First Announcement

International Symposium on
Animal Viruses, Vaccines and Immunity
AVVI-2024 - SOA DU - Bhubaneswar

9 - 11 February 2024

Organised by
Institute of Veterinary Science and Animal Husbandry
SIKSHA ‘O’ ANUSANDHAN
(Deemed to be University)
Bhubaneswar, Odisha

Collaborators
Background & Aim

It goes without saying that vertebrate viruses often cross species barriers, causing severe diseases in their recipient hosts, leading to phenomena such as zoonosis and reverse zoonosis. Since the year 2000, we have witnessed various epidemics and pandemics, including SARS, Bird Flu, Swine Flu, MERS, Morbillivirus disease in Indian lions, COVID-19, and more. Notably, all these causative viruses originate from animals.

Among the ancient viruses, Rabies virus is transmitted from wild animals to humans, as well as to domesticated and companion animals. The knowledge that cowpox virus imparts immunity to smallpox in humans dates back to 1796. The term "vaccine" itself finds its roots in the Latin word "Vacca," meaning cow. Therefore, to successfully realize the goals of the "One Health Initiatives," it is imperative that we collaborate to enhance our understanding of virus ecology, explore emerging viruses in animal reservoirs, develop the next generation of vaccines within tight timelines, and advance diagnostic techniques for both animal and human infections. This involves employing sophisticated methods, including synthetic attenuated virus engineering (SAVE) for virus attenuation. Furthermore, progress is needed to create vaccines that offer immunity for extended periods (beyond one year) and are easy to administer in animals.

The ongoing international symposium on "Animal Viruses, Vaccines and Immunity" (AVVI-2024) aims to convene virologists, epidemiologists, vaccinologists, biochemists, immunologists, and policymakers on a single platform. The goal is to engage in discussions regarding the pursuit of disease-free animals, a crucial aspect not only for maintaining the health of both humans and animals but also for ensuring food security and safety. The concept of "Healthy animal – Healthy People – Healthy country – Developed country" underscores the interconnectedness of these factors.
The theme of the Symposium

Viruses, vaccines, and immunity form the tripod that supports effective disease management and prevention. The triangle of virus, vaccine, and immunity needs to be stable. This international symposium will provide a platform for the academicians, researchers, and policymakers for discussions on the theme and generate new ideas for the development of point-of-care (PoC) diagnostics, and more effective and administration-friendly vaccines that are DIVA compatible, thermo-tolerant (42-45°C), and protective for >1 year. Further, genetic and antigenic variations occurring within a virus genus and its frequency and genetic location will be discussed pertaining to vaccine design and efficacy. There will be an exchange of knowledge and dissemination of information on traditional and new generation technologies. The priority areas to be discussed during the symposium include:

- Emerging, reemerging and exotic viruses: Epidemiology and ecology
- Endemic disease scenario: epidemiology, control and prevention strategy
- Rapid diagnostics
- Epitope mapping
- New generation platforms for administration-friendly veterinary vaccines
- Synthetic attenuated virus engineering (SAVE)
- Recombinant viral vectored vaccines
- mRNA based Veterinary vaccines
- Advances in veterinary immunology
- New generation adjuvants and immune modulators
- Understanding T-cell response post-vaccination
- Nutrigenomics, immune-genetics, and disease resistance genetic and epigenetic markers
- Biosafety, biosecurity, and GMP
- Indian virus sequence database/Viral repository
- Viral disease modeling
- Vaccine regulatory requirements
- Indian Pharmacopeia
- Animal ethics issues
From the President's Desk

Prof (Dr) Manojranjan Nayak
Founder President
Siksha O Anusandhan, Deemed to be University

