

Creating a supportive environment for vaccine manufacturing in LMICs: contribution from ADVAC the Advanced Course of Vaccinology

**Dr. Kamel Senouci, Director, ADVAC
University of Geneva, Switzerland**

DCVMN, October 2022, Pune, India



ADVAC More than 20 years...



ADVAC was created in 1998 at the instigation of Charles Mérieux and Stanley Plotkin.



Organized by Fondation Mérieux and University of Geneva

Co-sponsors

- *Bill & Melinda Gates Foundation*
- *Coalition for Epidemic Preparedness Innovations*
- *US Centers for Disease Control and Prevention*
- *European Centre for Disease Prevention and Control*
- *European & Developing Countries Clinical Trials Partnership*
- *Johns Hopkins Bloomberg School of Public Health*
- *European Society for Paediatric Infectious Diseases*
- *National Foundation for Infectious Diseases*
- *National Institutes of Health and Fogarty International Center*
- *World Health Organization*

Vaccine Industry and CEPI Education grants

- **Glaxo-SmithKline**
- **Janssen**
- **Merck**
- **Pfizer**
- **Sanofi-Pasteur**
- **Serum Institute of India**
- **Takeda**
- **CEPI**

ADVANCED TRAINING IN VACCINOLOGY

WHY ?

So many new vaccines!!

1986-2000

- Hepatitis B (recombinant)
- Typhoid (live and Vi polysaccharide)
- Cholera (live and recombinant toxin)
- Hepatitis A
- Varicella
- Acellular Pertussis
- Rotavirus
- Pneumococcal conjugate

2001-2022

- Live attenuated influenza
- More rotavirus reassortants
- Oral cholera
- Typhoid conjugate
- Mening A/C/W/Y conjugate
- Group B Mening
- Human Papillomavirus
- Zoster (live and subunit)
- Japanese Encephalitis (Vero)
- Ebola
- RTS,S Malaria
- Dengue
- COVID, RSV etc...

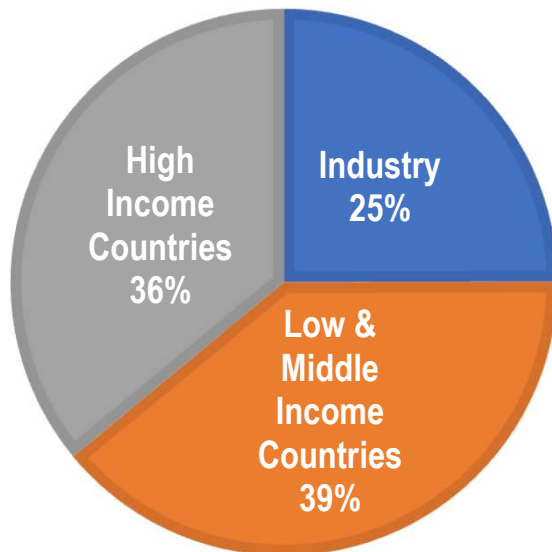
1. Need for more scientists with a broad vision of issues related to vaccines and immunization
2. Need for more qualified decision-makers to identify priority targets in vaccinology
3. Need for more qualified policy-makers for introduction of new vaccines in vaccination programs
4. Need to encourage/support cascade training in regions and countries



