

## MEMBERS

President:

Dr. S. Hemalatha

**Co-ordinators** 

Dr. P. Ashok Kumar

Dr. Neesar Ahmed

Dr. Soumen Bera

## VISION

Cancer Control among community through education and research.

## **MISSION**

- To disseminate cancer awareness through organised seminar, workshops and conferences.
- To encourage cancer based research among the students and research scholars.

# CANCER

K.NASHIHA BEGUM

B.Tech Biotechnology, School of Life Sciences, B.S. Abdur Rahman Crescent Institute of Science and Technology, Vandalur, Chennai-600048.

# FACT 1 - Cancer is a group of diseases.

Cancer is a group of diseases characterised by uncontrolled growth and spread of abnormal cells. There are over 100 types of cancer and any part of the body can be affected.

# FACT 2 - About 16% of people die from cancer.

In 2015, 8.8 million people died from cancer-nearly 1 in 6 gobal death. In 2020, more than 1.8 million new cancer cases are suspected to be diagnosed.

# FACT 3 - Cancer Affects everyone.

About 70% of death from cancer occur in low & middle income countries. The higest cancer rate found in Australia. The age rate was at least 300 per 1,00,000 in 11 countries (Australia, New zealand, hungary, Belgium, Canada, Denmark, Ireland, The US, Netherlands, Norway & South korea).

# FACT 4 - Most deadly top 5 types of cancer killing Men.

Worldwide, In 2019, most Deadly top 5 cancer for Men is lung cancer, prostate cancer, Colon cancer, Pancreas & Liver cancer.



## FACT 5 - Most deadly top 5 types of cancer killing Women.

Worldwide, In 2019, most Deadly top 5 cancer for Women is lung cancer, Breast cancer, Colon cancer, Pancreas & Ovary cancer.

# FACT 6 - Avoid using Tobacco can help to prevent cancer.

Tobacco use is the largest preventable cause of cancer. Smoking tobacco accounts 30% of all cancer death & 80% of all lung Cancer deaths. Encourage your loved ones to quit Smoking.



In 2012, cancer-causing Infections is more responsible for 2% of new diagonised cancer in low income countries. Infective agents such as Human Papilloma virus(HPV) & Hepatitis B virus(HBV) can cause cervical& liver cancer. Vaccination against this 2 virus could prevent 1.1 millions of cancer cause each year.

# FACT 8 - Good food and Lifestyle can reduce cancer.

30-50% of cancer cases are preventable. The following behaviour can reduce risk of cancer; Maintain a healthy body, doing excercise, eating high amount of vegetable and fruits & Avoiding Smoke and alcohol.

# FACT 9 - About 1% of new cancer diagonsis found in childhood.

In 2018, about 15,590 childrens and teen(0-19 years) were diagonised with cancer. Although uncommon, cancer is the leading cause of death by disease in children.

# FACT 9 - About 1% of new cancer diagonsis found in childhood.

In 2017, compare to 90% of high income countries, the low income countries has less than 30% of reported treatment services were available. Approximately 70% of deaths from cancer occur in low & middle income countries.



# Webinar on "Cancer, Causes and Prevention"

Organized by

## B.S. Abdur Rahman Crescent Institute of Science & Technology

### **School of Life Sciences**





on 31<sup>st</sup> March 2021

Convenor
Dr. S. Hemalatha
Professor & Head
School of Life Sciences

Coordinators

Dr. Md. Khurshid Alam Khan

Associate Professor School of Life Sciences

## **Brochure**

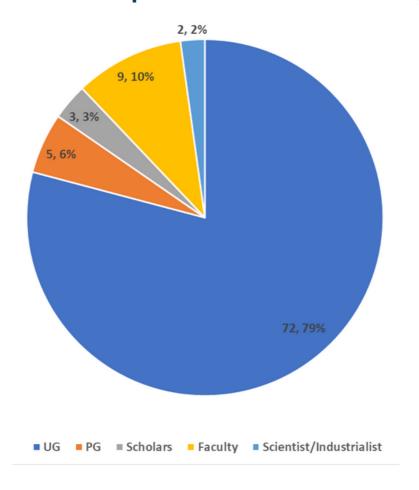


Nature of Participants: **Undergraduate and Post-graduate students, Research Scholars, Professors, Scientist** 

Total number of participants: 91

Registration Fee: Free

### **Participants Distribution**



Registration link: https://forms.gle/fTPuJp9Rh3cvCqjN6

Session: Cancer- Causes and Prevention

Speaker: Asrar Alam, Ph.D., Dr. B. R. Ambedkar Institute, Rotary Cancer Hospital, All