The term “Viral” in social media is from the term “Virus” that is the cause of most of the sufferings in animal and human being, since time immemorial. Protection to virus is achieved only through eliciting protective antibody production in the body against the components (either natural or recombinant) of the same or related virus. There have been more than 10 pandemics in last 300 years, mostly caused by virus. Spanish Flu in 1918-19 killed more than 40 million people i.e. 2% of the total global population that time. Bird Flu (H5 N1 Strain of Avian Influenza Virus) pandemic in 2006 in India caused culling of 170 million poultry birds and loss of about 760 million USD, about 0.02% of world GDP. Further viruses of vertebrates have been crossing species barrier (e.g. animal virus to human and vice versa) and causing human and animal health havoc to the level of Pandemics. The Coronavirus disease (Covid-19) pandemic (Jan 2020 – May 2023) was caused by an animal Coronavirus that lead to death of about 69.5 lakh human beings, with total economic loss of >16 trillion USD. Animals, including livestock and wild / captive animals suffer from several viral diseases. There have been cases of zoonoses and reverse zoonoses that have adversely affected the “One Health” concept.

Effective vaccines for many viral diseases are not available. Techniques in genomics (synthetic attenuated virus engineering; SAVE, etc.) have made development of newer vaccines faster. Some vaccines give lifelong or long duration immunity; whereas many other vaccines only impart very short duration of immunity. Therefore, the scenario of viral diseases is complicated as it is driven by the triangle of virus type, vaccine, and immunity / protection (VViP).

In the background of above facts, the present International Symposium on “Animal Viruses, Vaccines and Immunity” (09 – 11 February 2024) (AVVI - 2024) is designed to deliberate on the three faces (Virus, vaccine and immunity) that influence control of any viral diseases in animals and human beings. We have in the country more than 500 million animal heads and each animal is susceptible to more than one virus.

On behalf of the Siksha O Anusandhan, Deemed to be University, I invite you to the International Symposium to be held during 09 – 11 February 2024 at the Institute of Veterinary Science and Animal Husbandry. Your august presence, participation and wisdom will be helpful in jotted gaps in control of viral diseases in India and the world, leading to a healthier world.
Message

Prof (Dr) Bryan Charleston, MRCVS, FRS
Director & CEO,
The Pirbright Institute, UK

The deployment of effective veterinary vaccines has had a major impact on improving food security and consequently human health. Effective vaccines were essential for the global eradication of Rinderpest and the control and eradication of foot-and-mouth disease in some regions of the world. Effective vaccines also underpin the development of modern intensive food production systems such as poultry and aquaculture. However, for some high consequence diseases there are still significant challenges to develop effective vaccines. There is a strong track record in veterinary medicine of early adoption of new technologies to produce vaccines. Here we provide examples of new technologies to interrogate B cell responses and using structural biology to improve antigens.

Prof (Dr) Suresh K Mittal
Distinguished Professor of Virology,
Purdue Institute of Inflammation, Immunology and Infectious Disease,
Purdue University, USA

The AVVI-2024 Symposium at SOA DU- Bhubaneswar will allow national and international experts on viruses, vaccines, and immunity to discuss the “One Health” initiative for improving human and animal health and well-being.
Prof (Dr) Siba K Samal
Former Professor, Chairman & Assoc Dean
University of Maryland, College Park, Maryland, USA

It is my great pleasure to invite you to the international symposium on “Animal viruses, vaccines and immunity” to be held during 09-11 February 2024 in Bhubaneswar, Odisha, India. The goal of this symposium is to bring together a multidisciplinary group of scientists not only from India but also from all over the world to present and exchange ideas relating to animal diseases. The symposium is designed to cover three interrelated topics critically important to combat animal diseases. Animal viruses can have substantial impact on global human health. In fact, a large proportion of human pathogens (primarily viruses) likely arose from animals, exemplified by recent COVID-19 pandemic. Thus, development of vaccines against animal pathogens will be of paramount importance to reduce the risk of transmission of pathogens from animals to humans. Therefore, this symposium is particularly timely because it will discuss our state of the art knowledge on this topic. Your presence and deliberation will make this symposium successful in all aspects of disease control. I am confident this symposium will be highly beneficial to your scientific career.

