

# Doctoral School of Information and Biomedical Technologies

## Polish Academy of Sciences (TIB PAN)

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### **SUBJECT:**

Deciphering of biochemical signaling with systems biology and bioinformatics approaches.

### **SUPERVISOR:**

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### **DESCRIPTION:**

Biochemical signaling is a key mechanism to coordinate an organism in all aspects of its function. In multicellular organisms like the human body trillions of cells, of multiple different cell types communicate with each other by releasing a thousand types of molecules such as hormones, growth factors, cytokines, or chemokines. In the project we will intend to go beyond reductionists' descriptions of cellular signaling systems. Using systems biology and bioinformatics approaches we will aim to provide insights how signaling functions in order to inform more efficient therapeutic strategies.

### **BIBLIOGRAPHY:**

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