

# International Society for Vaccines Newsletter

Editor, Randy A. Albrecht, Ph.D.



February 2020

## From the President's Desk

**Happy New Year 2020!** The Officers and Executive Board thank the members of the International Society for Vaccines (ISV) for supporting the Society on a successful 2019. The **2019 ISV Annual Congress** took place on October 26-29 in Ghent, Belgium. There was a 25% increase in submitted abstracts with 260 abstracts accepted from the 400 total attendees. We thank the Sponsors and Partners that supported the 2019 ISV Congress, in particular the Gates Foundation for providing travel scholarships from low and middle income countries to attend the Congress.



Dr. Ted Ross

In December, 2019, we celebrated the 40<sup>th</sup> anniversary of the World Health Organization declaration of the eradication of smallpox. While elimination of smallpox from the human population was one of the greatest achievements for vaccines and vaccination, there are many challenges ahead for effective vaccine development to be addressed in 2020. Polio eradication has been on the list of targeted diseases for elimination for decades. The poliovirus still circulates in pockets of the world, such as Pakistan and Afghanistan, where children are still being paralyzed. Dengue fever is another disease that effects 100 million people living in tropical areas where dengue viruses are easily transmitted by mosquitos. Concerns are that children, not pre-immune to dengue, vaccinated with a live-attenuated dengue virus, that vaccination would act like a first infection and result in enhanced disease when the child was infected with the real virus. While two vaccine companies have tested new dengue vaccines in the last 2 years, early results have indicated that vaccinated children may have complications to the vaccine, but the vaccine appears effective in adults. 2020 will bring new dengue vaccines to clinical trials that may overcome these issues in children.

As vaccine researchers develop the next generation of effective vaccines, ISV is there to support these pioneers that bring new vaccines to the market, as well as supporting the next-generation of young, vaccine researchers. As stated in the [published article by Doolan and Lu](#), *Hum Vacc Immunother*; 2018; 14(9): 2101-2104: "The ISV is a global not-for-profit organization that aims to encourage, establish and promote the development and use of vaccines to prevent and control infectious and non-infectious diseases in humans and animals". ISV members hail from 45 different countries. Since 2008, ~700 individuals have been members of ISV. There are 150 members with expiration dates of 12/31/2019. Remember to [renew your membership](#) for 2020 at the [ISV website](#).

We were pleased to have a number of dedicated ISV members volunteer to serve on ISV Committees and Board members. As in the past, nominations for ISV Board Members were solicited two months ahead of the Annual General Meeting through the ISV newsletter and emails to the ISV mailing list. The new ISV Board, which is listed on the ISV website, will serve during the 2020-2021 term. We are looking for new members for the Outreach Committee. This committee oversees the paper of the month and paper of the year nominations, as social media and other outreach activities for ISV. The time commitment is minimum, so if you are interested, please send an email to [me](#), [Cindi Callaghan](#), or [Lenny Moise](#), current head of the Outreach Committee. We are looking for 5 new members to join some of our current committee members. Volunteer and join us on one of our committees!

ISV will host the [2020 ISV Annual Congress](#) in **Quebec City, Canada** on **10-13 October 2020**. The Annual Congress will provide a forum for Presentations by leaders in the vaccine field and allow many opportunities for Oral and Poster Presentations from Junior Scientists and Researchers. The Congress in Quebec City will be the 14<sup>th</sup> time that ISV has hosted this Annual Congress that will be led by Co-Chairs, [Dr. Linda Klavinskis](#) from Kings College London in the UK and [Dr. Joon Haeng Rhee](#) from Chonnam National University Medical School in South Korea. The ISV co-Chairs will be joined by Local co-Chair, [Dr. Gary Kobinger](#), from the Université Laval.

ISV is a strong and growing organization that is built upon the support of its membership. We look forward to hearing and working with you in 2020 to continue to the support of vaccines and the vaccine community. Send me your ideas for what you would like to see ISV take-on in 2020.

Best regards,  
[Ted Ross](#), President (2020-2021)

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## 2020 ISV Congress Updates

The International Society for Vaccines (ISV) is pleased to invite you to the 2020 ISV Annual Congress taking place on October 10th-13th in Québec City, Canada, at the [Québec City Convention Centre](#). Québec City is renowned and loved for its European charm, welcoming locals, infectious energy, and of course, for Old Québec - a UNESCO World Heritage Site. The city boasts one of the highest concentrations of research centers in Canada and the Northeastern United States. The convention center itself is set on Parliament Hill, flanked by excellent hotels and sits just steps from Old Québec.