Bhubaneswar, my home city, is a wonderful place to be in February. I wish this symposium a great success.
I am glad to know that SOA DU, Bhubaneswar is organizing International Symposium on “Animal Viruses, Vaccines and Immunity” from 9-11 February, 2024. The theme of the Symposium is most appropriate in the post COVID-19 scenario. As antivirus drug therapy is not feasible in livestock and poultry due to high cost and non availability of suitable antiviral drugs, and viral vaccines evoking both humoral and cell mediated immune response, and lack of adequate biosafety and zoo sanitary measures. Among the animal viruses, viruses/virus diseases of bovines, poultry, swine, sheep & goats, fishes, and bacteria will be discussed. Of about 1415 infectious diseases, about 62% are zoonotic (transmitted from animals to human) causing enormous losses due to mortality, morbidity, expenditure on treatment, and other indirect costs. Reverse zoonoses (transmission of disease from human to animal) as seen in COVID-19 provide conditions for development of carrier status in the host and mutation of the causal virus. In recent years, 70% of zoonotic diseases have been found to be caused by viruses. The vertebrate viruses often cross species barrier and cause disease in recipient hosts (zoonosis and reverse zoonosis). Since the year 2000, there have been serious epidemics/pandemics, viz., SARS, MERS, Bird Flu, Swine Flu, and COVID-19 in December 2020. It is interesting to note that all these causative viruses are of animal origin. One of the oldest and fatal zoonotic virus disease is Rabies which spread from wild canines (Jackals, wolf, foxes) and vampire bats to humans, domesticated and companion animals. Cow Pox virus known to cause mild disease among the people milking cows was found to confer immunity against smallpox. The term “vaccine” is derived from the Latin word “Vacca”, the cow. The global eradication of small pox in 1980 by producing herd immunity through vaccination is best example of “One Health”, bringing Veterinary and medical professionals, and other stakeholders to work together to understand virus ecology in animals, develop faster, safe and quality vaccines including mRNA vaccines for livestock and poultry, along with companion diagnostics, using genetic engineering including Synthetic attenuated virus engineered (SAVE) vaccines providing longer duration of immunity. The present symposium will bring virologists, epidemiologists, vaccinologists, immunologists, biochemists and policy makers to one platform to deliberate and make recommendations to protect and promote animal, human and environmental health using latest advancements in virus etiology, epidemiology, virus vaccinology, virus-cell interaction for uplifftment of sanitary and zoo sanitary measures, required not only to have healthy people and animals, but also to consolidate food security and safety, to ensure Healthy animal – Healthy food – Healthy people-Healthy--environment—Healthy and Developed country.
The theme of the Symposium ensure effective disease management and prevention, generate new ideas for development of PoC diagnostics, affordable and administration friendly quality vaccines under field conditions globally, that are DIVA compatible, thermo-tolerant at 42-45°C. Further, the genetic and antigenic variations occurring within a virus genus, and its frequency and genetic location will be discussed pertaining to vaccine design and efficacy. There will be exchange of knowledge, and dissemination of information on traditional and new technology, including gene deletion using CRISPR/cas9. The priority areas are:

We need to apply artificial intelligence (AI) on priority in all domains of viral research, such as development of quality diagnostics and vaccines, and antiviral drugs. Machine learning (ML), deep learning, metadata approaches need to be adopted for timely detection, diagnosis, control and prevention of TADs and emerging viruses.

My congratulations and good wishes to Dr Bramhadev Pattnaik, Dean IVSAH, SOA DU and his dedicated team for making best efforts for formulating and conducting excellent technical sessions covering important areas as per the theme of symposium.
I am extremely happy that my former distinguished colleague and an outstanding scientist, Dr. Bramhadev Pattnaik presently working as the Dean in the Institute of Vet. Science & Animal Husbandry, Siksha O Anusandhan Deemed to be University, Bhubaneswar, Odisha is organizing an International Symposium titled “Animal Viruses, Vaccines and Immunity” from 9-11 February, 2024 at Bhubaneswar. At a time when public and animal health issue is occupying the center stage globally, conceiving the idea to hold such a conference itself is a novel one and I am sure the topic will allure many animal health stalwarts of the country to participate and enrich the deliberations with their experienced backed inputs to draw up a workable and pragmatic road map to contain/ manage animal viruses and develop effective vaccines using the already unfolded 21st century scientific knowledge and information.

