Programmable Matter 4

Matthias Artmann, Andreas Padalkin, Daniel Warner, Christian Scheideler

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Programmable Matter

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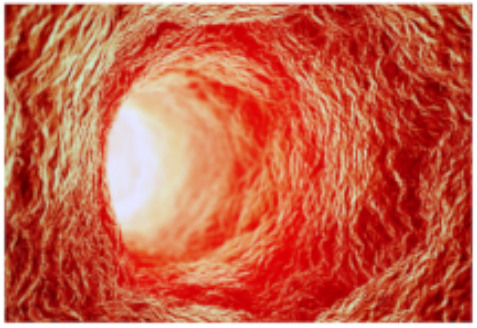
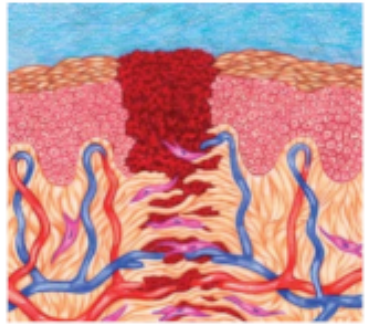
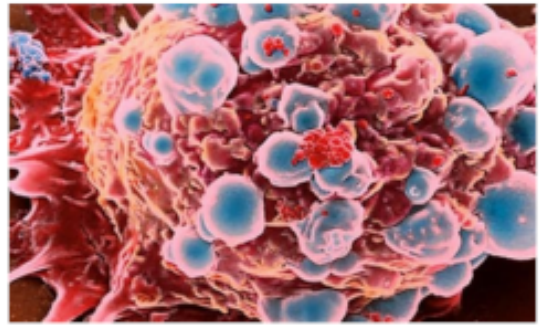
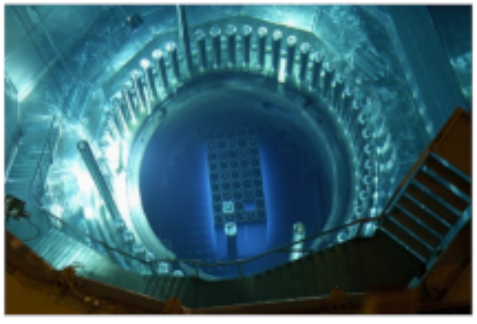
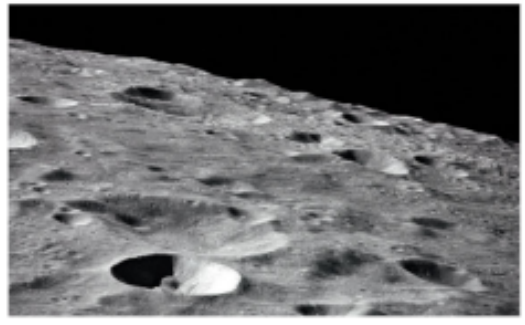
Programmable Matter

