



Indian Virological Society & Nitte University

26th Annual Conference of Indian Virological Society (IVS) “Viruses to Viromes in Health and Disease”



VIROCON 2017 Program

Day – 1: December 07, 2017

| Sessions | Time | Program |
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| Registration | 8:00-9:30 | Registration |
| Inaugural Function | 9:30-10:30 | Inaugural Function |
| 10:30 - 11:00 | | High Tea |
| Keynote Lectures Venue: K. S. Hegde auditorium | 11:00 -13:00 | Chair Person: Dr. Anupam Varma, President, IVS |
| | 11:00-11:40 | Dr. Andrew Davison , MRC University of Glasgow CVR, UK : <i>Herpes viruse genomics</i> |
| | 11:40-12:20 | Dr. H.R. Pappu , Dept. of Plant Pathology, WSU, Pullman, USA : <i>Structural and molecular insights into tospovirus-host interactions</i> |
| | 12:20-13:00 | Dr. Vinay Pathak , NCI, Frederick, Maryland : <i>Exploiting APOBEC3 proteins to elucidate HIV-1 nuclear import and develop gene therapy treatment</i> |

| 13:00-14:00 | | Lunch | | |
|------------------------------|----------------------|--|---|---|
| Technical Session - I | 14:00-17:30 | Medical Virology Venue: K. S. Hegde auditorium | Plant Virology Venue: Lecture Hall II (Charaka) | Animal Virology Venue: Lecture Hall IV (Sushrutha) |
| | Chair Persons | Dr. A.K. Bagga and Dr. Manoj Kumar | Dr. Indranil Dasgupta and Dr. V.G. Malathi | Dr. S.N. Singh and Dr. Indrani Karunasagar |
| Lead Lectures | 14:00-14:30 | Dr. Lucky Sangal , WHO, New Delhi <i>Achieving measles elimination goal by 2020: the journey so far</i> | Dr. Shelly Praveen , IARI, New Delhi <i>Virus propagation in host: a trade off to host's fitness</i> | Dr. Souvik Ghosh , Ross University School of Veterinary Medicine, St Kitts <i>Molecular characterization of complete genomic segment-2 (RdRP encoding gene) of picobirnaviruses detected in different animal host species</i> |
| | 14:30-15:00 | Dr. Sudhanshu Vrtati , RCB, Faridabad <i>Rotavirus vaccine development: The India story</i> | Dr. V. Celia Chalam , ICAR-NBPGR, New Delhi <i>Role of quarantine in biosecuring crops from transboundary plant viruses: The case study of quarantine of transgenic soybean germplasm</i> | Dr. Nagendra R. Hegde , NIAB, Hyderabad <i>Viral zoonoses and the role of animal-human interface on One Health</i> |
| | 15:00-15:30 | Dr. R.K. Ratho , PGIMR, Chandigarh <i>Advancements in the immunopathogenesis of Japanese Encephalitis: More to explore</i> | Dr. Supriya Chakraborty , JNU, New Delhi <i>Epigenetic regulation of geminivirus transcription by replication initiator protein</i> | Dr. Yashpal Malik , IVRI, Izatnagar <i>History and current trends in bovine rotavirus research in India</i> |
| | 15:30-16:00 | Dr. Arunkumar Govindakarnavar , CVR, Manipal <i>Following the tracks of KFD in India</i> | Dr. M. Krishna Reddy , ICAR-IIHR, Bengaluru <i>Emerging plant viruses – A threat for future</i> | Dr. V. Balamurugan , NIVEDI, Bangalore <i>Peste des petits ruminants vaccination strategies and control programme in India</i> |