We the animal scientists are aware that the onus of protecting the animal and human health (challenged by zoonotic disease) particularly from viruses, virus like agents and bacterial pathogens lies with us and that despite successful development in vaccines and diagnostic fronts, the desired efficacy is still eluding us. There appears to be two major issues associated with virus and virus like agents affecting animal health – one is the difficulty in their accurate detection in shortest possible time and the other is cleansing the virus from animal bodies before it is spread to others and to do the both effectively, country wide adequate preparedness in terms of skilled manpower and infrastructure is the need of the hour. For this, a program like “Animal Pathogen Diagnostic and Control Network (APDCN)” linked to either one of the existing national institutions or an exclusively newly established institution at Govt. of India level may perhaps be thought of. Such an institution shall network with 7-8 regional universities/ colleges having experience in animal virus handling or a completely new set of experts may be prepared for placement in these universities/ colleges for developing diagnostics and vaccines, undertake capacity building program, tie up with private players and so on. It is needless to say that such a program will require fund. The symposium may form a small committee to work out the fund requirement and place the complete proposal to the Union Ministry for funding. If accepted, the program may be flagged off as Odisha declaration on animal pathogen management network.

I wish the symposium all the success.
Dr V A Srinivasan
Former Research Director
Indian Immunologicals Limited
Advisor, National Dairy Development Board

Siksha O Anusandhan, deemed to be university, Bhubaneswar will be hosting an International brain storming/symposium on the theme “Animal viruses, vaccines and immunity” on 9th February and 11th February 2024. Needless to mention how important is this topic, Prof (Dr) Bramhadev Pattnaik, Dean, IVSAH and his team including Prof (Dr) Srinibas Das, the organising secretary and others will be embarking on an ambitious plan of inviting experts in these fields to share their experience and shed light on future directions on various aspects of novel methods of tackling emerging infectious diseases. The topics to be deliberated are wide and diverse. The need for rethinking on the way forward for meeting pandemic threat is increasing ever since COVID-19 had taken the world by surprise. It’s devastating effect on human race has left an indelible scar which will take decades to disappear. The lesson taught by the pandemic has made scientists world over to evolve strategies to tackle the spread of the pathogen much more effectively. This symposium will bring together scientists to deliver lectures and deliberate action plans to tackle emerging infectious diseases with novel diagnostic methods and vaccines. The symposium will be held in Bhubaneswar, the capital of Odisha, one of the oldest Kalinga kingdoms. The beautiful city, the nearby city of Puri, the abode of Lord Jagannath and Konark, known for its marvel architecture will be an added attraction for scientists. I am sure this symposium will attract scientist’s world over for meaning deliberation which will lead to purposeful recommendations.
In the recent past (2019-2023), the human race faced the COVID-19 pandemic along with panzootics of Lumpy Skin Disease in cattle and African Swine fever in pigs. The causative virus of COVID-19 is an animal (bat) Coronavirus that crossed species barrier. There was huge loss of human life and huge economic loss in almost all the countries in the World, and the bat virus got the name of 16 trillion USD virus. In this difficult time, India rose to the occasion and developed indigenous whole Coronavirus vaccine that became a boon to the humanity. The point is vertebrate viruses can infect multiple hosts, including humans. To have healthy humanity, the animals have to be disease-free. It is primarily incumbent upon the whole veterinary profession including – but not limited to – the veterinary scientists, virologists, vaccinologists and immunologists how best the animal and human population will get rid of various infectious viruses. Taking this vision forward, Institute of Veterinary Science and Animal Husbandry (IVSAH), under the Siksha ‘O ‘Anusandhan (SOA), Deemed-to-be-University, Bhubaneswar will be conducting an International Symposium on “Animal Viruses, Vaccines and Immunity” (AVVI) during 09-11 February 2024. I am also aware that the IVSAH, in the recent past, did conduct a National Seminar on Lumpy skin disease during September 2022, and the second one on Canine Cardiology during July 2023. It gives me immense pleasure that Prof. Dr Bramhadev Pattnaik, Dean of IVSAH, a reputed Virologist himself along with his team of learned Professors, Faculty, and students is hosting the International symposium on AVVI for better understanding of emerging, re-emerging and endemic viral diseases of animals, and means of their control. On the occasion, invited scientists from different ICAR institutes (IVRI, NAPSAD, NRCE, NIVEDI, CARI), DBT-NIAB, and scientists/teachers/students from many other academic and research institutions will be delivering wide array of specialized talks on the symposium theme. The proposed symposium being convened at IVSAH involving 6 National institutes is an excellent example of “Knowledge Partnership” in PPP mode. It will be a model for other scientific organizations and institutes to follow. A few foreign scientists are likely to join Indian Scientific Community who will be enriching the scientific deliberations with global perspectives. The deliberations during the 3-day symposium will lay the foundation stone of Animal Virus Pathobiology research and disease control strategies with futuristic perspectives. The venue of the symposium Bhubaneswar, the capital city of Odisha is the golden tourist triangle of Puri, Konark, Bhubaneswar will be the point of attraction for the delegates.

