Andres Alban

Frankfurt School of Finance & Management, Germany

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ACADEMIC POSITIONS

- Assistant Professor of Operations Management, Frankfurt School of Finance & Management (2023-present)
- Postdoctoral research fellow, MGH Institute for Technology Assessment, Harvard Medical School (2021-2023)

EDUCATION

Ph.D.	INSEAD, Technology and Operations Management (2021)
M.S.	INSEAD, M.S. in Management (2018)
	GPA: 3.9
B.S.	New Jersey Institute of Technology, double major in applied mathematics and physics (2016)
	Albert Dorman Honors College, GPA: 4.0

RESEARCH INTERESTS

My research interests lie broadly in the application of simulation, optimization, and data analysis to support health care decision-making.

JOURNAL PUBLICATIONS

- Alban, A., Chick, S. E., and Zoumpoulis, S. I. (2025). Learning personalized treatment strategies with predictive and prognostic covariates in adaptive clinical trials. *Management Science.* To appear
- Alban, A., Chick, S. E., and Forster, M. (2023). Value-based clinical trials: selecting trial lengths and recruitment rates in different regulatory contexts. *Management Science.* Finalist POMS College of Healthcare Operations Management Best Paper Competition 2021
- Alban, A., Blaettchen, P., de Vries, H., and Van Wassenhove, L. N. (2021a). Resource allocation with sigmoidal demands: Mobile healthcare units and service adoption. *Manufacturing & Service Operations Management.*
- Alban, A., Darji, H. A., Imamura, A., and Nakayama, M. K. (2017). Efficient Monte Carlo methods for estimating failure probabilities. *Reliability Engineering and System Safety*

Healthcare application papers:

- Sent, D., van der Meulen, D. M., Alban, A., Chick, S. E., Wissink, I. J., Vlaar, A. P., and Dongelmans, D. A. (2024). A quality improvement study on how a simulation model can help decision making on organization of ICU wards. *BMC Health Services Research*
- Ten Haaf, K., de Nijs, K., Simoni, G., Alban, A., Cao, P., Sun, Z., Yong, J., Jeon, J., Toumazis, I., Han, S. S., et al. (2024). The impact of model assumptions on personalized lung cancer screening recommendations. *Medical Decision Making*
- Forster, M., Brealey, S., Chick, S. E., Keding, A., Corbacho, B., Alban, A., and Rangan, A. (2021). Cost-effective clinical trial design: Application of a Bayesian sequential stopping rule to the profher pragmatic trial. *Clinical Trials.*
- Alban, A., Chick, S. E., Dongelmans, D. A., Vlaar, A. P. J., and Sent, D. (2020a). ICU capacity management during the COVID-19 pandemic using a process simulation. *Intensive Care Medicine*

CONFERENCE PROCEEDINGS

- Alban, A., Chick, S. E., and Zoumpoulis, S. I. (2024). Estimating value of information arm allocation indices in contextual ranking and selection problems. In *Proceedings of the 2024 Winter Simulation Conference*. IEEE, Inc

- Alban, A., Chick, S. E., and Zoumpoulis, S. I. (2021b). Expected value of information methods for contextual ranking and selection: Clinical trials and simulation optimization. In *Proceedings of the 2021 Winter Simulation Conference*

- Alban, A., Chick, S. E., Lvova, O., and Sent, D. (2020b). A simulation model to evaluate the patient flow in an intensive care unit under different levels of specialization. In *Proceedings of the 2020 Winter Simulation Conference*

- Alban, A., Chick, S. E., and Forster, M. (2018). Extending a Bayesian decision-theoretic approach to value-based sequential clinical trial design. In *Proceedings of the 2018 Winter Simulation Conference*

- Alban, A., Darji, H. A., Imamura, A., and Nakayama, M. K. (2016). Variance reduction for estimating a failure probability with multiple criteria. In *Proceedings of the 2016 Winter Simulation Conference*

GRANTS AND AWARDS

- Luk N. Van Wassenhove Ph.D. Student Research Award 2019-2020, INSEAD
- European Sepsis Academy, grant provided by the European Union, 2016-2019
  - Attended courses on pathogenesis and treatment of sepsis (Amsterdam University Medical Center), diagnostics technologies (BioMérieux), immune functional assays (BioMérieux), mini MBA (INSEAD), sepsis clinical course (University College London)
- NJIT Provost's Undergraduate Summer Research program, 2014 and 2015
- NJIT Albert Dorman Honors College Scholarship

TEACHING

- Operations management core class for bachelor's students, Frankfurt School of Finance & Management, 2023-2024
- Teaching Assistant for the process and operations management core class for MBA students (online), INSEAD, Spring 2020
- Math tutorials for PhD students, INSEAD, Fall 2017.

SKILLS

- Programming: Julia, R, Matlab, Python, C++
- Languages: Spanish (native), English (fluent), German (intermediate), French (basic)
- Sports: tennis (played NCAA division I at NJIT with scholarship), padel, soccer, ultimate frisbee, basketball