The 2020 Congress is co-chaired by Linda Klavinskis (Kings College London) and Joon Haeng Rhee (Chonnam National University) along with local co-chair Gary Kobinger (Université Laval). We are very fortunate to have such a distinguished Scientific Committee this year whose names may be viewed below and on our [Congress website](#).

Please be aware that official registration and abstract submission will open in April although current registration rates may be viewed online. The deadline for abstract submission is **July 10th**.

We encourage everyone to join or renew your ISV membership at the [ISV main website](#) in order to take advantage of the \$100 discount on your Congress registration fee. Be on the lookout for our monthly Congress email update and our new website launching soon. If you need immediate information please email: [info@isvcongress.org](mailto:info@isvcongress.org). We look forward to seeing you all in October.

Sincerely,

2020 ISV Congress Secretariat

## 2020 ISV Congress Scientific Committee

Margaret Ackerman, Dartmouth, USA  
Rafi Ahmed, Emory University, USA  
Ruxandra Draghia-Akli, Janssen, USA  
Amy Espeseth, Merck, USA  
Thomas Geisbert, UTMB, USA  
Sarah Gilbert, Jenner Institute, UK  
Kathrin Jansen, Pfizer, Inc., USA  
Karin Jooss, Gritstone Oncology, USA  
Stephen Kent, University of Melbourne, AU  
Jerome Kim, IVI, KOR  
Lakshmi Krishnan, NRC, CAN  
Ed Lavelle, Trinity College Dublin, IRE  
Qihan Li, IMBCAMS, CN

Raina MacIntyre, UNSW, AU  
Adrian McDermott, NIAID, NIH, USA  
Miguel O'Ryan, University of Chile, CL  
Claude Perreault, University of Montreal, CAN  
Sanjay Phogat, GSK, ITL  
Xavier Saelens, University of Ghent, BE  
Amadou Sall, Institut Pasteur de Daka, WAFR  
Melanie Saville, CEPI, UK  
Baik Seong, Yonsei University, KOR  
John Shiver, Sanofi Pasteur, USA  
Connie Schmaljohn, USAMRIID, USA  
Satoshi Uematsu, University of Tokyo, JP



## International Society for Vaccines 2020 Annual Congress

Please join us in....

**Québec City, Canada**

*October 10th—October 13th, 2020*

*Québec City Convention Centre*

International  
Society for  
**VACCINES**

## Updates from the ISV Outreach Committee

The ISV Outreach Committee is looking for new members to expand ISV communications with society members, the greater scientific community, and the lay public. The purpose of the committee is to disseminate information about ISV activities, goals, and aspirations. We also seek to effectively communicate ISV positions to the greater scientific community and lay public to promote ISV recognition and grow Society influence. The time commitment is minimum, so if you are interested, please send an email to [Ted Ross](#), [Cindi Callaghan](#), or [Lenny Moise](#), who is the current head of the Outreach Committee. We are looking for 5 new members to join some of our current committee members. Volunteer and join us!

## January Paper of the Month

### [Phase 3 Efficacy Analysis of a Typhoid Conjugate Vaccine Trial in Nepal.](#)

*N Engl J Med.* 2019 Dec 5;381(23):2209-2218. doi: 10.1056/NEJMoa1905047.

Shakya M, Colin-Jones R, Theiss-Nyland K, Voysey M, Pant D, Smith N, Liu X, Tonks S, Mazur O, Farooq YG, Clarke J, Hill J, Adhikari A, Dongol S, Karkey A, Bajracharya B, Kelly S, Gurung M, Baker S, Neuzil KM, Shrestha S, Basnyat B, Pollard AJ; TyVAC Nepal Study Team.

Excerpted from the journal abstract: *Salmonella* Typhi is a major cause of fever in children in low- and middle-income countries. A typhoid conjugate vaccine (TCV) that was recently prequalified by the World Health Organization was shown to be efficacious in a human challenge model, but data from efficacy trials in areas where typhoid is endemic are lacking. A single dose of TCV was immunogenic and effective in reducing *S. Typhi* bacteremia in children 9 months to 16 years of age. (Funded by the Bill and Melinda Gates Foundation; Current Controlled Trials number, ISRCTN43385161).

## February Paper of the month

### [A Novel Coronavirus from Patients with Pneumonia in China, 2019.](#)

*N Engl J Med.* 2020 Jan 24;10.1056/NEJMoa2001017. doi: 10.1056/NEJMoa2001017.