Health monitoring / minimal invasive surgery



Monitoring of hazardous/complex environments



Space missions

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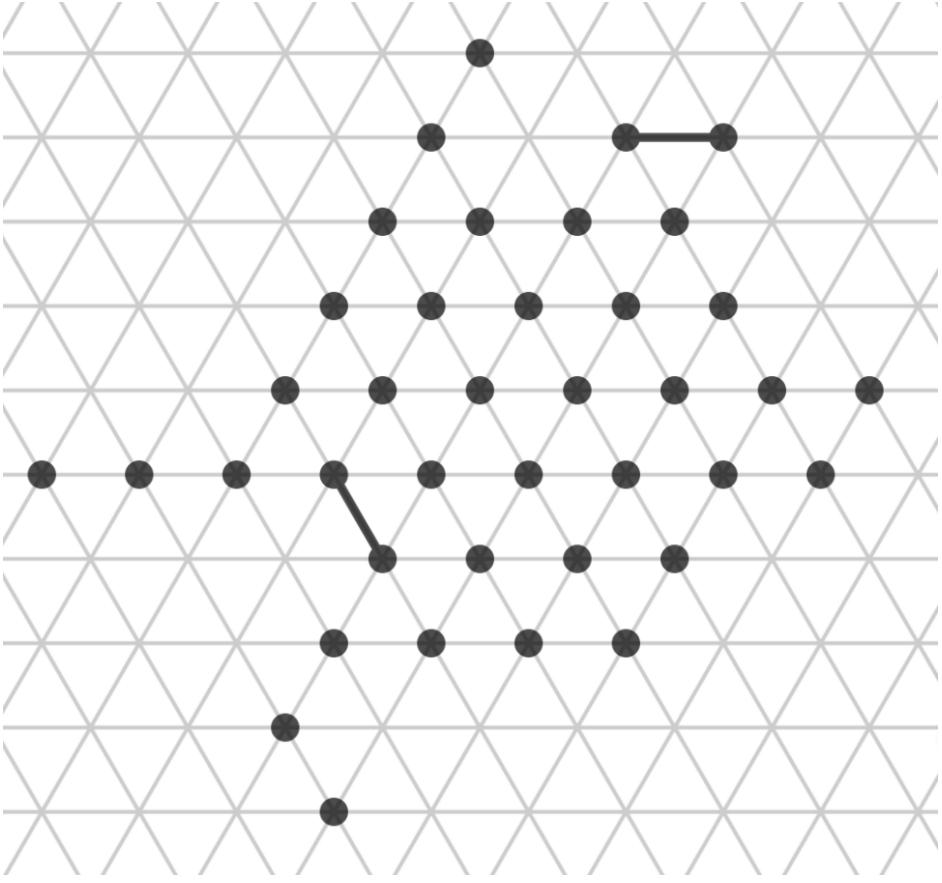
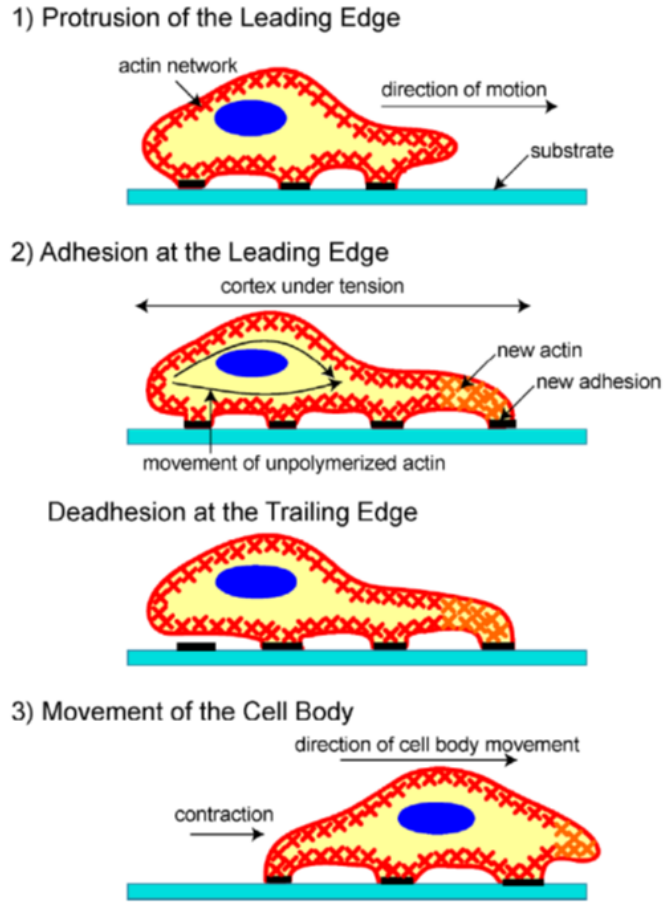
Geometric Amoebot Model





