



## Magdalena Matusiak

Instructor, Pathology

### Bio

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#### BIO

During my doctoral studies, I trained in innate immunity gaining expertise in high throughput genetic engineering, molecular biology, and immunology. My Ph.D. work focused on the macrophage role in the host response to pathogen infection and sterile inflammation. Moving to Stanford, I set myself to work at the forefront of invention and acquire computational skills. Throughout my postdoctoral fellowship, I have worked with surgical pathologists including Drs. Matt van de Rijn, Rob West, Jeanne Shen, and Christian Schürch and leaders in the field of bioinformatics including Drs. Aaron Newman and Andrew Gentes studying macrophages in solid malignancies. In consequence, I effectively transformed from a wet-lab scientist to a computational biologist with expertise in genomics, image analysis, human pathology, and immunology.

#### ACADEMIC APPOINTMENTS

- Instructor, Pathology

#### PROFESSIONAL EDUCATION

- PhD, Ghent University, Belgium , Innate Immunity (2015)
- MSc, Intercollegiate Faculty of Biotechnology, University of Gdańsk and Medical University of Gdańsk, Poland , Biotechnology (2012)
- BSc, Intercollegiate Faculty of Biotechnology, University of Gdańsk and Medical University of Gdańsk, Poland , Biotechnology (2010)

#### COMMUNITY AND INTERNATIONAL WORK

- Data Carpentry Instructor and helper, Stanford

### Research & Scholarship

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#### CURRENT RESEARCH AND SCHOLARLY INTERESTS

My research focuses on revealing clinically relevant prognostic markers associated with myeloid cell biology in solid malignancies. I currently lead two main projects: first, using single-cell RNA Sequencing and bulk tissue genomics to discover tumor-associated macrophage (TAM) diversity and establish their prognostic and predictive markers, second: using multiplex tissue imaging (MIBI) to unravel prognostic markers of spatial heterogeneity in the colon cancer.

### Publications

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#### PUBLICATIONS

- **Expression of SARS-CoV-2 entry receptors in the respiratory tract of healthy individuals, smokers and asthmatics.** *Respiratory research*  
Matusiak, M., Schurch, C. M.  
2020; 21 (1): 252