Zhu N, Zhang D, Wang W, Li X, Yang B, Song J, Zhao X, Huang B, Shi W, Lu R, Niu P, Zhan F, Ma X, Wang D, Xu W, Wu G, Gao GF, Tan W; China Novel Coronavirus Investigating and Research Team

Excerpted from the journal abstract: In December 2019, a cluster of patients with pneumonia of unknown cause was linked to a seafood wholesale market in Wuhan, China. A previously unknown betacoronavirus was discovered through the use of unbiased sequencing in samples from patients with pneumonia. Human airway epithelial cells were used to isolate a novel coronavirus, named 2019-nCoV, which formed another clade within the subgenus sarbecovirus, Orthocoronavirinae subfamily. Different from both MERS-CoV and SARS-CoV, 2019-nCoV is the seventh member of the family of coronaviruses that infect humans. Enhanced surveillance and further investigation are ongoing. (Funded by the National Key Research and Development Program of China and the National Major Project for Control and Prevention of Infectious Disease in China.)

Visit the ISV website to view previous [Papers of the Month.](#)

## Dr. Punnee Pitisuttithum, February 2020 ISV Fellow of the Month

Professor Punnee Pitisuttithum is the Head of the Department of Clinical Tropical Medicine, and also the Head of the Vaccine Trial Centre (VTC) at the Faculty of Tropical Medicine, Mahidol University, Thailand. She is an internationally recognized expert on tropical infectious diseases, especially on vaccine trials and clinical studies. She has completed over 40 clinical trials and has 170 publications in international peer-reviewed journals. Her research has been cited more than 5,000 times according to Scopus database. She has designed and conducted numerous clinical studies (phase I, II, III vaccine trials) of tropical diseases and vaccine against HIV/AIDS, HPV, Cholera, and other infectious diseases. She was the lead clinical investigator in the largest community trial of HIV vaccines (prime-boost regimen) involving 16,000 participants (RV144) which was the first time showed efficacy in human. She played a key role in the testing of the world's first commercial dengue vaccine.



**Dr. Punnee  
Pitisuttithum**

She served as a member of the Initiative for Vaccine Research (IVR) of the World Health Organization (WHO), the WHO-UNAIDS Vaccine Advisory Committee (VAC) on HIV/AIDS, the International AIDS Vaccine Institutes, and the Task Force on Research and Development during the establishment of The Global Alliance for Vaccines and Immunization (GAVI). She has also chaired and co-chaired numerous international conferences or reviewing committees. She has received numerous honors and awards including the Most Outstanding Researcher in Medical Science in 2015 from the National Research Council of Thailand, as well as the Mahidol University Award for Outstanding Research in 2013.

She received her MBBS degree from Lady Hardinges Medical College, New Delhi, India. She has a Diploma in Tropical Medicine and Hygiene and a Doctor of Clinical Medicine degree, both from Mahidol University, Thailand. She also holds a Diploma of Thai Board of Internal Medicine from the Medical Council of Thailand.

## 2019 Paper of the Year:

### [Final Analysis of a Trial of M72/AS01 E Vaccine to Prevent Tuberculosis.](#)

Tait DR, Hatherill M, Van Der Meeren O, Ginsberg AM, Van Brakel E, Salaun B, Scriba TJ, Akite EJ, Ayles HM, Bollaerts A, Demoitié MA, Diacon A, Evans TG, Gillard P, Hellström E, Innes JC, Lempicki M, Malahleha M, Martinson N, Mesia Vela D, Muyoyeta M, Nduba V, Pascal TG, Tameris M, Thienemann F, Wilkinson RJ, Roman F. *N Engl J Med*, 381 (25), 2429-2439. doi: 10.1056/NEJMoa1909953.

## Leading nominations for paper of the year:

[Immunogenicity of chimeric haemagglutinin-based, universal influenza virus vaccine candidates: interim results of a randomised, placebo-controlled, phase 1 clinical trial.](#) Bernstein DI, Guptill J, Naficy A, Nachbagauer R, Berlanda-Scorza F, Feser J, Wilson PC, Solórzano A, Van der Wielen M, Walter EB, Albrecht RA, Buschle KN, Chen YQ, Claeys C, Dickey M, Dugan HL, Ermler ME, Freeman D, Gao M, Gast C, Guthmiller JJ, Hai R, Henry C, Lan LY, McNeal M, Palm AE, Shaw DG, Stamper CT, Sun W, Sutton V, Tepora ME, Wahid R, Wenzel H, Wohlbold TJ, Innis BL, García-Sastre A, Palese P, Krammer F. *Lancet Infect Dis*. 2019 Oct 17;S1473-3099(19)30393-7. doi: 10.1016/S1473-3099(19)30393-7.

