

# IC2020\_06\_POSTDOCTORAL FELLOWSHIP\_COVID\_AS

## Company Description

BCAM is the research center on applied mathematics created with the support of the Basque Government and the University of the Basque Country, which aims to strengthen the Basque science and technology system, by performing interdisciplinary research in the frontiers of mathematics, talented scientists' training and attraction, so the excellence of our results are recognized by the Society.

### Information

Deadline: 2020-07-13
Category: Business

Province: Bizkaja

Company

**BCAM** 



### Main functions, requisites & benefits

#### Main functions

Development of mathematical/statistical methods and computational tools for modelling the transmission dynamics of SARS-Cov-2 with a special focus on the prediction of health care resources. Our proposal rests on the combination of mechanistic models and Bayesian inference for uncertainty quantification and the development of efficient Markov Chain Monte Carlo (MCMC) samplers and numerical algorithms for the real-time use of the results. The selected candidate will work with members of the research lines of "Applied Statistics" and "Modelling and Simulation in Life and Material Sciences" of the BCAM.

#### Requisites

Requirements: Promising young researchers. Applicants must have their PhD completed before the contract starts. PhD degree preferable in Mathematics, Statistics or related fields. Skills and Track-Record: Good interpersonal skills. A proven track record in quality research, as evidenced by research publications in top scientific journals and conferences. Demonstrated ability to work independently and as part of a collaborative research team. Ability to present and publish research outcomes in spoken (talks) and written (papers) form. Ability to effectively communicate and present research ideas to researchers and stakeholders with different backgrounds. Fluency in spoken and written English. Scientific Profile: The preferred candidate will have: Strong background in Bayesian statistical modelling and inference. Background in MCMC and Hamiltonian Monte Carlo is highly desirable. Good programming skills in R, Python and/or C. Research experience in applied Statistics in interdisciplinary applications.

