## FACULTY PROFILE

| PERSONAL PARTICULARS                                  | S   |  |  |
|---|---|--|--|
| Name  | Dr.SHAE   | BNA.A  |  |
| Department  | Biotechn  | ology  |  |
| Designation   |   | Professor  |  |
| Organization  | National College  |  |  |
| Date of Join  | 12-09-2022  |  |  |
| Core Discipline                                       | Biotechnology   |  |  |
| Specialization  | Biotechnology   |  |  |
|   | Cancer Biology  |  |  |
| Areas of Interest                                     | Immunol<br>Genetic E  | r Biology  |  |
| Address   | Darul Aman, AGRA 67C<br>Akshaya Gardens Residence<br>Association, Kurishadi,<br>Nalanchira-695015 |  |  |
| Phone Number  | 9496695<br>082  |  | Email id<br>shabna.a@ncas.edu.in<br>shabna276@gmail.com  |
|   |   |  |  |
| PROFESSIONAL QUALIF                                   | <b>ICATION</b>  | S  |  |
| PROFESSIONAL QUALIF<br>Qualification                  | ICATION:  | S<br>Specialization  | Instit<br>ution  |
|   |   |  | Instit   |
| Qualification<br>PhD<br>CSI<br>RUG<br>C               | Cai   | Specialization   | Instit<br>ution<br>Rajiv Gandhi Centre for<br>Biotechnology  |
| Qualification<br>PhD<br>CSI<br>RUG                    | Car   | Specialization<br>ncer Research  | Instit         ution         Rajiv Gandhi Centre for         Biotechnology         University of kerala         CSIR-UGC         Mount Carmel         College         (Autonomous),  |
| Qualification<br>PhD<br>CSI<br>RUG<br>C<br>NET        | Car<br>L<br>Bio<br>Zo   | Specialization<br>ncer Research<br>.ife Sciences   | Instit<br>ution<br>Rajiv Gandhi Centre for<br>Biotechnology<br>University of kerala<br>CSIR-UGC<br>Mount Carmel<br>College   |
| Qualification<br>PhD<br>CSI<br>RUG<br>C<br>NET<br>MSc | Car<br>Car<br>L<br>Bio<br>Za<br>Ch  | Specialization<br>ncer Research<br>Life Sciences<br>otechnology<br>technology,<br>oology,                        | Instit         ution         Rajiv Gandhi Centre for         Biotechnology         University of kerala         CSIR-UGC         Mount Carmel         College         (Autonomous),         Bangalore University         Mount Carmel College         (Autonomous), Bangalore  |
| Qualification PhD CSI RUG C NET MSc BSc               | Car<br>Car<br>L<br>Bio<br>Za<br>Ch  | Specialization<br>ncer Research<br>Life Sciences<br>otechnology<br>technology,<br>oology,<br>emistry<br>Years of | Instit         ution         Rajiv Gandhi Centre for         Biotechnology         University of kerala         CSIR-UGC         Mount Carmel         College         (Autonomous),         Bangalore University         Mount Carmel College         (Autonomous), Bangalore  |
| Qualification PhD CSI RUG C NET MSc BSc               | Car<br>Car<br>L<br>Bio<br>Za<br>Ch<br>ENT   | Specialization<br>ncer Research<br>.ife Sciences<br>.technology<br>.technology,<br>emistry                       | Institution         Rajiv Gandhi Centre for         Biotechnology         University of kerala         CSIR-UGC         Mount Carmel         College         (Autonomous),         Bangalore University         Mount Carmel College         (Autonomous), Bangalore University         Mount Carmel College         (Autonomous), Bangalore |

|  |                    |             | Netional Caller         |  |  |
|--|--------------------|-------------|-------------------------|--|--|
|  | 2 years (S         | 1           | National College        |  |  |
|  | 2022-until         | now)        |                         |  |  |
| PROFESSIONAL RESPONSIB   | ILITIES HELD       |             |                         |  |  |
| 1.Member, Nature Club, National  | College            |             |                         |  |  |
| 2.Co-ordinator, Centre for Life Sc   | ences, National Co | ollege      |                         |  |  |
| 3.Member, Career Guidance, Natio   | onal College       |             |                         |  |  |
| 4.Member, NAAC   |                    |             |                         |  |  |
| 5.Member, Research Committee, National College                                       |                    |             |                         |  |  |
|  |                    |             |                         |  |  |
| PROGRAMS ORGANISED   | nology organized   | 'Callory of | life' as part of Spings |  |  |
| Department of Botany and Biotechnology organized 'Gallery of life' as part of Sciago |                    |             |                         |  |  |
| National, on 11 <sup>th</sup> and 12 <sup>th</sup> March ,2                          | .024               |             |                         |  |  |
| SUBJECTS TAUGHT  |                    |             |                         |  |  |
| 1.Microbiology   |                    |             |                         |  |  |
| 2.Immunology   |                    |             |                         |  |  |
| 3. Animal Physiology   |                    |             |                         |  |  |
| 4.Animal Biotechnology<br>5.Plant Biotechnology                                      |                    |             |                         |  |  |
| 6.Genetic Engineering  |                    |             |                         |  |  |
| 7.Environmental Biotechnology  |                    |             |                         |  |  |
|  |                    |             |                         |  |  |
| <b>RESEARCH PUBLICATIONS</b>   | JOURNAL            |             |                         |  |  |
| 1. Anwar Shabna, Jay   | esh Antony, Vino   | d Vijayaku  | rup, Minakshi Saikia,   |  |  |
| Vijayasteltar BLiju, Archana P Retnakumari, Nisthul A Amrutha, Vijai V               |                    |             |                         |  |  |