India Institute of Medical Sciences, Ansari Nagar, New Delhi, India





## 2nd Virtual Annual International Conference on Naturopathy, Nanotechnology, Nutraceuticals and Immunotherapy in Cancer Research - 2021

Organized by

## School of Life Sciences &

Association of Cancer Education and Research (ACER)

**B.S. Abdur Rahman Crescent Institute of Science & Technology** 

in association with

W Purdue University, USA

Sponsored by

Tamil Nadu State Council for Science & Technology (TNSCST)

&

Microbiologist Society, India (MSI)













on

 $11^{th} - 12^{th}$  June 2021

#### Organizing Secretory

Dr. S. Hemalatha Professor & Head School of Life Sciences Dr. Raji Sundararajan Professor.

Purdue University, USA

Dr. Ignacio Camarillo

Associate Professor, Purdue University, USA

#### Coordinators

Dr. P. Ashok Kumar (Assoc. Prof) Dr. Soumen Bera (Asst. Prof) Dr. Neesar Ahmed (Asst. Prof)



## >>> BROCHURE



#### About Conference

ICNNC - 21 is an interdisciplinary event that invites participation institutes, industries and diagnostic centers to share their research experience and exchange ideas on various aspects of Naturopathy, Nanotochnology, Nutracouticals and Immunotherapy in cancer research (CNPC-21 also provides an opportunity to communicate with leading scientists, researchers, academicians and students from all around the world.



Contact us

+918248145481; +917418362096



#### About ACER

Association of Cancer Education and Research (ACER) is started with the aim to control the spread of cancer among the community through education and research. By disseminating cancer awareness through seminars, workshops and conferences. ACER also aims to encourage cancer based research among the students and research scholars.

#### About B.S. Abdur Rahman Crescent Institute of Science and Technology, India

B.S. Abdur Rahman Crescent Institute of Science and Technology is accredited with "A+" grade by NAAC, ranked 3rd among the Engineering Institutions in Tamilnadu in teaching, learning and resources by NIRF, MHRD. It has track record of 37 years of Excellence in offering Engineering, Science and Management programmes. Being one of the leading engineering institutions in India, it focuses on academic excellence, innovative research and entrepreneurship.





School of Life Sciences is awarded as THE BEST POTENTIAL SCHOOL in BSACIST, excelling in teaching, research and training programmes across the interdisciplinary areas of life sciences by nurturing student's bicenterpreneurship. The school offers Undergraduate, Postgraduate and Doctoral programmes in Life Sciences.

Prof. A. Peer Mohamed, VC, BSACIST Prof. A. Azard Registrar, RSACIST

- Dr. Ignacio Camerillo, Purdue University, USA
- Dr. Raji Sundararajan, Purdue University, USA
- Dr. Allen Garner, Purdue University, USA · Dr. Elisebatta Seini, Insubria University, Italy

Theme of the Conference

Natural Products and Alternative Medicine
Drug Repurposing
Nanotechnology and Nanomedicine
Cancer Immunology

Dr. A Suresh kumar, CLRI, India

International Conference



#### Drug Resistance Regenerative Medicine

- Accepted papers will be published in Applied Biochemistry and Biotechnology Journal Special Issue(Scopus Indexed; Impact Factor: 2.27).

  Accepted review articles will be published in special section on "Biotechnology and Nutraceuticals" in Current Pharmacology Reports (Scopus Indexed) Journal













as Bank (IOB)

U.G.&P.G. Students Rs. 100<sup>1</sup>-Research Scholars Rs. 200<sup>1</sup>-Faculties/Scientist/Others Rs. 500<sup>1</sup>-(\*Attractive Group discount of 5 members or more from the same Institute and same levels

