote Address (Dr. Jagadeesh Gopalan, Chairman , Centre of Excellence and Professor, Dept . of Aerospace Engg., IISc, Bengaluru)	(Dr. Kshitish Acharya, Faculty Scientist, IBAB, Bengaluru) Topic: Genomics as an area of Integrated discipline for research & introduction to NGS technology.	(Dr. Kshitish Acharya Faculty Scientist , IBAB, Bengaluru) Topic: GWAS & functional genomics for plant, animal, microbial & human genomics & a review of relevant databases & tools.
Tuesday 24/11/2020	(Shodhaka Life Sciences, Bengaluru) Topic :Discussion on pipelines for NGS data analysis, and the reliability of the bioinformatic tools & databases for data analysis in the post-genomic era.		(Shodhaka Life Sciences) Reference Alignment of reads from NGS: Demonstrations.
Wednesday 25/11/2020	(Shodhaka Life Sciences) de novo assembly of reads from NGS: Demonstrations.	(Dr. Prabhakar B.T., Professor, Molecular biomedicine Lab, Sahyadri Science college Shivamogga) Topic : Genes and Cancer.	(Dr.Amit Singh, Associate Prof., Dept of micro biology and cell biology, centre for Infectious disease and research, IISc, Bengaluru) Topic:Hydrogen sulfide blocks HIV rebound by maintaining mitochondrial bioenergetics and redox homeostasis.
Thursday 26/11/2020	(Dr. S.J.Patil, Consultant Clinical Genetics, N.H. Hospital, Bengaluru) Topic: Current trends in clinical genomics and its application in clinical practice.	Prof. Ajith V.P. Indian Institute of Science and Edducation and Research, Thiruvananthapuram). Topic : Intra-specific variation in mutation rates and spectrum among S cerevisiae strains	(Dr. Vidya Niranjn, Professor, Dept. Of Biotechnology, RVCE, Bengaluru) Topic : Study of COVID-19 Indian isolates gaining insights into mutation frequencies, Protein stability and prospective effect on pathogenecity.
Friday 27/11/2020	(Dr. Ganga Prasad S., Professor, Dept. Of Genetics and Plant Breeding, AG College, Shivamogga) Topic: Genomic Selection and Use of Molecular Tools in Breeding Programs.	(Dr. S. Shishupal Professor, Dept. Of Microbiology, Davangere University, Shivangotri, Davangere) Topic :Significance of mass spectrometry in peptidomics.	(Prof. G.Narayan Murthy, Principal, National college of Pharmacy, Shivamogga) Topic : Gene therapy
Saturday 28/11/2020	(Dr. Amrutesh K. N. Professor, Principal Investigator (DBT) Applied Plant Pathology Laboratory, Department of Studies in Botany , Mysore University,Mysuru) Topic:Engineering Driven – Synthetic Biology for Novel applications in the Era of Genomics	QUIZ (45 mins) followed by Valedictory.	.



National Education Society(R.)

**J N N College Of Engineering,
Shivamogga**

(Approved by AICTE, New Delhi, Certified by UGC 2f & 12B, Accredited by NAAC -'B', UG
programs:CE,ME,EEE,ECE,CSE,ISE,TCE accredited by NBA:1.7.2019 to 30.6.2022, Recognized by
Govt. of Karnataka and Affiliated to VTU, Belagavi)



Department of Computer Science and Engineering

**AICTE Sponsored Online Short Term Training Programme (STTP) on
RESEARCH AVENUES IN GENOMICS**

Certificate

*This is to certify that Dr. Dnyanesh Amle, AIIMSc., Nagpur
has successfully completed one week **AICTE** Sponsored Online Short Term Training
Programme (STTP) on **RESEARCH AVENUES IN GENOMICS** organized by the
Dept. of CS&E, JNNCE, Shivamogga. During 23.11.2020 to 28.11.2020.*

Nirmala

Dr. Nirmala Shivanand
Professor, Coordinator -STTP . .
Dept. of CS&E, JNNCE

Poornima K.M.

Dr. Poornima K.M.
HoD. Dept. of CS&E, JNNCE.

Dr. P. Manjunatha

Dr. P. Manjunatha
Incharge Principal, JNNCE

Date :30/11/2020

Proceedings of the AICTE STTP on "Research avenues in Genomics "

The AICTE Sponsored STTP on "Research Avenues in Genomics was organized by Department of Computer Science and Engineering, JNN College of Engineering Shivamogga, Karnataka state, from 23/11/2020 to 28/11/2020. The participants for this STTP were faculty, PG students, Research Scholars from Engineering /Medical/Agriculture/Pharmacy/Science college/University .Total 70 participants attended the STTP and got benefitted.

On 23/11/2020, The STTP was inaugurated by the Chief Guest Dr. Jagadeesh Gopalan, Chairman COE & Professor. Department of Aerospace Engg., IISc, Bengaluru and Guest of Honor Sri S.N. Nagaraja, Secretary ,National Education Society, Shivamogga. Inauguration is followed by the keynote speech by Dr. Jagadeesh Gopalan on the Topic "Shock Waves and its Applications ". From 23/11/2020 to 28/11/2020 speakers delivered talk on many interesting topics related to Genomics.