- 1. Anwar Shabna, Jayesh Antony, Vinod Vijayakurup, Minakshi Saikia, Vijayasteltar BLiju, Archana P Retnakumari, Nisthul A Amrutha, Vijai V Alex, Mundanattu Swetha,Sreekumar U Aiswarya, Somaraj Jannet, Uma Subramanian Unni, Sankar Sundaram, Daisy R Sherin, Nikhil Ponnoor Anto, Smitha V Bava, Sadasivan Chittalakkottu, Sophia Ran, and Ruby John Anto, Pharmacological attenuation of melanoma by tryptanthrin pertains to the suppression of MITF-M through MEK/ERK signaling axis, Cellular and Molecular Life sciences, 2022.
- 2. Sreekumar Usha Devi Aiswarya , Gowda Vikas , Nair Hariprasad Haritha , Vijayasteltar Belsamma Liju , Anwar Shabna , Mundanattu Swetha , Tennyson Prakash Rayginia , Chenicheri Kizhakkeveettil Keerthana , Lekshmi Raghu Nath ,Mullan Vellandy Reshma , Sankar Sundaram , Nikhil Ponnoor Anto , Ravi Shankar Lankalapalli , Ruby John Anto , Smitha Vadakkeveettil Bava, Cucurbitacin B, Purified and Characterized From the Rhizome of Corallocarpus epigaeus Exhibits Anti-Melanoma PotentialCucurbitacin B, Purified and Characterized From the Rhizome of Corallocarpus epigaeus Exhibits Anti-Melanoma Potential, Frontiers in Oncology, 2022

- 3. Mundanattu Swetha, Chenicheri K Keerthana, Tennyson P Rayginia, Lekshmi R Nath, Nair Hariprasad Haritha, **Anwar Shabna**, Kalishwaralal Kalimuthu, Arun K Thangarasu, Sreekumar U Aiswarya, Somaraj Jannet, Sreekumar Pillai, Kuzhuvelil B Harikumar, Sankar Sundaram, Nikhil Ponnoor Anto, Dee H Wu, Ravi S Lankalapalli, Rheal Towner, Noah Isakov, Sathyaseelan S Deepa, Ruby John Anto, Augmented Efficacy of Uttroside B over Sorafenib in a Murine Model of Human Hepatocellular Carcinoma. **Pharmaceuticals**, 2022.
- 4. Lekshmi R Nath, Mundanattu Swetha, Vinod Vijayakurupvinod, Arun Kumar Thangarasu, Haritha H Nair, Shabna Anwar, Sreekumar U Aiswarya, Tennyson P Rayginia, C K Keerthana, Kalishwaralal Kalimuthu, Sankar Sundaram, Ravi Shankar Lankalapalli, Sreekumar Pillai, Rheal Towner, Noah Isakov and Ruby John Anto, Blockade of uttroside B-induced autophagic pro-survival signals augments its chemotherapeutic efficacy against hepatocellular carcinoma, Frontiers in Oncology, 2021,12:812598.
- 5. Amrutha Nisthul A., Archana P. Retnakumari, Shabna A., Ruby John Anto & C. Sadasivan (2018): Insilico screening for identification of fatty acid synthase inhibitors and evaluation of their antiproliferative activity using human cancer cell lines, Journal of Receptors and Signal Transduction,2018.
- 6. Minakshi Saikia, Archana P Retnakumari \*, Shabna Anwar\*, Nikhil P Anto, Rashmi Mittal, Shabna Shah, Kavya S Pillai, Vinod S Balachandran, Vidya Peter, Reeba Thomas and Ruby John Anto: Heteronemin, a marine natural product, sensitizes acute myeloid leukemia cells towards cytarabine chemotherapy by regulating farnesylation of Ras Oncotarget, 2018, Vol. 9, (No. 26), pp: 18115-18127
- Arun Kumar T. Thulasidasan\*, Archana P. Retnakumari\*, Mohan Shankar, Vinod Vijayakurup, Shabna Anwar, Sankar Sundaram, G. S. Vinod Kumar and Ruby John Anto: Folic acid conjugation improves the bioavailability and chemosensitizing efficacy of curcumin-encapsulated PLGA-PEG nanoparticles towards paclitaxel chemotherapy Oncotarget, 2017, Vol. 8, (No. 64), pp: 107374-107389
- Lekshmi R. Nath, S. N. Kumar, Arya A. Das, Bala Nambisan, A. Shabna, Chellapan Mohandas mand Ruby John Anto: *In Vitro* Evaluation of the Antioxidant,3,5-Dihydroxy- 4-ethyl-transstilbene(DETS) Isolated from *Bacillus cereus* as a Potent Candidate against Malignant Melanoma Frontiers in Microbiology, 7:452,doi: 10.3389/fmicb.2016.00452, 2016.
- 9. Vinod BS, Haritha Nair, Vinod V, Shabna A, Shabna S, Archana K, Kavya SP, Sanu T and Ruby John Anto: Resveratrol chemosensitizes

HER-2-overexpressing breast cancer cells to docetaxel chemoresistance by inhibiting docetaxel-mediated activation of HER- 2–Akt axis Cell Death Discovery,1, 15061; doi:10.1038/cddiscovery.2015.61, 2015.