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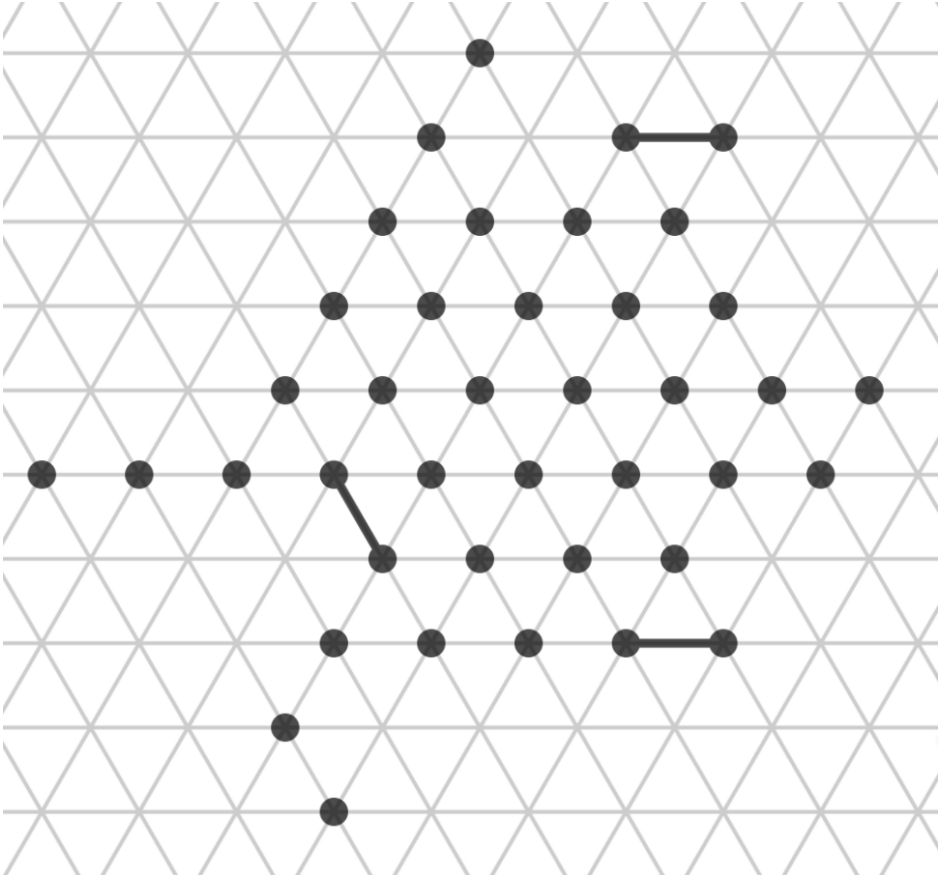