I wish all the best for the successful conduct of the proposed International symposium on AVVI.

Jai Bharat!
Dr G. Taru Sharma
Director, National Institute of Animal Biotechnology
(An Autonomous Institute of the Department of Biotechnology,
Ministry of Science & Technology, Govt. of India)

International Symposium on Animal Viruses, Vaccines and Immunity is proposed to be held at SOA DU-Bhubaneswar during the second week of February 2024. The theme of this meeting has been chosen so aptly, especially after experiencing the serious pandemic of the century. Its primary aim is to bring scientists, policymakers, and related professionals under one umbrella to deliberate and discuss the issues, challenges, and a way forward to address animal health concerns impacting food security and public health. I am certain that this meeting will be highly beneficial for researchers, faculty, students, and policymakers, fostering a better understanding of the various challenges in developing strategies to realize the One Health objectives. NIAB stands as a new-generation Institute under the Department of Biotechnology, Ministry of Science and Technology, Government of India. Equipped with state-of-the-art infrastructural facilities for small and large animals, its mission is to develop a sustainable and globally competitive livestock industry through innovative technologies, thereby leading towards human welfare. The Institute has been at the forefront of the National One Health Programme, collaborating with 27 partners across the country. I eagerly look forward to the scientific deliberations by distinguished national and international experts, anticipating great interactive sessions that will ultimately result in a memorable learning experience during these three days from 9th to 11th February.

Wishing the meeting resounding success!
Healthy animal, human and environment is the need of the day for global health and food security. Of all the microbes, virus is a major threat to both animal and human health. Vaccines play a major role in control, eradication and elimination of viral diseases. Eradication of the dreaded morbillivirus disease of cattle, (Rinderpest) could be possible in India in 2006, due to application of a potent vaccine. Similar was the case with the elimination COVID-19 pandemic in less than 3 years, but with a global economic loss of about 16 trillion USD.

We are experiencing emergence of new virus (antigenic) types, almost in a gap of 5-6 years. Across different species transfer of virus is also becoming rapid due to socio-economic reasons, and it may cause moderate to severe disease in the recipient host. The latest example is COVID-19 pandemic, caused by a bat coronavirus. Of late, there was Monkeypox threat in 2022-23. In 2006, it was Bird Flu pandemic, and in 2009 it was Swine Flu. The book “The Viral Storm: The dawn of a new pandemic age”, by Nathan Wolfe is worth reading. The predictions by the author are probably becoming true.

With expected rapid evolution/ mutation and species transfer of different virus in different ecology, development of faster vaccines and diagnostics is a must, and Indian vaccine industry plays a major role in both vaccine design and large scale production. Research scientists at both the government sector and vaccine industry need to join hands for faster design of newer vaccines using modern technologies. Administration of vaccines as a prophylactic measure is a very cost effective intervention in disease prevention and significantly reduces the use of antibiotics and overcomes related AMR issues.

