

Special Issue on
Extracellular Matrix and Immune Niches in Human Disease

CALL FOR PAPERS

Extracellular matrix (ECM) has a broad impact on the basic function of immune cells: affecting cell survival, growth and differentiation, and determining cell shape and migration. As a potential organizer of immune cell compartments, ECM plays an important role in the establishment and maintenance of immune homeostasis under physiological conditions. ECM regulates cellular interaction in various pathological processes, including immune response and wound repair process. In addition, dynamic changes in the extracellular matrix network are also one of the basic features of the tumor microenvironment. ECM can exert effects directly on tumor cells, but can further regulate the development and metastasis of tumors by regulating blood supply and inflammatory cells in the tumor milieu. For example, ECM can remodel the tumor inflammatory microenvironment and tumor immunity by modulating the migration of immune cells.

Although we have a certain understanding of the basic structure of the extracellular matrix and its physiological and pathological functions, there are still many important questions to be answered in this field. The complexity of extracellular matrix is not only reflected in the distribution of extracellular matrix proteins throughout different tissues and organs, but also during different physiological and pathological processes. Fundamental studies are required to explore ECM-immune interactions that occur during tissue homeostasis and infectious diseases, inflammatory diseases as well as malignancy.

This special issue invites original research and review articles that further the understanding and clarify the related fundamental knowledge and underlying mechanism of the interplay between immune cells and their extracellular matrices, in order to explore new therapeutic strategies and improve clinical outcomes.

Potential topics include but are not limited to the following:

- ▶ Immune cell-matrix interaction in the maintenance of tissue homeostasis
- ▶ Immune cell-matrix interaction in tissue repair and regeneration
- ▶ Immune cell-matrix interaction in infectious disease
- ▶ Immune cell-matrix interaction in inflammatory diseases
- ▶ Therapeutic strategies that modulate the extracellular matrix and immune niches in the tumor microenvironment
- ▶ Current clinical perspectives of the ECM and immune niches

Authors can submit their manuscripts through the Manuscript Tracking System at <https://mts.hindawi.com/submit/journals/jir/emin/>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

Lead Guest Editor

Jian Song, University of Muenster,
Muenster, Germany
songj@uni-muenster.de

Guest Editors

Christopher J. Pirozzi, Duke University,
Durham, USA
christopher.pirozzi@dm.duke.edu

Zenghui Teng, University of
Duesseldorf, Duesseldorf, Germany
zenghui.teng@uni-duesseldorf.de

Weidong Cao, The People's Liberation
Army General Hospital, Beijing, China
weidcao@fmmu.edu.cn

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