| 16:00-16:30 | | Tea/ Coffee Break | | |
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| Contributed Papers | 16:30-16:45 | Dr. Shikha Saxena , IVRI, Bareilly <i>Human papillomavirus derived novel cell penetrating peptide in conjugation with oligoarginine peptide for intracellular delivery in normal and cancerous cells</i> | Dr. Basavaprabhu L Patil , NRCPB, New Delhi <i>Variability studies of pigeon pea sterility mosaic emaraviruses in India provides evidence of segment re-assortment and recombination</i> | Dr. Sanjay Barua , ICAR-NRCE, Hisar <i>Evaluation of antiviral and drug resistance mechanism of emetine</i> |
| | 16:45-17:00 | Dr. Aashish Chowdhury , AIIMS, New Delhi <i>Dengue virus circulating serotypes: Trends over two decades at a tertiary care centre in New Delhi</i> | Dr. Basavaraj , IARI, New Delhi <i>Evolution of diverse papaya ringspot virus population: Hosts and geo-climatic locations are the key strikers</i> | Dr. Naveen Kumar , ICAR-NRCE, Hisar <i>SERCA regulates paramyxovirus replication</i> |
| Academia-Industry Interaction Venue: K. S. Hegde auditorium | 17:00-17:15 | Dr. K. Srinivas, Indian Immunologicals Ltd | | |
| | 17:15-17:30 | Dr. S.N. Singh, Biovet Pvt. Ltd | | |
| 17:30-19:00 | Poster Session | | | |
| 19:00-20:00 | Welcome Reception | | | |

Day – 2: December 08, 2017

| Sessions | Time | Schedule | | |
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| Keynote Lectures Venue: K. S. Hegde auditorium | 9:00-11:00 | Chair Person: Dr. AK Prasad, Ex-President, IVS | | |
| | 9:00-9:40 | “IVS - S.P. Raychaudhuri Life Time Achievement Award” Lecture – Dr. A.C. Mishra , IRSHA, Bharati Vidyapeeth University, Pune : <i>Challenges in prevention and management of dengue virus infection</i> | | |
| | 9:40-10:20 | “IVS - Bhargava Oration Award” Lecture – Dr. R.K. Jain , IARI, New Delhi : <i>Plant virus diagnosis- Paradigm shifts in 21st century</i> | | |
| | 10:20-11:00 | Dr. Rangaraj Selvarangan , University of Missouri, Kansas City: <i>Molecular multiplex testing for respiratory viruses and its impact on patient care and outcomes</i> | | |
| 11:00-11:30 | | Tea / Coffee Break | | |
| Technical Session -2 | 11:30-13:00 | Medical Virology Venue: K. S. Hegde auditorium | Plant Virology Venue: Lecture Hall II (Charaka) | Animal Virology Venue: Lecture Hall IV (Sushrutha) |
| | Chair Persons | Dr. V Ravi and Dr. Anuradha Tripathy | Dr. R K Jain and Dr. Shelly Praveen | Dr. Riji John and Dr. Nagendra Hegde |
| Lead Lectures | 11:30-12:00 | Dr. Durga Rao , IISc, Bangalore <i>Rotavirus viroplasm structures: the first insights into the organizational assembly of viral and host factors</i> | Dr. Indranil Dasgupta , Delhi University <i>Exploring the defence and counter defence strategies in plant virus interactions</i> | Dr. Kiran Kondabagil , IIT, Mumbai <i>Mechanisms of genome packaging in large DNA viruses and bacteriophages</i> |

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| | 12:00-12:30 | Dr. Shailendra Saxena , KGMU, Lucknow <i>Molecular mechanism of differential neuro AIDS by HIV-1 B and C clades</i> | Dr.V.G.Malathi , TNAU, Coimbatore <i>Tomato leaf curl New Delhi virus- emergence as invasive pathogen</i> | Dr. Ravi Kumar Gandham , ICAR-IVRI, Bareilly <i>Host response to pathogen: Transcriptome and proteome approach</i> |
| | 12:30-13:00 | Dr. Priya Abraham , Department of Clinical Virology, CMC Vellore <i>HPV vaccine- Two in one benefit</i> | Dr. A.I Bhat , ICAR-IISR, Kerala <i>Piper yellow mottle virus: characterization and management</i> | Dr. Shrikrishna Isloor , KVAFSU, Bangalore <i>Recent advances in diagnosis of rabies in animals and it's strengthening under OIE twinning programme in India</i> |
| 13.00- 14.00 | | Lunch | | |