On 23/11/2020, Speaker Dr. Kshitish K. Acharya, faculty Scientist, IBAB, Bengaluru explored on the central dogma of molecular biology, Next Generation sequencing (NGS) technology, GWAS, Functional Genomics for plant, animal & human. He also gave insight on databases and tools available for processing Genomic data. On 24/11/2020 and 25/11/2020 Mr. Akhilesh, Research Associate, Shodhaka Life sciences, Bengaluru & Sravanthi, Research Associate, Shodhaka Life sciences, Bengaluru delivered talks on NGS data analysis. Further, they gave demonstrations on Reference alignment READS from NGS, DeNovo assembly of READS from NGS using various existing tools. On 25/11/2020, Dr. Prabhakar B.T. , Professor, Molecular biomedicine Lab, Sahyadri science college, Shivamogga, gave an expert talk on Genes and Cancer. He explored on research in cancer genomic area. It was very informative session. On the same day in afternoon session, Prof. Virendra Kumar pal, Research Assistant, Department of Microbiology and cell biology, centre for infectious diseases and research ,IISc., Bengaluru shared his knowledge on Hydrogen sulfide blocks HIV rebound by maintaining mitochondrial bioenergetics and redox homeostasis and their research findings on this topic. on 26/11/2020 Dr. S.J.patil, Consultant Clinical Genomics, N.H. Hospital, Bengaluru gave an expert talk on current trends in clinical genomics. He showed some real cases of enzyme deficiency & treatment and recovery of patient after treatment. Prof. Ajit V.P. shared his expertise on Intra-specific variation in mutation rates & spectrum among S.Cerevisiae strain and his research findings in this field. Dr. Vidya Niranjana, Professor, Biotechnology department, R.V.C.E. , Bengaluru shared her expertise on study of COVID-19 Indian isolates gaining insights into mutation frequencies, protein stability & prospective effect on pathogeneticity.


On 27/11/2020, Dr. Gangaprasad, Professor, Department of Genetics & Plant breeding, A.G. College , Shivamogga , delivered an expert talk on conventional and non-conventional methods of plant breeding, tools for gene selection, research challenges in plant breeding programs. On the same day Dr. Shishupal, Professor, Department of Microbiology, Davanagere University, Davangere gave an expert talk on Peptidomics. He shared his knowledge on Mass Spectrometry and its significance in Peptidomics. Dr. Narayan Murthy, Principal, National college of Pharmacy, Shivamogga shared his in-depth knowledge on Gene therapy, current research in this field. On 28/11/2020, Dr. Amrutesh K.N.,

Professor, department of Studies in Botany, University of Mysore, Mysuru, delivered an informative talk on Engineering driven-Synthetic biology for novel applications in the era of Genomics. Overall all the sessions were informative and participants interacted with the resource persons enthusiastically.

Quiz was conducted for participants in next session on 28/11/2020. Quiz answers were evaluated by expert team. After quiz session the valedictory function of the STTP is performed and feedback was collected from the participants.

Date : 30/11/2020


PROFESSOR & HEAD
Dept. of Computer Science & Engg.
J.N.N. College of Engineering
SHIVAMOGGA - 577 204.


Coordinator of AICTE STTP-Genomics
(Dr. Nirmala Shivanand)
Professor, CS&E Department
JNN College of Engg.,
Shivamogga.

All India Council for Technical Education

(A Statutory body under Ministry of HRD, Govt. of India)

Nelson Mandela Marg, Vasant Kunj, New Delhi-110070 Website: www.aicte-india.org



68

STTP- Sanction Letter

Ref. No. 34-65/237/RIFD/STTP/Policy-1/2018-19

Date 10 JAN 2020

To

The Drawing and Disbursing Officer,
All India Council for Technical Education,
Nelson Mandela Marg,
Vasant Kunj, New Delhi - 110070

Sub: Release of grant for conduct of Short Term Training Programme (STTP) under AQIS 2018-19 during the financial year 2019-20- reg.

Sir,

This is to convey the sanction of the Council for payment of **Rs. 265000 /- (Rupees Two Lakh SixtyFive Thousand Only)** for conduct of Short Term Training Program as per details given below:-

1.	Name and address of the beneficiary University / Institution	JAWAHARLAL NEHRU NATIONAL COLLEGE OF ENGINEERING , P.B. NO. 128, NAVULE, SHIMOGA SHIMOGA-577204 Karnataka
2.	Permanent ID of Institute	1-8198061
3.	Institute type	Unaided - Private
4.	Name of Coordinator	Dr. NIRMALA
5.	Amount sanctioned	Rs. 265000/-
6.	Amount to be released	Rs. 265000/- Full & final payment
7.	Head of account	601.15(a) Gen. Short Term Training Programme (Plan)
8.	The authorized officer in whose favour Cheque/ Demand Draft/ RTGS is to be made	REGISTRAR / DIRECTOR / PRINCIPAL.
9.	Title of the programme	Research Avenues in Genomics

1. The amount of the grant shall be drawn by the Drawing and Disbursing Officer, All India Council for Technical Education on the grant-in-aid bill and shall be disbursed to and credited to the Registrar/ Director/Principal of the institute through RTGS.
2. This grant-in-aid is being released in conformity with the terms & conditions as well as norms of the scheme as already communicated, and also being communicated in this letter.