- Puliyappadamba VT, Thulasidasan AK, Vijayakurup V, Antony J, Bava SV, Anwar Shabna, Sundaram S, Anto RJ. Curcumin inhibits B[a]PDE-induced procarcinogenic signals in lung cancer cells, and curbs B[a]P-induced mutagenesis and lung carcinogenesis Biofactors, 41, 431–442, 2015.
- 11. J Antony, MSaikia, Vinod.V, L. R. Nath, M R Katiki, M.S.R. Murty, A Paul, Shabna A, H Chandran, S M Joseph, Nishanth KS, E J Panakkal, Sriramya I.V, Sridivya I.V, S Ran, Sankar S, E Rajan and Ruby John Anto. DW-F5: A novel formulation against malignant melanoma from *Wrightia tinctoria* Scientific Reports, 5:11107, DOI: 10.1038/srep11107, 2015
- Lekshmi R. Nath1\*, Jaggaiah N. Gorantla\*, Arun Kumar T. Thulasidasan, Vinod Vijayakurup ,Shabna Shah, Shabna Anwar, Sophia M. Joseph1, Jayesh Antony, Kollery Suresh Veena, Sankar Sundaram, Udaya K. Marelli, Ravi S. Lankalapalli & Ruby John Anto: Evaluation of uttroside B, a saponin from *Solanum nigrum* Linn, as a promising chemotherapeutic agent against hepatocellular carcinoma Scientific Reports 6:36318, DOI: 10.1038/srep36318 1
- A.Shabna, Radha D. Kale, Preetha Nair: The Potential Bioconversion of Paper waste to Bioplastic and Biofuel. Journal Biotechnol. Bioinf. Bioeng. PP 337-342, 2011, 1(3):337-342, Published by Society for Applied Biotechnology, ISSN 2249-9075

## CONFERENCES

Presented a poster entitled " Molecular evaluation and *in vivo* validation of Tryptanthrin as a candidate drug for melanoma chemotherapy ".at the 39<sup>th</sup> Annual Conference of Indian Association for Cancer Research, held at Udaya Samudra, Trivandrum from Feb 5-7,2020.

Presented a paper entitled "Deciphering the role of melanoma specific gene MITF-M in regulating the therapeutic efficacy Tryptanthrin" at the AICTE Conference on Molecular Tools and Disease Diagnosis held at Sahrudaya College, Thrissur from October 25- 27,2019 **Best Paper Award.** 

Presented a poster entitled "Unravelling the molecular events regulating the therapeutic potential of tryptanthrin in melanoma chemotherapy" at the Second International Conference on "Nutraceuticals and Chronic Diseases" (INCD2017) held at Bogmallo Beach Resort, Bogmalo, Goa, September 01 -03, 2017.**Best Poster Award** 

|         | Presented a poster entitled "Mechanistic evaluation and <i>in vivo</i><br>validation of Tryptanthrin as a potent molecule against malignant<br>nelanoma".at the 36 <sup>th</sup> Annual Conference of Indian Association for<br>Cancer Research, Amala Cancer Research Centre, Thrissur, February<br>9-11, 2017. <b>Best Poster Award</b>              |
|---------|--|
| t       | Presented a paper entitled "The Potential Bioconversion of Paper waste<br>o Biofuel and Bioplastic", in the Swadesi Science Congress, held on<br>November 07-09, 2011, at Cashew Bhavan, Kollam  |
|         | Presented a paper entitled "Efficiency of <i>Saccharomyces cerevisiae</i> in<br>Bioconversion of paper waste to renewable fuel", in the National<br>Symposium on Innovative & Modern Technologies for Agricultural<br>Productivity, Food Security and Environmental Management, held on<br>July 22-23, 2011, at the Saffron Boutique Hotel, Mangalore. |
| r       | Delivered a guest lecture (UGC sponsored) on "The efficiency of<br>nanoparticles in disease diagnosis" for MSc Nanotechnology students,<br>conducted by the Department of chemistry, Mount Carmel College.   |
| WORKSHO | P/ SEMINARS/FDPs ATTENDED  |
|         | Participant in the five day workshop on Molecular tools and techniques organized by the State Inter University Centre For Genomics and Gene Technology, Department of Biotechnology, University of Kerala, Trivandrum on May 27-31 <sup>st</sup> , 2013.   |
|         |  |