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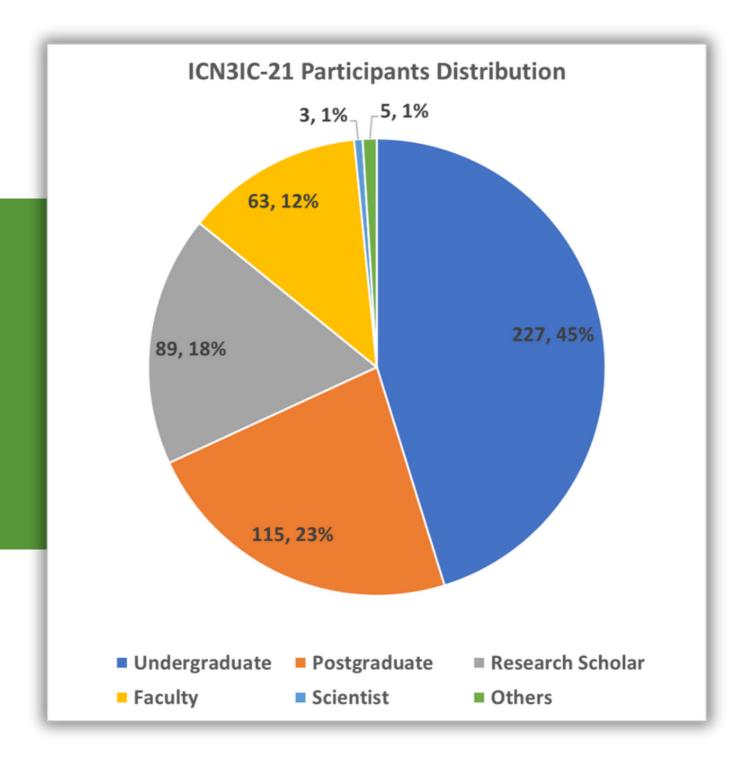
- Please use the same name and email address for Conference Registration and Abstract Submission.
- · Abstract should not exceed 250 words excluding title and authors
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- Make a 3-5 minutes video and send to us through
- workshop.sls@crascent.education.

   All the uploaded abstract will be reviewed by the
- · Upon the reviewer's decision, the selected abstract will be called
- for full paper and peer-reviewed to publish in Applied Biochemistry and Biotechnology Journal (Scopus Indexed; Impact Factor: 2.27)

# Nature of Participants: **Undergraduate and Post graduate students, Research Scholars, Professors, Scientist**

## >>> TOTAL NUMBER OF PARTICIPANTS: 502



Registration link: https://bit.ly/2RcfaqD

Abstract Submission link: https://bit.ly/3uPoyzb



### >>> DAY 1 (11.06.2021)

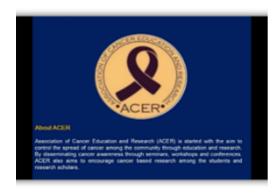
#### Session 1:

#### Inaugural address of ICN3IC-21

Speaker: Dr. S. Hemalatha, Professor & Dean, President, ACER

Video URL: <a href="https://youtu.be/X8pmObd9zws">https://youtu.be/X8pmObd9zws</a>





## About Association of Cancer Research & Education (ACER)

Speaker: Dr. Neesar Ahmed, Assistant Professor (Sel.Gr.),

School of Life Sciences

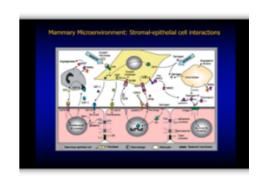
Video URL: <a href="https://youtu.be/X8pmObd9zws?t=327">https://youtu.be/X8pmObd9zws?t=327</a>

## Plenary Lecture: Mechanisms of Obesity and Leptin in Breast Cancer

Speaker: Dr. Ignacio G. Camarillo, Department of Biological

Sciences, Purdue University, USA

Video URL: <a href="https://youtu.be/ljCmT0VzT80">https://youtu.be/ljCmT0VzT80</a>





## Invited Talk 1: 3D scaffolds to mimic extra-cellular matrix: evaluation of the cell electroporation)

Speaker: Dr. Elisebatta Seini, Department of Theoretical and Applied Science, University of Insubria, Varese, Italy Video URL: <a href="https://youtu.be/chWDzrqxnF4">https://youtu.be/chWDzrqxnF4</a>

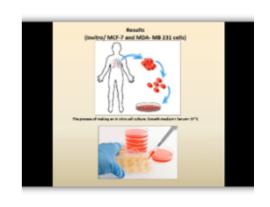
#### Session 2

## Invited Talk 2: Therapeutic aspects of FOXO signaling in breast cancer cells using natural products

Speaker: Dr. A. Suresh Kumar, Senior Scientist, Department of Biochemistry and Biotechnology, CSIR-CLRI, Adyar,

Chennai, India

Video URL: <a href="https://youtu.be/2xwdlzRNjRk">https://youtu.be/2xwdlzRNjRk</a>



