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## Commented Summary of a Year of Work in Covid-19 Statistical Modeling

*Wednesday, 15 September 2021 14:20 (20 minutes)*

We summarize eleven months of pro-bono work on statistical modeling and analysis of Covid-19 topics. For each of the papers and tutorials included here we provide a one-paragraph summary and commentary, including methods used, results, and possible public health applications, as well as the ResearchGate url to access them. Section 1 is an Introduction. In Section 2 we describe the web page created, and its main sections. In Section 3 we summarize three papers on Design of Experiments and Quality Control Applications. In Section 4, we summarize four papers on Reliability, Survival Analysis and Logistics Applications to Vaccine development. In Section 5 we summarize three papers on Multivariate Analysis (Principal Components, Discriminant Analyses) and Logistics Regression. In Section 6 we summarize three Stochastic Process papers that implement Markov Chain models to analyze herd immunization. In Section 7, we summarize three papers on Socio-economic analyses of vaccine rollout, and race, ethnicity and class problems, derived from Covid-19. In Section 8, we conclude, discussing the procedures used to produce these papers, and the audiences we hope to reach.

### Keywords

Covid-19, statistical modeling and analysis

### Special/invited session

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