| Technical Session -3 | 14:00-16:00 | Medical Virology Venue: K. S. Hegde auditorium | Plant Virology Venue: Lecture Hall II (Charaka) | Animal Virology Venue: Lecture Hall IV (Sushrutha) | |
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| | Chair Persons | Dr. R.K.Ratho and Dr. G. Arun Kumar | Dr. V.G. Malathi and Dr. Krishna Reddy | Dr. Shailendra Saxena and Dr. Kiran Kondabagil | |
| Lead Lectures/ Contributed Papers | 14:00-14:30 | Dr. V. Ravi , NIMHANS, Bangalore <i>Enhancing surveillance for acute encephalitis syndrome in India</i> | 14:00-14:15 | 14:00-14:30 | Dr. Dilip Kumar Sarma , ICAR-NRCP, Assam <i>Trends in emerging and re-emerging viral diseases of pigs in India</i> |
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| | 14:30-15:00 | Dr. Anuradha Tripathy , NIV, Pune <i>Longevity of immunological memory to Hepatitis E</i> | 14:30-14:45 | Dr. Anirban Roy , IARI, New Delhi <i>Plant virus genome based vectors for genome engineering of crop plants</i> | 14:30-14:45 | Dr. S.K. Otta , CIBA, Chennai <i>Exploring dsRNA for therapy of shrimp white spot syndrome virus (WSSV)</i> |
| | | 14:45-15:00 | Dr. Arutselvan , ICAR-CTCRI, Kerala <i>Rapid detection of Sri Lankan cassava mosaic virus through loop-mediated isothermal amplification assay</i> | 14:45-15:00 | Dr. Y. Krishna Mohan Reddy , TNVASU, Chennai <i>Profile of Culicoides populations in livestock holdings in Tamil Nadu with particular reference to bluetongue</i> | |
| | 15:00-15:30 | Dr. Sarah Cherian , NIV, Pune <i>Evolutionary dynamics of the 2009 pandemic Influenza A H1N1 virus by viral genome and protein structure modelling analyses</i> | 15:00-15:15 | Dr. Bhaskara Reddy , RARS, Tirupathi <i>Rolling Circle Amplification (RCA)-PCR assay is more effective than traditional PCR for detection of begomoviruses infecting greengram (Vigna radiata)</i> | 15:00-15:15 | Dr. M. Poornima , CIBA, Chennai <i>Tilapia Lake Virus (TiLV) an emerging threat to Tilapia farming in India</i> |
| Contributed Papers | 15:30-15:45 | Dr. Aparna Mukhopadhyay , Presidency University, Kolkata <i>Investigating the molecular details of hepatitis C and enteric viruses of Kolkata</i> | 15:15-15:30 | Dr. Saurabh Kumar Dubey , ICAR-IVRI, New Delhi <i>Detection of endogenous and episomal banana streak viruses from local banana mats prevalent in North East India</i> | 15:15-15:30 | Dr. Santhosh S. Koratkar , SIU, Pune <i>Isolation, identification, and characterization of inclusion body hepatitis (IBH) virus from poultry, India</i> |
| | 15:45-16:00 | Dr. Soma Chattopadhyay , ILS Bhubaneswar <i>Chikungunya nsP1 directly interacts with nsP2 and modulates its ATPase activity</i> | 15:30-15:45 | Dr. Vanitha Chandel , Amity University, UP <i>In-silico interaction of RNA silencing suppressors of velvet bean severe mosaic virus with DICER domains</i> | 15:30-15:45 | Dr. Ezhil Praveena , CIBA, Chennai <i>Prevalence of white spot syndrome virus (WSSV) and infectious hypodermal and haematopoietic necrosis virus</i> |