#### >>> DAY 2 (12.06.2021)

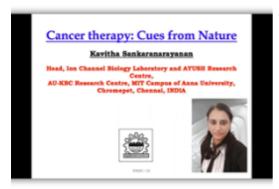
#### **Session 3**

# Invited Talk 3: Characterizing the Interactions of Electromagnetic Field Interactions with Biological Cells to Guide Medical Applications

Speaker: Dr. Allen Garner, Associate Professor, School of Nuclear Engineering, School of Electrical and Computer Engineering, Department of Agricultural and Biological Engineering, Purdue University, USA

Video URL: <a href="https://youtu.be/INZyEQaljR0">https://youtu.be/INZyEQaljR0</a>





#### **Invited Talk 4: Cancer therapy: Cues from Nature**

Speaker: Dr. Kavitha Sankaranarayanan, Head, Ion Channel Biology Laboratory and AYUSH Research Centre, AU-KBC Research Centre, MIT Campus of Anna University, Chennai, India about Cancer therapy: Cures from Nature Video URL: <a href="https://youtu.be/jTu5MW4uRjM">https://youtu.be/jTu5MW4uRjM</a>

#### **Session 4: Valedictory Session**

ICN<sup>3</sup> IC-21 Report. Speaker: Dr. Soumen Bera, Assistant Professor, School of Life Sciences

Video URL: <a href="https://youtu.be/BdXwtwSbITA">https://youtu.be/BdXwtwSbITA</a>





#### **Announcement of awards**

Speaker:Dr. C Simon Durairaj, Scientific Assistant, School of Life Sciences

Video URL: https://youtu.be/SGkXxOGBYp4

#### **Vote of Thanks**

Speaker:Dr. Ashok Kumar Pandurangan, Associate

Professor, School of Life Sciences

Video URL: <a href="https://youtu.be/PsRewUrm2E">https://youtu.be/PsRewUrm2E</a>



## Publications of SLS related to cancer

1. Ubaid. R, Mubarakali, D and S. Hemalatha\* Copper nanoparticles: easily accessible nanoweapons against the escalating antibiotic resistanceNano-Strategies for Combatting Antimicrobial Resistance and Cancer. Handbook of Research on Nano-Strategies for Combatting Antimicrobial Resistance and Cancer IGI Global, 2021. <a href="https://doi.org/10.4018/978-1-7998-5049-6.ch018">https://doi.org/10.4018/978-1-7998-5049-6.ch018</a>

- 2. Lakshya M, Ignacio G. C, Gowri Sree V, S.Hemalatha, Uma K.A Raji S. High-throughput, Label-Free Quantitative Proteomic Studies of the Anticancer effects of Electrical Pulses with Turmeric Silver Nanoparticles: an in vitro Model StudyNature Sci Rep10,7258 (2020). (Impact factor 4.379)(Scopus and web of science indexed). <a href="https://doi.org/10.1038/s41598-020-64128-8">https://doi.org/10.1038/s41598-020-64128-8</a>
- 3. L.Mittal, Ranjani.S, Shariq Ahmed.M, Jeya Shree T, Tahira A, Poompavai S, IG Camarillo, GowriSree V, Raji S and S.Hemalatha\*.Turmeric-Silver-Nanoparticles for Effective Treatment of Breast Cancer and to break CTX-M-15 mediated Antibiotic Resistance in Escherichia coli Inorganic and Nano-Metal Chemistry, 51:6,867-874, 2020. (web of science indexed) (Impact factor 1.716). https://doi.org/10.1080/24701556.2020.1812644.
- 4. M.Fazeela Mahaboob Begum & S.Hemalatha\*. Zebrafish an Emerging Biomedical Tool in Translational Research International Journal of Advance Study and Research Work (2581-5997)// Special Issue ICROIRT-2020/September 2020, 611-613.
- 5. Adil A.A.Shabnam. A, Ashok Kumar.P, S Hemalatha, Neesar A, N.Ali, A.F. AlAsmari, M.Aashique and M. Waseem\*. Emerging Role of Mitophagy in Inflammatory Diseases: Cellular and Molecular Episodes. Current Pharma, Design, 2020, 26 (4), 1-7. (Scopus and Wos indexed). (Impact factor 3.31) http://dx.doi.org/10.2174/1381612826666200107144810