The theme of the international symposium “Animal Viruses, Vaccines and Immunity” is a step towards One health for all. I congratulate the organizers and the scientists involved. I hope the conglomeration of virologists, biotechnologists and vaccinologists will come out with valuable recommendations to decrease viral disease burden on both animals and human beings, leading towards a disease free and affluent world, as the costs of controlling viral epidemics/ pandemics are exorbitant, and many poor nations may find difficulty.

I wish the symposium a great success.
COVID-19 Pandemic by SARS Corona virus-2, was a watershed moment in the 21st Century. It shook the world and exposed how vulnerable we are when such new viruses strike to unleash wars of morbidity and death.

The logo of the symposium is designed after the spherical structure with radiating corona, typical of Coronavirus. The “Navagunjara” in the center is a mythological creature mentioned in the Sarala Das (an ancient poet) Mahabharat, and also pictorial depiction on the walls Lord Jagannath Temple of Puri, and other mythological texts. The Navagunjara is an incarnation of Lord Vishnu, as mentioned. It is a fusion of man and eight different animals, viz; head of rooster, neck of peacock, limbs of elephant, tiger, horse and man, hump of bull (Ox), waist of lion, and serpent as the tail.

In the present concept, the image of Navagunjara is symbolic of the intertwined reality of animals and human, and an art representation of the concept of one health, and harmony. The structure of a virus (icosahedron), an antibody (immunoglobulin) molecule in the center of the spherical logo is to convey host immune response, native or induced can counter these viruses. Between the two, virus and immunoglobulin, is the logo of SOA Deemed to the University which nurtures and fosters human knowledge in all spheres of life.

I wish all success to the international symposium AVVI-2024.
Organising Committee

Chief Patron

Prof (Dr) Manojranjan Nayak
President, SOA DU

Patron

Prof (Dr) P K Nanda
Vice Chancellor, SOA DU

Advisors

Prof (Dr) Amit Banerjee
Chancellor, SOA DU

Prof (Dr) M P Yadav
Former Director and Vice Chancellor, ICAR-IVRI

Dr V A Srinivasan
Former Research Director, IIL, and advisor, NDDB

Prof (Dr) Jyoti Ranjan Das
Management specialist, SOA DU

Dr Raj Kumar Singh
Former VC and Director, ICAR-IVRI

Prof (Dr) Suresh K Mittal
Distinguished Professor, Virology, Purdue University, USA
Convener

Dr Bramhadev Pattnaik
Dean, IVSAH, SOA DU
E mail: dean.ivsah@soa.ac.in

Co-Convener

Dr G. Taru Sharma
Director, DBT- NIAB, Hyderabad
E mail: tarusharma@niab.org.in

International Scientific Committee

Prof (Dr) A. K. Srivastava
Vice Chancellor, DUVASU

Dr Abhijit Mitra
Animal Husbandry Commissioner, Govt of India

Dr Bryan Charleston
CEO, The Pirbright Institute, UK

Dr Devendra T Mourya
Former Director, ICMR- NIV

Dr G. Saikumar
ICAR- IVRI

Dr Gaya Prasad
Former Vice Chancellor, SVPUAT, Meerut
Dr Habibar Rahman  
Former DDG (AS), ICAR and Regional Representative for South Asia, ILRI

Dr Jyoti Ranjan Das  
Management Specialist, SOA DU

Dr Manmohan Parida  
Director, DRDE, Gwalior

Dr MP Yadav  
Former Vice Chancellor, ICAR-IVRI and SVPUAT, Meerut

Dr N V Patil  
Vice Chancellor, MAFSU, Nagpur

Padmashree (Dr) A P Dash  
Former Head, WHO-SEARO, and Former VC, CUTN

Dr PN Rangarajan  
Indian Institute of Science, Bangalore

Dr Praveen Malik  
CEO, Agrinnovate, ICAR

Prof P K Uppal  
Founder Director, ICAR-NRC on Equines & Former Advisor, RWTCI

Dr Ramkishan  
Dy DCI, CDSCO & Member, WHO-Expert Advisory Panel on Biological Standardization

