

Extracellular vesicles

Extracellular vesicles (EVs) are cell-secreted nanoparticles of 30-1000 nm in size. The recent discovery that they contain selected RNAs and proteins that can be transferred from one cell to another suggests a new form of long distance intercellular communication.

Our lab studies EVs as potential drug carriers. We develop methods for large scale EV isolation, investigate tools for drug loading and design novel ways to achieve cell targeting. In addition, we aim to characterize EV components important for uptake and processing by target cells, in order to improve synthetic drug delivery systems through EV-inspired engineering.

Projects:

- *Extracellular vesicle-inspired drug delivery systems*
- *Molecular mechanisms underlying extracellular vesicle-mediated RNA transfer*

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