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| | | | | | | (IHHNV) in black tiger and Indian white shrimp broodstocks in India |
| 16.00-16.30 | Tea / Coffee break | | | | | |
| Young Scientist Award Lectures Venue: K. S. Hegde auditorium | 16:30-18:06 | Chair Persons: Dr. Govind P. Rao and Dr. Bikas Mandal | | | | |
| | 16:30-16:42 | Dr. Gaurav Kumar – <i>Genome-wide comparative transcriptome landscape of rice (Oryza sativa L.) provides novel molecular insights into stress dynamics of the plant against Rice tungro viruses</i> | | | | |
| | 16:42-16:54 | Dr. Rashmirani Senapathi – <i>Prognostic significance of multiple HPV genotype infection in invasive cervical carcinoma: A report from Odisha, India</i> | | | | |
| | 16:54-17:06 | Dr. Kshitija Rane – <i>Epidemiological data and computational prediction confirms genetic predisposition to rotavirus infection – Need of precision Immunization.</i> | | | | |
| | 17:06-17:18 | Dr. Sajad Ahmad Wani – <i>Peripheral blood immune cell subsets specific transcriptome unravelled early high through putgene expression predictors of Peste des petits ruminants vaccine induced response in sheep and goats</i> | | | | |
| | 17:18-17:30 | Dr. Shanmuga Prema – <i>Vector-mediated transmission of Tobacco streak virus in cotton ecosystem through Parthenium pollen grains</i> | | | | |
| | 17:30-17:42 | Dr. Senthilraja C – <i>Identification and characterization of tomato spotted wilt virus in the state of Tamil Nadu; Development of TSWV detection kit</i> | | | | |
| | 17:42-17:54 | Dr. Minhas S.K – <i>Virological and immunological responses of goatpox (GTPV) virus in goats and sheep</i> | | | | |
| | 17:54-18:06 | Dr. Divyanshi Karothia – <i>Inhibition of west nile virus replication by small interfering RNA targeting a highly conserved sequence</i> | | | | |
| Industry-Academia | 18:06-18:21 | Dr. Karthik Baunchander, Bio-Rad Laboratories India Pvt. Ltd. | | | | |

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| Interaction Venue: K. S. Hegde auditorium | 18:21-18:36 | Dr. Kalpesh Patil, Beckman Coulter India Pvt. Ltd. |
| 18:36-19:45 | | Poster Session |
| 19:45-21:30 Venue: K. S. Hegde auditorium | | General Body meeting followed by entertainment and dinner |

Day – 3: December 09, 2017

| Sessions | Time | Schedule | | | | |
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| | 9:00 -11:00 | Chair Person: Prof. Iddya Karunasagar | | | | |
| Keynote Lectures Venue: K. S. Hegde Medical Academy auditorium | 9:00 - 9:40 | Dr. Ranjit Ray , Saint Louis University, Missouri, USA : <i>Hepatitis C virus persistence, liver disease, progression and prevention strategies</i> | | | | |
| | 9:40-10:20 | Dr. Suresh Mahalingam , Griffith University, Australia: <i>New insights into immunopathology of arboviral infections</i> | | | | |
| | 10:20-11:00 | Dr. Venkataram Prasad , Baylor College of Medicine, Houston : <i>Gastroenteric pathogens and blood type connection</i> | | | | |
| 11.00-11.30 Tea / Coffee Break | | | | | | |
| Technical Session -4 | 11:30-13:00 | Medical Virology Venue: K. S. Hegde auditorium | Plant Virology Venue: Lecture Hall II (Charaka) | | Animal Virology Venue: Lecture Hall IV (Sushrutha) | |
| | Chair Persons | Dr. H.C.Ghera and Dr. Rangaraj S | Dr. Celia Chalam and Dr. Subramanya Shastry | | Dr. Srikrishna Isloor and Dr. D.K. Sarma | |
| Lead Lectures/ Contributed Papers | 11:30-12:00 | Dr. Gajanan Sapkal , NIV, Pune <i>Zika infection: Public health threat to India</i> | 11:30-11:45 | Dr. Makesh Kumar T , ICAR-CTCRI, Kerala <i>Molecular characterization of Taro bacilliform virus infecting taro (Colocasia esculenta) in India</i> | 11:30-12:00 | Dr. Riji John , TNFU, Thoothukudi <i>Virus disease management in aquaculture</i> |
| | | | 11:45-12:00 | Dr. Neeraj Verma , AKS University, Satna <i>Molecular analysis of Mungbean</i> | | |