Dr R K Singh  
Former Director/Vice Chancellor, ICAR-IVRI

Prof (Dr) Rajashree Panigrahy  
Professor, Medical Microbiology, SOA DU
Dr Sanghamitra Mishra  
Dean, Institute of Medical Science, SOA DU

Dr Siba K Samal  
Former Professor, Chairman & Assoc Dean, Maryland University, USA

Dr Subrat K Panda  
Former Professor & Head Division of Pathology, AIIMS, New Delhi

Dr Suresh K Mittal  
Distinguished Professor of Virology, Purdue University, USA

Dr Suresh K Tikoo  
Professor & Director, Vaccinology & Immunotherapeutics, Saskatchewan University, Canada

Dr G.Taru Sharma  
Director, DBT-NIAB

Dr V A Srinivasan  
Former Research Director, IIL and Advisor NDDB

Dr YPS Malik  
Dean, Biotechnology, GADVASU, Ludhiana

Dr Ganendra Gongal  
Regional Coordinator, SEARO- WHO
National Scientific Committee

Dr Bramhadev Pattnaik
Dr Girish K Sharma
Dr Ashok K Tiwari

Dr Vivek Kumar Gupta
Dr Ashok Kumar
Dr R. Karunakaran

Dr Baldev R Gulati
Dr Minakshi Prasad
Dr Vineet Bhasin

Dr C. Tosh
Dr Sushanta K Das
Dr S K Rana
Lead Speakers

Prof (Dr) Bryan Charleston
Dr Luis Rodriguez
Dr Gyanendra Gongol
Prof (Dr) S.K Tikoo
Prof (Dr) Siba K Samal
Prof (Dr) Suresh K Mittal
Prof (Dr) Aditya K Misra
Prof (Dr) A K Srivastava
Dr H Rahman
Dr Raj Kumar Singh
Dr G.Taru Sharma
Dr Jonathan Artz
Dr Anthony Fooks

Prof (Dr) M P Yadav

Prof (Dr) Subrat K Panda

Dr VA Srinivasan

Dr Gaya Prasad

Dr J M Kataria

Dr Girish K Sharma

Dr SK Rana

Dr Nitin Virmani

Dr Sandeep Bhatia

Dr C. Tosh

Dr K Rajukumar
Dr Amit Kanani
Dr M Kalaivani
Prof (Dr) TK Goswami
Dr HK Khuntia
Dr Sarita Jena
Dr Lipsa Dash
Dr Prajna Mohapatra
Dr Ravindra Sharma
Dr Tridib Rajkhowa
Dr S L Yashwanath
Dr Ravindra Hegde
Dr Amita Reena Gomes
Dr B M Chandranaik
Dr M A Ramakrishna
Dr Manjunath
Dr Madhuri Subbiah
Dr Sanjay Baruah
Organising Secretary
Prof (Dr) Srinibas Das

Co-Organising Secretary
Prof (Dr) Bana Bihari Dash

Organising Committee:
Drs Jogesh C Jena, Sushant K Das, Prasanna K Mishra, AK Barik, NK Praharaj, Gangadhar Nayak, Dhananjay Das, Bikas Das, Balaram Sahu, R M Narendra, R M Moharatha, DN Biswal, Pragya Mohapatra, Santosh K Sahu, Analisha Debbarma, Deepak Chaurasia, Samarendra Mohanty, Sanjeev Kumar, Ajit Kumar, Hemant K Khuntia, Salivahan Chakravarty, Monalisa Debbarma

Logo Design: Dr. Gaurav K Sharma
Editor: Dr. Santosh Kumar Sahu
Administrative Support
Shri Yoga Prakash, Shri Ashis k Swain, Shri Tapas K Kar, Ms Soumya Sucharita Nayak
About Bhubaneswar, Odisha

