# **Poster Presentations**

#### Novel expression systems and innovative platforms

- 2. Multifactorial high-throughput process screening for a yellow fever virus-vectored Zika vaccine candidate

Sven Göbel, Max Planck Institute for Dynamics of Complex Technical Systems, Germany

- Chimeric hemagglutinin split vaccines elicit broadly cross-reactive antibodies and protection against group 2 influenza viruses in mice
   Eduard Puente-Massaguer, Icahn School of Medicine at Mount Sinai, USA
- A scalable, serum-free cell culture platform for improved production of diverse live virus and viral vector vaccine candidates
   James Wagner, MSD, USA
- Influenza A defective interfering particles as broad-spectrum antivirals
   Sascha Young Kupke, Max Planck Institute for Dynamics of Complex Technical Systems, Germany
- C1 gene expression platform rapid, high yield and lower cost way to develop & manufacture biologics
   Mark Emalfarb, Dyadic International Inc., USA
- 7. Enabling commercial process oriented clone selection for a pipeline vaccine candidate through process scale down and analytical characterization Matthew Woodling, Merck & Co, Inc USA, USA
- 8. **Developing vaccines for common respiratory viruses using a platform technology** Andrew Young, University of Queensland, Australia
- Enhancing NA immunogenicity through novel VLP designs
   Leticia Guzmán-Ruiz, University of Natural Resources and Life Sciences, Vienna, Austria
- Development of a rapid, cost-effective bioprocess for the production of recombinant human serum albumin in Pichia Pastoris
   Wangin Soh, Hilleman Laboratories, Singapore
- 11. Development of the Thermophilic Filamentous Fungus Thermothelomyces heterothallica C1 into a prominent human and animal vaccines production platform Mark Emalfarb, Dyadic International Inc., USA
- 12. Production of AAV virus-like particles in CHO cells for bioorthogonal chemistry applications

Daniel Barreto-Cabrera, Instituto de Biotecnología - Universidad Nacional Autónoma de México, Mexico

13. Rapid screening and scaled manufacture of immunogenic virus-like particles in a tobacco BY-2 cell-free protein synthesis system

Jorge Armero Gimenez, Wageningen University, LenioBio, Germany

14. Oral administration of a recombinant RBD like from SARS-CoV-2, as immunostimulant for the care of COVID-19

Norma Adriana Valdez-Cruz, UNAM, Mexico

15. FinaXpress, an E. Coli platform for the expression of disulfide-bonded proteins - production of low-cost carrier proteins, vaccine antigens, and biotherapeutics Renaud Jacquemart, Fina Biosolutions, USA

16. TITLE TBA

## **Nucleic acid-based vaccines**

17. Self-amplifying mRNAs encoding chimeric or mosaic influenza virus hemagglutinin antigens induce broadly protective antibody responses in mice

Juan Manuel Carreno Quiroz, Icahn School of Medicine at Mount Sinai, USA

18. Engineering protein nanocompartments for a novel mRNA loading and delivery system

Ferdinando Sereno, University College London, United Kingdom

- 19. **Efficient supply of high quality lineralised pDNA for mRNA production** Salomé A. de Sá Magalhães, University College London, United Kingdom
- Optimizing in-vitro transcription parameters for production of messenger RNA (mRNA) vaccines

Julia Puppin Chaves Fulber, McGill University, Canada

21. A Phase i, randomized, double-blind, placebo-controlled trial of a Reprna-based vaccine for Covid-19: A brief analysis of safety in adults

Bruna Machado, SENAI CIMATEC, Brazil

22. Development of Rna Vaccines for leishmaniasis and comparison with vaccines based on recombinant antigens

Gabriela de Asis Burle-Caldas, UFMG/CTVacinas, Brazil

- 23. Univercells develops breakthrough technologies and services that democratize the production of biologics: The potential of Drug Development collaboration David Honba, Univercells, Belgium
- 24. Development of a Marburg self-amplifying mRNA-lipid nanoparticle vaccine: Differential effects when co-formulated with Toll Receptor Agonists
  Allan Watkinson, Labcorp, United Kingdom
- 25. A novel genetic vaccine platform using tag/catcher conjugation for modular assembly and secretion of antigen-displaying capsid virus-like particles