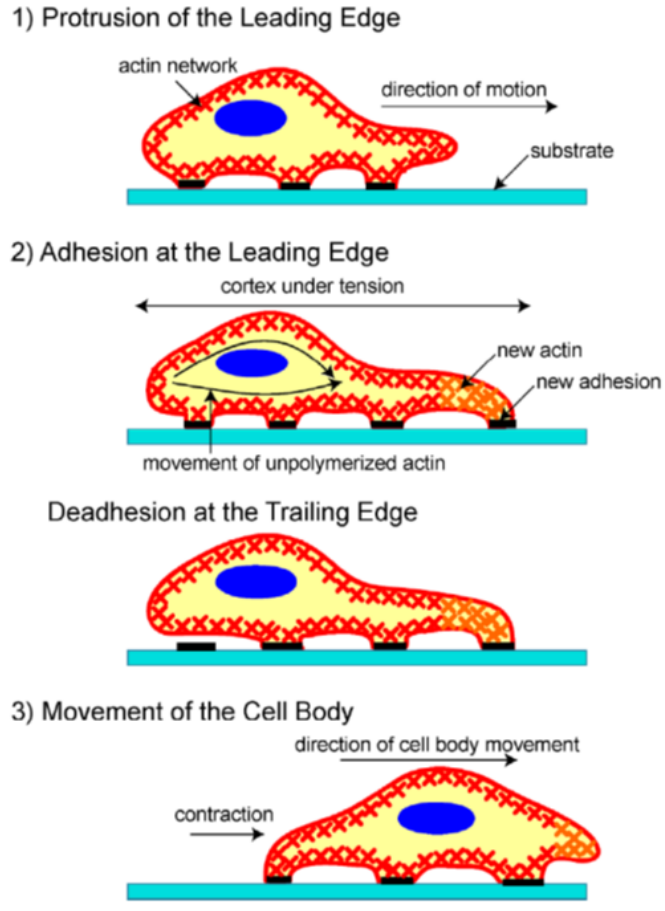

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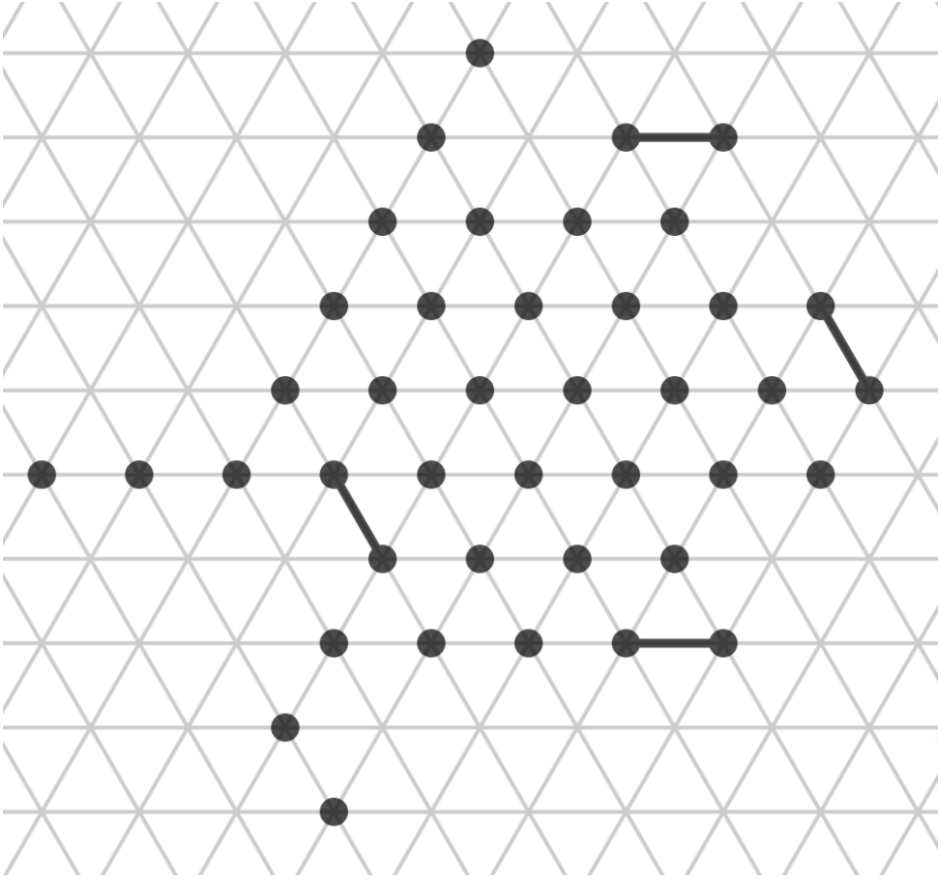

