Naval Research Logistics Special Issue on "Developing Pandemic Preparedness Using Artificial Intelligence, Data Analytics, and Operations Research"

As of March 2022, the COVID-19 pandemic has claimed over 6 million lives worldwide, including nearly 1 million in the United States. The pandemic is projected to cost the US $16 trillion, or over 90% of its annual economic output (Cutler and Summers 2020). Not only has the pandemic had a profound effect on health, economy, culture, and society, but it has also shaped the fields of artificial intelligence, data analytics, and operations research, and will continue to do so for some decades to come, both in terms of research themes and methodologies.

The purpose of this special issue is to feature high-quality research from the operations research and analytics fields that is motivated by COVID-19 and/or that contributes to pandemic preparedness. All analytics methodologies are considered, and possible topics include, but are not limited to, the following:

- The role of artificial intelligence, data analytics, and operations research in supporting healthcare operations, resource allocation, and public policy decisions
- Vaccine design, manufacturing, and distribution
- Infectious disease testing system design and optimization
- Impact of pandemic response on non-COVID-19 healthcare delivery
- Novel methodological advances inspired by the COVID-19 pandemic
- Building resilient pharmaceutical and medical device supply chains and logistics systems for pandemic preparedness.

To facilitate speedy dissemination of research, **all AEs and reviewers will be asked to select between Accept, Minor Revision, or Reject**, in order to prevent manuscripts from being entangled in major revisions. If invited, all the revisions are expected to be mainly expositional in nature, and must be completed within three months. Manuscripts must adhere to the same rigorous standards as NRL publications. We are especially interested in studies that are timely, impactful, and relevant to practice.

Guest Editors:

- Sanjay Mehrotra, Northwestern University (mehrotra@northwestern.edu)
- Ebru Bish, University of Alabama (ekbish@cba.ua.edu)
- Tinglong Dai, Johns Hopkins University (dai@jhu.edu)

Guest Associate Editors:

- Hamsa Sridhar Bastani, University of Pennsylvania
- Ningyuan Chen, University of Toronto
- Alexandre Jacquillat, Massachusetts Institute of Technology
- Soroush Saghafian, Harvard University
- Pengyi Shi, Purdue University
- John Silberholz, University of Michigan
- Nikos Trichakis, Massachusetts Institute of Technology
- Serhan Ziya, University of North Carolina at Chapel Hill

Timeline:

We accept submissions any time before the deadline. The review process will begin immediately after submission, with a first-round decision expected within three months and a final decision expected within nine months (if a revision is requested).

Submission deadline: September 1, 2022

First-round decisions: December 31, 2022

Revise-and-resubmit deadline (if invited): March 31, 2023

Final decisions: June 15, 2023

Instructions:

Submissions should be directed to the journal's online submission system, https://wiley.atyponrex.com/journal/NAV. Authors should suggest AEs and referees, and select "Developing Pandemic Preparedness Using Artificial Intelligence, Data Analytics, and Operations Research" for the "Special Issue" question. Detailed author guidelines for the journal may be found at https://onlinelibrary.wiley.com/page/journal/15206750/homepage/forauthors.html. The journal encourages succinct and clear writing, but there are no page limitations. Papers may have a full-length appendix.