## Publications of SLS related to cancer

- 6. R.Kaushik, S.Khan, M. Sharma S. Hemalatha\*, Z.Mueed and N.Poddar.Role of Cytochrome P450 in Prostrate Cancer and its Therapy. Curr, Enz, Inhi., 2020, 16, 1-11. (Scopus indexed). (Impact factor 0.5) <a href="http://dx.doi.org/10.2174/1573408016666200218122044">http://dx.doi.org/10.2174/1573408016666200218122044</a>.
- 7. SMF. Begum, S. Hemalatha\*. Phytoconstituents from Gelidiella acerosa induce apoptosis by regulating Bax, Bcl2 expression in A549 cells. Biocat. Agri. Biotech. 2020, 29, 101757 (Scopus indexed). <a href="https://doi.org/10.1016/j.bcab.2020.101757">https://doi.org/10.1016/j.bcab.2020.101757</a>.
- 8. Arpudha mary, S. Priya, Muhammed A.P. Manzoor, D. Mubarakali, S. Hemalatha\* Apoptotic-inducing factor 1 (AIF1) is critical in cembranoid mediated apoptosis to control cancer Biocat.Agri.biotech, 2019 Volume 22, 101343, ISSN 1878-8181, (Scopus indexed) (Cite score 2.9) <a href="https://doi.org/10.1016/j.bcab.2019.101343">https://doi.org/10.1016/j.bcab.2019.101343</a>
- 9. Shirin Lutfiya. A, S. Priya, Muhammed A.P. Manzoor, S. Hemalatha\* Molecular docking and interactions between vascular endothelial growth factor (VEGF) receptors and phytochemicals: Anin-silicostudy Biocat.Agri.biotech, 22, 101424, 2019, ISSN 1878-8181 2019 (Cite score 2.9) (Scopus indexed) <a href="https://doi.org/10.1016/j.bcab.2019.101424">https://doi.org/10.1016/j.bcab.2019.101424</a>.
- 10. Rubeena Dar, Parveiz Igbal, Pandurangan AK\*. Strong Association and Effect of Lifestyle and Clinicopathological Risk Factors in Colorectal Cancer during Treatment Process A Study based on Kashmiri Population. Toxicology and Environmental Health Sciences 13 (2020) 73-81. (Scopus indexed)

## Publications of SLS related to cancer

- 11. Samidurai D, Pandurangan AK, Krishnamoorthi S, Perumal MK, Nanjian R. Sinensetin 🌘 ძ isolated from Orthosiphon aristatus inhibits cell proliferation and induces apoptosis in hepatocellular carcinoma cells. Process Biochemistry, 88 (2020) 213-221. (Scopus/Wos indexed) (Impact factor 4.885)
- 12. Harini Ramesh, Radhakrishnan Narayanaswamy, Mohamed Adil A.A, Revathik, Pandurangan AK\*. Natural compounds as inhibitors of Beta catenin: An insilico study. Annals of the Romanian Society for Cell Biology, 24(1)(2020) 343 - 348.(\*Corresponding author) (Scopus indexed)
- 13. Saveed H, Mohamed Adil. AA, Pandurangan AK, Revathi. K. Vickram AS. Targeting Immunocheckpointin MohammedWaseem, The Tumor Microenvironment and Cancerimmunotherapy. Annals of the Romanian Society for Cell Biology, 24(1) (2020) 297 - 316.) (Scopus indexed)
- 14. NaziyaSayeed, Mohamed Adil AA, Pandurangan AK, Revathi K, Anil kumar B, Khan KA. Immunotherapy Methods Towards Colitis Associated Cancer - A SystematicReview. Annals of the Romanian Society for Cell Biology, 24(1) (2020) 525- 542. ) (Scopus indexed)
- ■ 15. Mohebali N, Pandurangan AK\*, Mustafa MR, Anandasadagopan SK, Alagumuthu T.Vernodalin induces apoptosis through ROS/JNK pathway activation in human colon cancer cells. Journal of Biochemical and Molecular Toxicology 34(12) (2020) e22577. (\*Corresponding author) (Scopus/Wos indexed) (Impact factor 3.568)

# PHOTO & ART CORNER



P. Megavardhini, B.Sc. Biotechnology



G. Dhanya, B.Sc. Biotechnology



G. Dhanya, B.Sc. Biotechnology

## Membership Application



## ASSOCIATION OF CANCER EDUCATION AND RESEARCH (ACER)- INDIA

#### MEMBERSHIP APPLICATION

Full Name (In BLO D.O.B & Age:	CK LETTERS):S	ex: Male/Female Na	ationality:
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Life Member			Rs.3050/-
Ordinary Member	Rs. 500/-	Rs. 50/-	Rs. 550/-
Student Member	Rs. 250/-	Rs. 50/-	Rs. 350/-
Life Member (Forei	gners)		250 USD
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