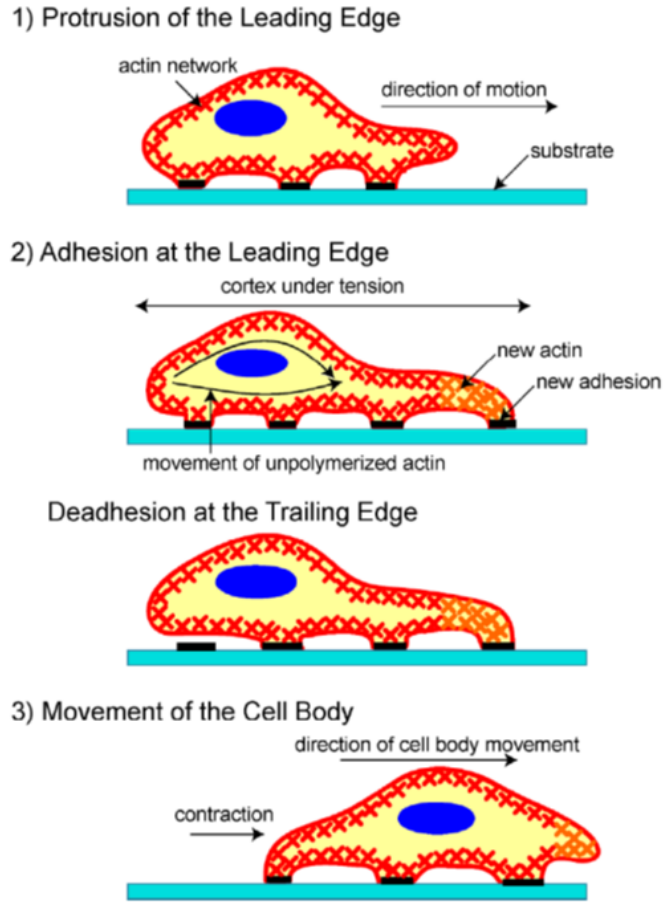

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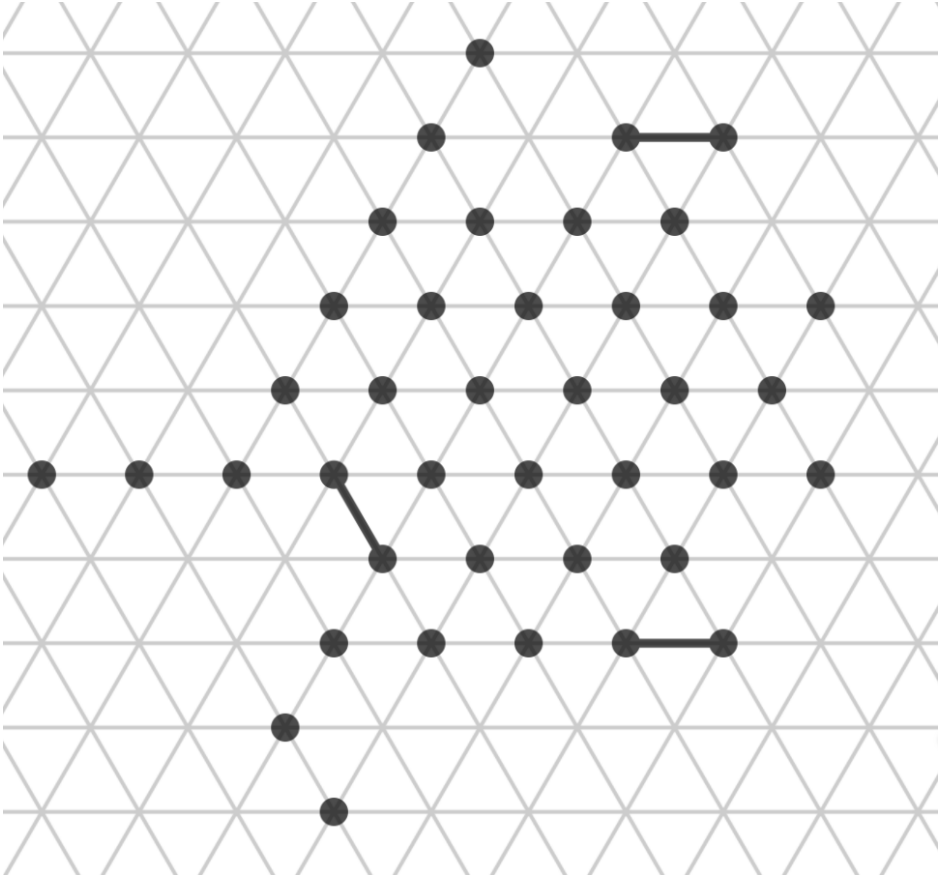