2000 – 2022

- **22 courses, 1355 participants**
- **121 countries**

**DISTRIBUTION OF 825
PARTICIPANTS: 2009-2021**

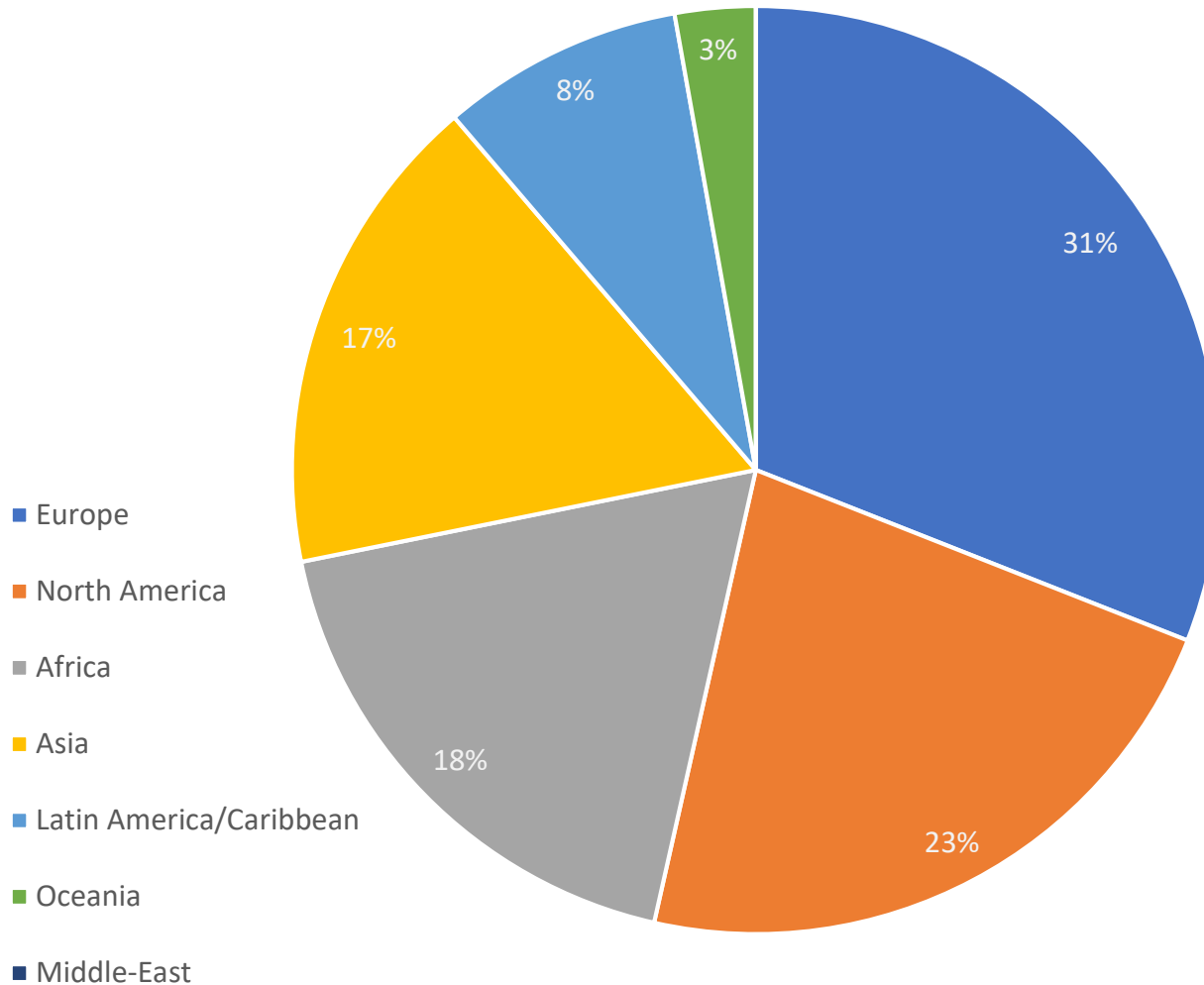


Selected participants

- **Highly motivated**
- **With previous experience in vaccinology**
- **Likely to have increasing responsibilities**
- **Diverse professional background: academia, government, industry, international organizations**
- **Diverse geographic origin: low and middle income countries & high income countries**

