

# Andres Alban

INSEAD, Boulevard de Constance, Fontainebleau, France 77305  
[andres.alban@insead.edu](mailto:andres.alban@insead.edu) | [andres-alban.github.io](https://github.com/andres-alban) | +33 6 43 93 54 59

## EDUCATION

---

- Ph.D.** INSEAD, Technology and Operations Management (expected 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

---

Healthcare operations, clinical trials, Bayesian sequential optimization, stochastic simulation

## JOURNAL PUBLICATIONS

---

- Alban, A., Chick, S. E., Dongelmans, D. A., Vlaar, A. P. J., and Sent, D. (2020b). ICU capacity management during the covid - 19 pandemic using a process simulation. *Intensive Care Medicine*
- 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*, 165:376–394

## WORKING PAPERS

---

- Alban, A., Chick, S. E., and Forster, M. (2020c). Value-based clinical trials: selecting trial lengths and recruitment rates in different regulatory contexts. Major revision at Management Science
- Alban, A., Blaettchen, P., de Vries, H., and Van Wassenhove, L. N. (2020a). Resource allocation with sigmoidal demands: A data-driven approach to managing mobile healthcare units. Major revision at M&SOM
- Forster, M., Brealey, S., Chick, S. E., Keding, A., Corbacho, B., Alban, A., and Rangan, A. (2019). Cost-effective clinical trial design: Application of a Bayesian sequential stopping rule to the profler pragmatic trial. In submission to Clinical Trials

## WORK IN PROGRESS

---

- Alban, A., Chick, S. E., and Zoumpoulis, S. A value of information approach to designing sequential clinical trials for precision medicine. In progress
- Alban, A., Uhel, F., Zoumpoulis, S., Vlaar, A., Chick, S. E., and Scicluna, B. Blood transcriptomic endotypes and the response to fluid treatment in sepsis: A prospective cohort study. In progress

## CONFERENCE PROCEEDINGS

---

- Alban, A., Chick, S. E., Lvova, O., and Sent, D. (2020d). A simulation model to evaluate the patient flow in an intensive care unit under different levels of specialization. To appear in Winter Simulation Conference 2020
- 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*, pages 2459–2470
- 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*, pages 302–313

## CONFERENCE PRESENTATIONS

---

- A Value of Information Approach to Designing Sequential Clinical Trials for Personalized Health Care. With Stephen E. Chick and Spyros I. Zoumpoulis. *INFORMS Annual Meeting 2019*.

- Fair and efficient? Capacity allocation of mobile family planning services in Uganda. With Philippe Blaettchen, Harwin de Vries, and Luk Van Wassenhove. *INFORMS Annual Meeting 2019*.
- Personalized Fluid Management in Sepsis Using Transcriptomic Endotypes. With Stephen E. Chick, Spyros I. Zoumpoulis, Brendon P. Scicluna, Fabrice Uhel, and Alexander P.J. Vlaar. *INFORMS Healthcare 2019*.
- Value-Based Clinical Trial Design to Account for Features of Pragmatic Trials. With Stephen E. Chick and Martin Forster. *POMS Annual Conference 2019*.
- Extending a Bayesian Decision-Theoretic Approach to Value-Based Sequential Clinical Trials. With Stephen E. Chick and Martin Forster. *Winter Simulation Conference 2018*.

## 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

---

- Process and operations management core class for MBA students (online), INSEAD, Spring 2020
- Math tutorials for PhD students, INSEAD, Fall 2017.
- Math tutor and recitation assistant, NJIT Math Tutoring Center, 2013-2016.

## SKILLS

---

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