Bhubaneswar is known as "Temple City of India" – a historical and cultural hub that boasts a rich tapestry of ancient temples, modern attractions, and captivating experiences. Odisha, historically known as Kalinga, is the state located on the east coast of India where Emperor Ashoka shun war and violence (268-232 BCE), and converted to a Buddhist. Later Buddhism spread out of India. Emperor Kharavela of Maha megha vahana dynasty ruled Kalinga empire during 193-170 BCE, and propagated Jainism. This is cited in the ancient rock cave inscriptions in the hills of the Khandagiri & Udayagiri. Odisha is the ninth largest state by area in India, and the eleventh largest by population. Odisha has several popular tourist and pilgrim destinations at Puri, Konark, and Bhubaneswar. Odisha is known for the Jagannath temple, Puri and Sun temple, Konark. Bhubaneswar, the capital city of Odisha, has historical monuments of both Buddhism and Jainism. The city has several other archaeological monuments. There is a Zoological Park at Nandankanan with some unique features like white and melanistic tiger breeding and the only Pangolin breeding Center in the world. Asia's largest and world's 2nd largest lagoon, Chilika, is about 100 km from Bhubaneswar. It is a splendid bio-corridor which attracts varieties of migratory birds across the globe. The Symposium will be conducted at Bhubaneswar, which is the temple city of Odisha, and is the education hub in the entire eastern and north east states with several national institutes, viz, AIIMS, IIT, ICMR-RMRC and several ICAR institutes, NISER etc. Bhubaneswar is well connected with rail, road and air. Weather during February 2024 (Autumn) will be pleasant with average temperature of 20-24°C.
About Siksha 'O' Anusandhan

The Siksha 'O' Anusandhan (SOA), a deemed to be University under UGC, is a leading institution committed to quality teaching and innovative research for professional advancements in academics. The University offers various professional courses to educate students to become responsible, enlightened, and productive citizen. The University also serves business, education, health care services for the community. “The University is accredited by NAAC with ‘A++’ grade (3rd Cycle) and ranked internationally by QS and The World University Rankings 2023. SOA secured 15th in the University Category, 27th in the Engineering Category, 16th in the Medical Category, 9th in the Dental Category, 8th in the Law Category, 49th in the Research Category, 57th in the Management Category and 26th in the Overall Category by NIRF India Rankings 2023, MHRD, Govt. of India. It is granted with Category-I Graded Autonomy Status by UGC, Govt. of India. The university campus ranks 3rd in the country as Swachh Campus. The university has NABH accredited Hospitals and NABL accredited Diagnostics Laboratory. The university is recognized by UGC ,AICTE ICAR, VCI, MCI and other regulatory bodies to offer high-quality education.

Navagunjara

The legend of Navagunjara is an incarnation of Lord Vishnu, as mentioned in the Mahabharat, written by Sarala Das. This incarnation appeared before the Pandavas during their exile. It is a fusion of man and eight different animals, viz; head of rooster, neck of peacock, limbs of elephant, tiger, horse and man, hump of bull, waist of lion, and serpent as the tail. The symbol is even relevant today, and as per the Sarala Mahabharat, it is a symbol of harmony, diversity and the unity of all living beings. In the present day context, we visualize it as a symbol of “One Health”. There is a link between mythology, ancient philosophy, and its relevance to one health for all. It is mostly depicted as the PATTA CHITRA, a traditional art form of Odisha.
Registration date and Fee:

Registration is open till 31 January 2024
email to dean.ivsah@soa.ac.in, tarusharma@niab.org.in

Registration Fee: Rs 5000.00
For Students : Rs.2500.00

Contact
Bramhadev Pattnaik
Cell: 79787 98321
email: dean.ivsah@soa.ac.in

Raj Kumar Singh
Cell: 7534075345
email: rajks.virology@gmail.com

G. Taru Sharma
Cell: 8218601498
email: tarusharma@niab.org.in

Srinibas Das
Cell: 9861337072
email: dassrinibas@gmail.com

Bana Bihari Dash
Cell: 8917370396
email: bbdash08@gmail.com