

# The Research Group of Biomathematics

## Biomathematics - the Mathematics of Life

*The mathematician owns a wonderful tool created by the efforts of many ingenious people, accumulated through the centuries.  
He has the key that can open a way to the many mysteries of the Universe and obtain, by a few symbols,  
a synthesis that covers and connects many and diverse results of different sciences."  
— Vito Volterra —*

### [2018: The Year of Mathematical Biology](#)

The Research Group of Biomathematics at the University of Helsinki focuses on mathematical modelling and analysis of biological phenomena and processes. The research covers a wide spectrum of topics ranging from problems at the molecular level to the structure of populations. To tackle these problems the research group uses a variety of modelling approaches, most importantly ordinary and partial differential equations, integral equations and stochastic processes. A successful analysis of the models requires the study of pure research in, for instance, the theory of (infinite dimensional) dynamical systems and such research is also carried out by the group. The group collaborates closely with many other domestic and international research groups and is part of the [Finnish Centre of Excellence in Analysis and Dynamics](#) .

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