  Cyrielle Fougeroux, Adaptyac, Denmark
- 26. TITLE TBA

## Regional development and manufacturing of vaccine

27. Process development for high titer production of RCA free adenovirus in suspension complementing cell culture derived from A549 cell line
Chun Fang Shen, National Research Council of Canada, Canada

28. Immunogenicity of a trivalent recombinant antigen based on SARS-CoV-2 receptorbinding domain and its variants of concern

Berenice Calderón-Pérez, CINVESTAV-IPN, Mexico

29. **Development of a vaccine candidate against Clostridium botulinum in cattle**Berenice Calderón-Pérez, CINVESTAV-IPN, Mexico

30. Acheviements of a vaccine development unit within Lmics; Biotechnology development unit, Institut Pasteur de Tunis, Tunisia

samia rourou, Institut Pasteur de Tunis, Tunisia

31. Upstream development for a Zika Virus Chimeric vaccine

Tiago Pereira dos Santos, Bio-Manguinhos/FIOCRUZ-RJ, Brazil

- 32. Recombinant interleukins as vaccine adjuvants against livestock diseases Berenice Calderón-Pérez, CINVESTAV-IPN, Mexico
- 33. WITHRAWN
- 34. Manufacture of a SARS-CoV2 vaccine in Mexico

Néstor O. Pérez, Probiomed SA de CV, Mexico

35. Validation of a serological ELISA method to detect anti-SarsCov2 IgG and IgM antibodies in Mexican population.

Mabel Rodriguez, Instituto de Biotecnología, Mexico

### Vaccine manufacturing

36. Modeling the benefits of small molecule Viral Sensitizers (VSEsTM) to increase virus production

Jean-Simon Diallo, Virica Biotech, Canada

37. Disruptive Vibro® technology offering new opportunities in vaccine manufacturing processes

Jarno Robin, SANI Membranes, Denmark

38. Intensification of virus production in suspension cells: Comparison of perfusion and fed batch-based processes for different cell lines

Cristina Silva, Polytechnique Montréal, Canada

39. The production and purification of an intermediate product for large scale VLP production in insect cells - baculovirus working stock

Lena Achleitner, acib - Austrian Centre of Industrial Biotechnology, University of Natural Resources and Life Sciences Vienna, Austria

40. Fixed-bed bioreactor production of virus for vaccine manufacturing

Renato Astray, Instituto Butantan, Brazil

41. Sterile purification of large viruses using functionalized non-woven fibers

Patricia Pereira Aguilar, acib - Austrian Centre of Industrial Biotechnology, University of Natural Resources and Life Sciences Vienna, Austria

42. Influenza A virus production following quality by design principles

Tilia Zinnecker, Max Planck Institute for Dynamics of Complex Technical Systems, Germany

43. Development of next generation manufacturing platform technology for the production of viral vectored vaccines

Wanqin Soh, Hilleman Laboratories Singapore Pte Ltd, Singapore

44. Evaluation of a universal influenza B vaccine based on the mosaic hemagglutinin strategy using different vaccine platforms in mice

Irene González-Domínguez, Icahn School of Medicine at Mount Sinai, USA

45. Development of a trivalent adjuvanted sub-unit vaccine candidate for Covid-19: From antigen expression to Ind-enabling Cmc and preclinical studies