[A proof of concept for structure-based vaccine design targeting RSV in humans.](#) Crank MC, Ruckwardt TJ, Chen M, Morabito KM, Phung E, Costner PJ, Holman LA, Hickman SP, Berkowitz NM, Gordon IJ, Yamshchikov GV, Gaudinski MR, Kumar A, Chang LA, Moin SM, Hill JP, DiPiazza AT, Schwartz RM, Kuelzto L, Cooper JW, Chen P, Stein JA, Carlton K, Gall JG, Nason MC, Kwong PD, Chen GL, Mascola JR, McLellan JS, Ledgerwood JE, Graham BS; VRC 317 Study Team. *Science*. 2019 Aug 2;365(6452):505-509. doi: 10.1126/science.aav9033.

[Measles Virus Infection Diminishes Preexisting Antibodies That Offer Protection From Other Pathogens.](#) Mina MJ, Kula T, Leng Y, Li M, de Vries RD, Knip M, Siljander H, Rewers M, Choy DF, Wilson MS, Larman HB, Nelson AN, Griffin DE, de Swart RL, Elledge SJ. *Science*. 2019 Nov 1;366(6465):599-606. doi: 10.1126/science.aay6485.

[A generalized HIV vaccine design strategy for priming of broadly neutralizing antibody responses.](#) Steichen JM, Lin YC, Havenar-Daughton C, Pecetta S, Ozorowski G, Willis JR, Toy L, Sok D, Liguori A, Kratochvil S, Torres JL, Kalyuzhniy O, Melzi E, Kulp DW, Raemisch S, Hu X, Bernard SM, Georgeson E, Phelps N, Adachi Y, Kubitz M, Landais E, Umotoy J, Robinson A, Briney B, Wilson IA, Burton DR, Ward AB, Crotty S, Batista FD, Schief WR. *Science*. 2019 Dec 6;366(6470):eaax4380. doi: 10.1126/science.aax4380.

[Targeted selection of HIV-specific antibody mutations by engineering B cell maturation.](#) Saunders KO, Wiehe K, Tian M, Acharya P, Bradley T, Alam SM, Go EP, Scarce R, Sutherland L, Henderson R, Hsu AL, Borgnia MJ, Chen H, Lu X, Wu NR, Watts B, Jiang C, Easterhoff D, Cheng HL, McGovern K, Waddicor P, Chapdelaine-Williams A, Eaton A, Zhang J, Rountree W, Verkoczy L, Tomai M, Lewis MG, Desaire HR, Edwards RJ, Cain DW, Bonsignori M, Montefiori D, Alt FW, Haynes BF. *Science*. 2019 Dec 6;366(6470):eaay7199. doi: 10.1126/science.aay7199.

## Situation Update on COVID-19

1. Johns Hopkins University developed a real-time tracker of [Coronavirus COVID-19 Global Cases](#), which has infected over 81,000 people and resulted in over 2,700 deaths globally as of 26 February 2020.
2. The WHO renamed the 2019-novel Coronavirus, [Severe Acute Respiratory Syndrome Coronavirus 2](#) (SARS-CoV-2), which causes coronavirus respiratory disease (COVID-19).
3. The [Coalition for Epidemic Preparedness Innovations](#), CEPI, announced [funding for four programs](#) to develop new vaccines against COVID-19, including three programs with Inovio, the University of Queensland, and CureVac. CEPI has also partnered with Moderna Inc. and the U.S. National Institute of Allergy and Infectious Diseases (NIAID). CEPI released a funding call to rapidly develop and manufacture already proven vaccine technologies.
4. Moderna, a biotech company, recently delivered the [first experimental Coronavirus Vaccine](#) for human testing to the National Institutes of Allergy and Infectious Diseases (NIAID) of the National Institutes of Health, USA., which is planning the first clinical trial in April.
5. The Centers for Disease Control and Prevention (CDC), USA, is providing general information about the [Coronavirus Disease 2019 \(COVID-19\)](#), with information specific for [healthcare professionals](#), and [laboratories](#).

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## International Society for Vaccines

ISV has a social media presence with 152 Facebook members and over 530 LinkedIn members. Join us online to take part in discussions or to find out what is happening in the society. We would like your ideas for future newsletter articles. Is there an article you'd like to submit to the newsletter? What are the most pressing issues in vaccine research? Please send us your thoughts.



Contact us:

Society website: <http://isv-online.org/>

LinkedIn: <https://www.linkedin.com/groups/8359482/profile>

Instagram: [@intl\\_society\\_for\\_vaccines](https://www.instagram.com/intl_society_for_vaccines/) [https://www.instagram.com/intl\\_society\\_for\\_vaccines/](https://www.instagram.com/intl_society_for_vaccines/)

2019 ISV Congress: <http://isvcongress.org/>