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| | | | | yellow mosaic India virus (MYMIV) infecting soybean in MP, India | | |
| | 12:00-12:30 | Dr. Ali Zaid , Griffith Univ, Australia <i>Host innate immune responses in Alphavirus pathogenesis: insights into potential therapeutic solutions</i> | 12:00-12:15 | Dr. Ramasamy Selvarajan , ICAR-NRC Banana, Tamilnadu <i>On-site detection of plant viruses with special reference to banana viruses using lateral-flow devices</i> | 12:00-12:15 | Dr. Dilip Vasudevan , ILS, Bhubaneswar <i>Structural characterization of White Spot Syndrome Viral enzymes involved in nucleotide synthesis via de novo pathway</i> |
| | 12:30-13:00 | Dr. Margit Mutso , Griffith University, Australia <i>Insight of Zika virus infection in neural cell: the route to brain</i> | 12:15-12:30 | Dr. Md. Saliq Noorani , Jamia Millia Islamia, New Delhi <i>One step multiplex RT-PCR for simultaneous amplification of tripartite genome of Prunus necrotic ringspot virus</i> | 12:15-12:30 | Dr. G. Venkatesan , ICAR-IVRI, Mukteswar <i>Genetic analysis of viral interferon resistance (VIR) gene of orf virus isolates from India reveals structural conservation of the protein in parapox viruses</i> |
| | | | 12:30-12:45 | Dr. Sangita V , Amity University, Haryana <i>Structural studies on capsid protein of banana bunchy top virus</i> | 12:30-12:45 | Dr. Satheesha Avunje , ICAR-CIBA, Chennai <i>Efficacy of bacteriophage therapy of luminescent bacterial disease in commercial shrimp hatcheries</i> |
| | | | 12:45-13:00 | Dr. Gowtham. I , DRDO-BUCLS, Coimbatore <i>A potential alternate production platform for plant biologics-chikungunya vaccine candidates</i> | 12:45-13:00 | Dr. V. Balamurugan , NIVEDI, Bangalore <i>Status of PPR vaccination in Chhattisgarh state, India</i> |

