

Lecture Series of the Research Institute for Supply Chain Management

Monday, April 26, 2021. Beginning 5:30 pm



NICO VANDAELE:

A TRANSDISCIPLINARY, SYSTEM-BASED APPROACH TO COPE WITH COVID-19 VACCINE SUPPLY CHALLENGES

Infectious diseases pose a serious threat to global health and the economy, as the COVID-19 pandemic painfully shows. In terms of prevention, vaccines are widely recognized as a powerful tool to fight epidemics. However, not only is the development of vaccines challenging, but also the manufacturing and distribution of vaccines on a potentially global scale is anything but trivial. This requires a substantial investment, both in physical and human capital, in which many unknowns and uncertainties reside. To avoid delays once the vaccine candidates are ready for scale-up, a global and sustainable vaccine manufacturing and distribution network needs to be established, both to support planned immunization as well as to be prepared for outbreak response. In an End-To-End approach multiple aspects of the supply network need to be considered and coordinated, in a way that many upstream decisions and aspects in R&D have a considerable impact on the downstream supply network up to the very last mile and point of vaccination.

Nico Vandaele holds a degree Business Engineering and obtained a PhD in Applied Economics, Operations Research and Operations Management from KU Leuven in 1996. As full professor at KU Leuven, he is holder of the GSK Research Chair on Access-to-Medicines, the Janssen Pharmaceutica Research Chair on Pandemic Preparedness and leads the Access-to-Medicines Research Center. Nico Vandaele teaches courses in operations research, operations management, supply chain management and health systems design.

He is intensively involved in health system design, with current focus on immunization, Covid-19, HIV and neglected tropical diseases in a Sub-Sahara context, in collaboration with various international organizations. His other research interests are situated in supply chain design, modeling of manufacturing and service systems, the design of planning systems, sales and operations management, health care management and traffic modeling. Another research area deals with decision support systems for product design and development and (R&D) portfolio management.

He is associate editor of Flexible Services and Manufacturing Journal, published in multiple OR/MS and OM journals, is co-founder of the Health Care Systems Engineering conference and is board member of the EURO WG on Humanitarian Operations and the WG on Stochastic Modeling.

He is passionate about his fruit garden, enjoys running in the woods, loves a glass of tasty wine and hopes, despite climate change, future generations will be able to enjoy all the beauty of our planet. That's why health systems in resource limited setting triggers his current research.

<https://feb.kuleuven.be/drc/Operations%20Management/misc/GSKchair>
<https://feb.kuleuven.be/nico.vandaele>

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