ADVAC 2022

Distribution of participants per region



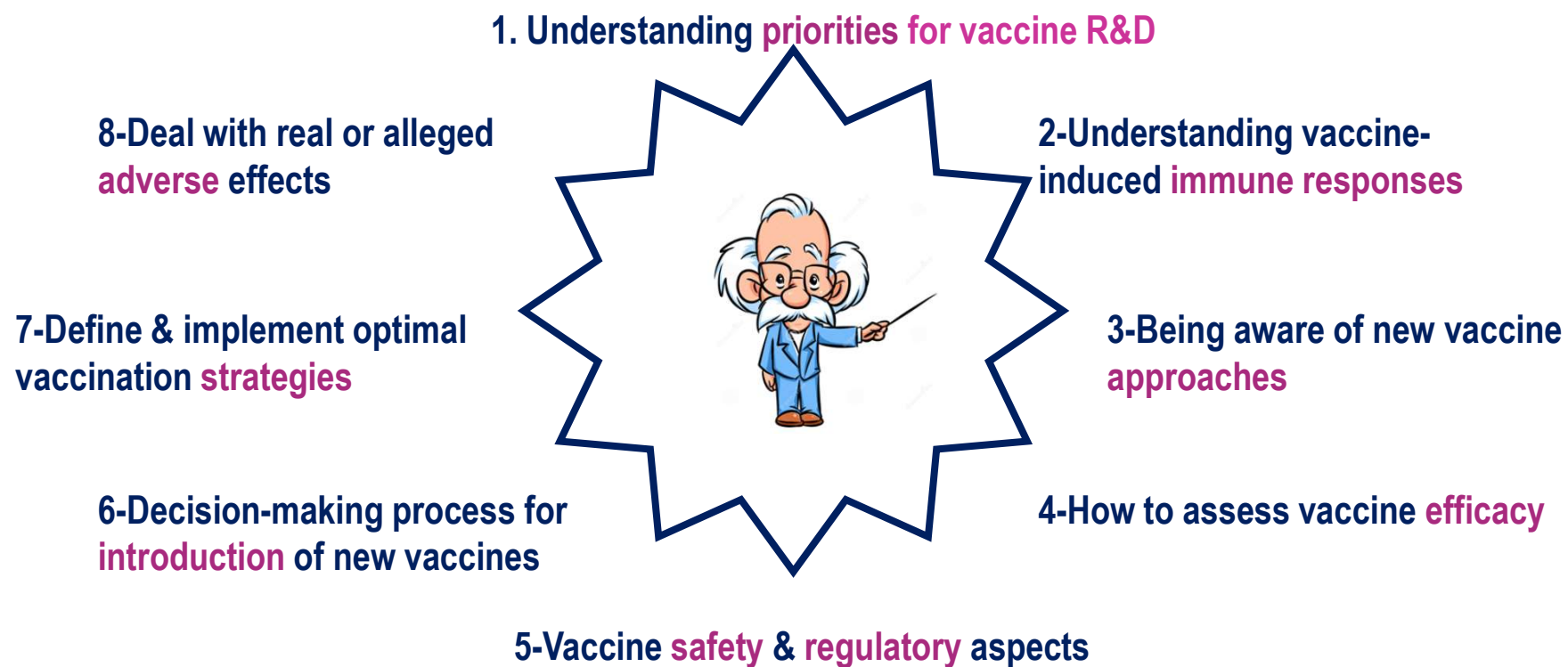
In 2022:

- 71 participants
- 39 countries
- 21 BMGF, 6 EDCTP, 1 ESPID & 1 NFID fellowships

2000-2022

- 22 courses
- 1355 participants
- 121 countries

Objective: to provide a broad view of the various aspects of vaccinology and tools for better decision-making



- **11 days in person course at Pensieres, Annecy, France**
- **Program:** <https://www.advac.org/images/files/course-program/22nd-ADVAC-PROGRAM-04MAY2022.pdf>

ADVAC alumni network: more than 1400 experts in vaccinology

- <https://www.advac.org/alumni/my-account>
- **Regular alumni meetings around the year (SAGE, ESPID, IDSA, Webinars)**
- **Recording of ADVAC lectures posted on the alumni website**
- **A database of 1400 experts around the world in all areas and sectors**
- **Platform to share information with and between alumni**



ICAVT

INTERNATIONAL COLLABORATION ON
ADVANCED VACCINOLOGY TRAINING

A global network of advanced vaccinology courses

- **A network of 29 courses all over the world**
- **The objective is to assist courses to address challenges in priority areas and facilitate activities and exchange of information**
- **<https://www.global-vaccinology-training.com>**

Perspectives

- Training of experts already working in immunization-vaccines creating a network of 1400 experts with around **60% from LMICs**
- The need to increase the LMICs participation to ensure that LMICs have even more vaccinology experts to **create the environment needed for a thriving industry**
- The **need for DCVM to support this global effort** (ADVAC and other courses, Alumni network, ICAVT)
- **Send more of your staff to the course!**
- Support the development of Alumni courses to keep them updated on the future of DCVMN