13:00-14:00**Lunch**

| Technical Session -5 | 14:00-16:45 | Medical Virology Venue: K. S. Hegde auditorium | Plant Virology Venue: Lecture Hall II (Charaka) | | Animal Virology Venue: Lecture Hall IV (Sushrutha) | |
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| | Chair Persons | Dr. Sarah Cherian and Dr. Gajanan Sapkal | Dr. R. Selvarajan and Dr. Anirban Roy | | Dr. Souvik Ghosh and Dr. V. Balamurugan | |
| Lead Lectures/ Contributed Papers | 14:00-14:30 | Dr. Adam Taylor , Griffiths Univ Australia <i>Mutation of the N-terminal region of chikungunya virus capsid protein: implications for vaccine design</i> | 14:00-14:15 | Dr. Sravya.G. , SRM University, Tamilnadu <i>Molecular characterization of begomovirus from weed occurring in chilli fields</i> | 14:00-14:15 | Dr. Sujeet Kumar , ICAR-CIBA, Chennai <i>Phage mediated virulence in emerging bacterial pathogen Vibrio campbellii</i> |
| | 14:30-15:00 | Dr. Manoj Kumar , CSIR, Chandigarh <i>Computational resource for phylogenomics and therapeutic analysis of Zika virus</i> | 14:15-14:30 | Dr. Viswanathan R , ICAR-SBI, Coimbatore <i>Identification and characterization of RNA silencing suppressor gene(s) of Sugarcane streak mosaic virus (SCSMV) through Agrobacterium mediated transient expression assay</i> | 14:15-14:30 | Dr. Tamil Selvan , ICAR-IVRI, Bangalore <i>Laboratory rodent models for understanding pathogenesis of Foot and Mouth Disease virus: Histopathological analysis of suckling Wistar rat tissues</i> |
| | 15:00-15:15 | Dr. Baibaswatha Nayak , AIIMS, New Delhi <i>Identification of circulatory microRNAs in different phases of Hepatitis B virus induced disease progression and its prognostic relevance in hepatocellular carcinoma</i> | 14:30-14:45 | Dr. Subha Das , Bose Institute, West Bengal <i>Mycoviral diversity in Rhizoctonia solani AG-I-IA infecting rice in India</i> | 14:30-14:45 | Dr. Govindaraj , NIVEDI, Bangalore <i>Financial impact of PPR in sheep and goats in Karnataka</i> |

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| Contributed Papers | 15:15-15:30 | Dr. Nima D. Namsa , Tezpur University, Assam <i>Exploring rotavirus proteins to design B and T cell multi-epitope subunit vaccine using immunoinformatics approach</i> | 14:45-15:00 | Dr. Zainul.A.Khan , University of Delhi <i>Geminivirus bidirectional promoters: a new toolkit to manipulate plant genomes</i> | 14:45-15:00 | Dr. Akhila DS , Nitte University, Mangalore <i>Comparative efficacy of nanoparticle based delivery of recombinant proteins VP28 and VP39 against WSSV infection in Litopenaeus vannamei</i> |
| | 15:30-15:45 | Dr. Rama Adiga , Nitte University, Mangalore <i>Molecular characterization of Zika virus sequences from Mexico</i> | 15:00-15:15 | Dr. Velusamy Balasubramanian, ICAR-NRCB, Tamilnadu <i>Virus indexing for certification of tissue culture raised banana using indigenously developed detection kits has attributed for the improved production of banana in India</i> | 15:00-15:15 | Dr. Juliet Mohan Raj , Nitte University, Mangalore <i>Selective packaging of antibiotic resistance determinants in induced prophage fractions</i> |
| | 15:45-16:00 | Dr. Vidya Ajila , Nitte University, Mangalore <i>Role of Secretory Leucocyte Protease Inhibitor in Viral Infections of the Oral Cavity- A Review</i> | 15:15-15:30 | Dr. G. Kartikeyan , TNAU, Coimbatore <i>Zucchini yellow mosaic virus – An emerging threat to cucurbitaceous vegetables cultivation</i> | | |
| | 16:00-16:15 | Dr. Saritha Sivadas , MCVR Manipal University <i>Molecular characterization of hemagglutinin gene of Influenza A(H3N2) viruses circulating in India during 2014 to 2016</i> | | | | |

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| | 16:15-16:30 | Dr. Anita J, MCVR , Manipal University <i>Molecular characterization of hemagglutinin (HA) gene of influenza A(H1N1) and influenza A(H3N2) virus</i> | | | | |
| | 16:30-16:45 | Dr. Urmila Kulkarni Kale , Pune University <i>Alignment-free approach for viral typing</i> | | | | |
| 16:45-17:00 | | Tea / Coffee | | | | |
| 17:00-17:45 Venue: K. S. Hegde auditorium | Valedictory function and presentation of Young Scientist and Best Poster Awards | | | | | |