Leda R. Castilho, UFRJ, Brazil

46. Modeling the benefits of small molecule Viral Sensitizers (VSEsTM) to increase virus production

Jean-Simon Diallo, Virica Biotech, Canada

- 47. **Bioprocess improvement to increase manufacturing yield using a fixed-bed bioreactor** Pei-Yin Lim, Hilleman Laboratories, Singapore
- 48. **Purification platform for poxviruses by filtration processes**Michael Wolff, University of Applied Sciences Mittelhessen, Germany
- 49. The development of a Hi5-Cas9 stable cell line for assessing the impact of AcMNPV essential gene disruption on baculovirus & recombinant protein production using CRISPR-Cas9 technology

Jacqueline Powichrowski, University of Waterloo, Canada

- 50. Impact of animal origin free peptones on HEK293 and vero based vaccine applications Ashwin Gurunathan, Thermo Fisher Scientific, USA
- 51. Influenza virus capture using membrane chromatography: Improving selectivity by matrix design and pseudo-affinity ligand interactions

  David Dauer, Sartorius Stedim Biotech GmbH, Germany

#### Analytical technology

52. Rapid multiplexed analytics for mRNA vaccines Erica Dawson, InDevR, Inc., USA

53. Extraction of intact proteins from polyacrylamide gels for virus-like particle purity reversed-phase HPLC method development

Jonathan Welsford, MSD, USA

- 54. **Asymmetric flow field flow fractionation as an analytical tool for virus-like particles**Narges Lali, ACIB GmbH, BOKU, Austria
- 55. Quality assessment of virus-like particle: A new transmission electron microscopy approach

Salomé A. de Sá Magalhães, University College London, United Kingdom

- 56. Application of multivariate data analysis on multi-sensor system for in-line process monitoring of adenovirus production in HEK293 cells
  Xingge Xu, McGill University, Canada
- 57. Redox potential of intercapsomeric disulfides defines pathway of final VLP assembly for HPV

# Formulation and stability

58. Opportunities for process analytical technology integration in the QbD framework for vaccine formulation development and manufacturing

Nausheen Rahman, sanofi, Canada

59. Addressing vaccine stability and cold chain challenges with recombinant human serum albumin to enable global administration

Mark Stathos, InVitria Inc, USA

60. Bioprocess studies for the production of bacterial vesicles for the delivery of immunogens in epithelial cells

Mauricio A. Trujillo-Roldán, UNAM, Mexico

61. Formulation development and characterization of a Marburg self-amplifying mRNA-lipid nanoparticle vaccine with CpG oligonucleotide

Allan Watkinson, Labcorp, United Kingdom

62. Formulation development and characterization of a Marburg self-amplifying mRNAlipid nanoparticle vaccine with a Toll-like receptor 7 agonist

Allan Watkinson, Labcorp, United Kingdom

63. Development of a spray dried respiratory tuberculosis vaccine candidate and dosing protocol for a non-human primate study

John Chen, Access to Advanced Health Institute, USA

64. **Oral COVID-19 vaccination with QYNDR-RBD is safe and immunogenic** Garry Morefield, VaxForm, USA

## **Devices and delivery**

65. Lateral flow devices: Applying antigen-antibody interaction for vaccine technology Marco Rito-Palomares, Tecnologico de Monterrey, Mexico

# One-health

66. Designing and developing novel peptide inhibitors targeting SARS-CoV-2 entry into host cells using Moroccan scorpion venom molecule mimics

Naoual OUKKACHE, Institut Pasteur of Morocco, Morocco

67. High cell density semi-perfusion of CCX.E10 quail cells for production of vesicular stomatitis virus based oncolytic vaccine

Lennart Jacobtorweihe, Max Planck Institute for Dynamics of Complex Technical Systems, Germany

- 68. **Bivalent virus-like particles for Circovirus protection and immunocastration**Diego Fontana, Universidad Nacional Del Litoral, Argentina
- 69. Developing anti-helminth vaccines for people and cattle (for)seeing the One Health approach in action

Renaud Jacquemart, FABP Biotech, Brazil

70.	Click chemistry functionalization of HIV-1-based virus-like particles and extracellular
	vesicles

Francesc Gòdia, Universitat Autònoma de Barcelona, Spain