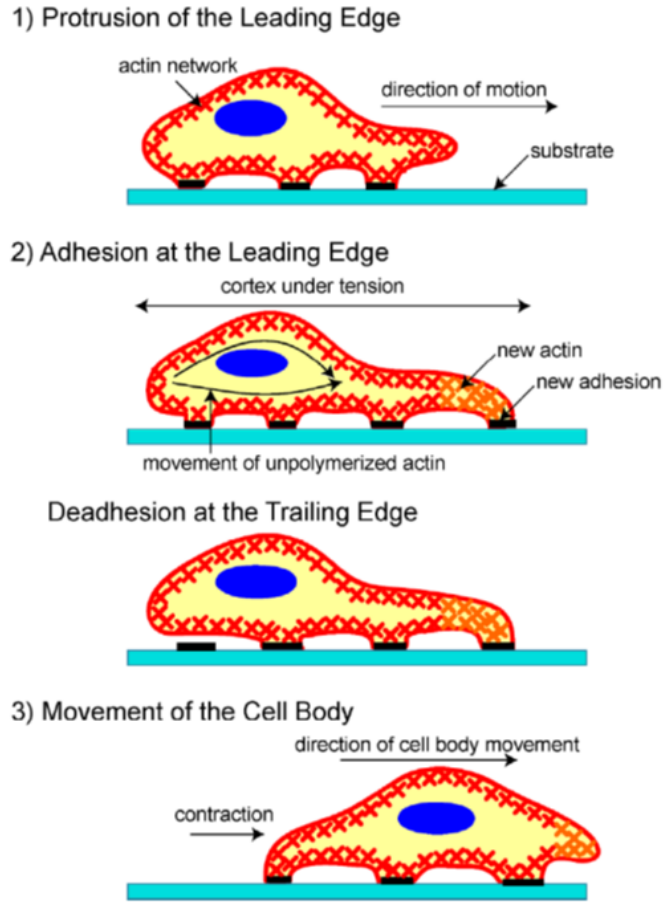

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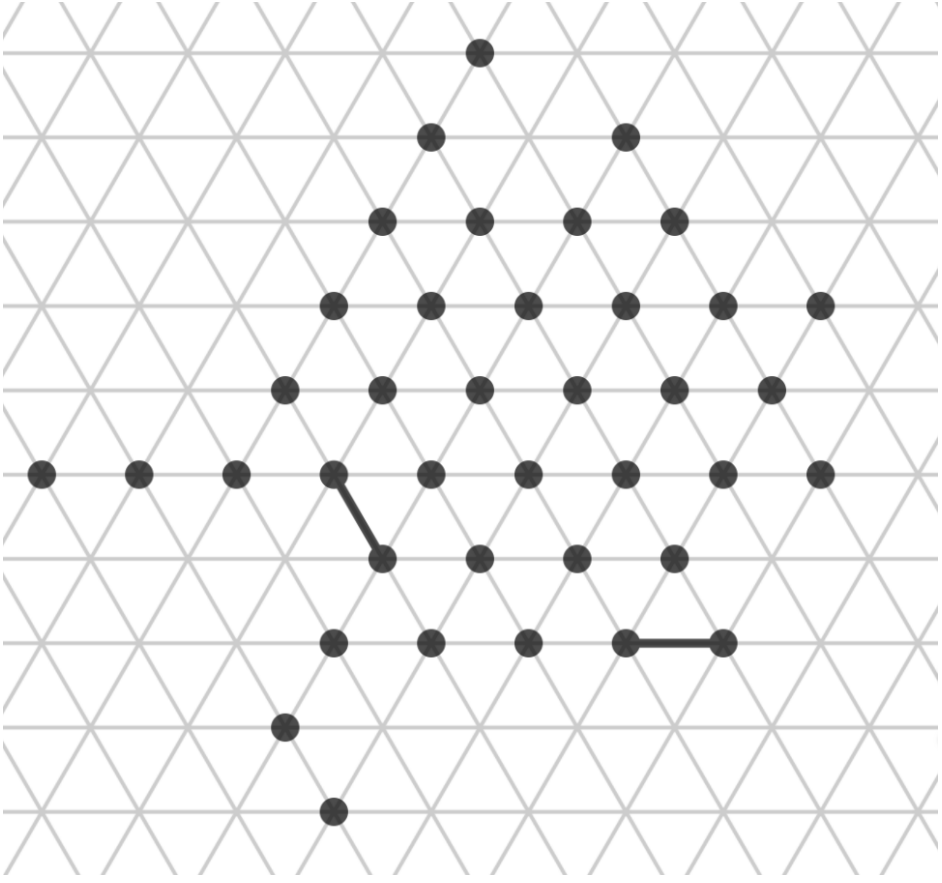

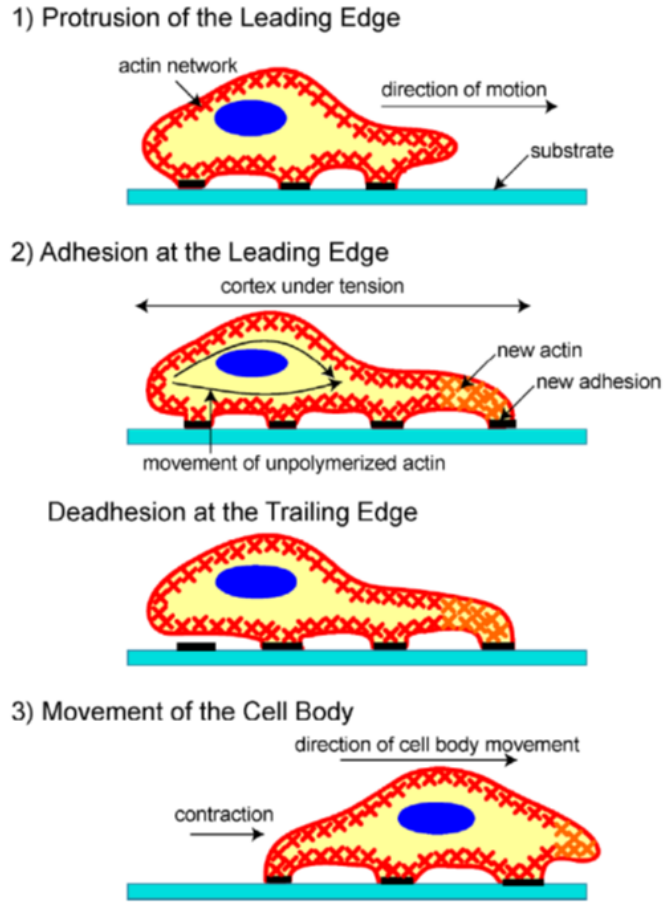

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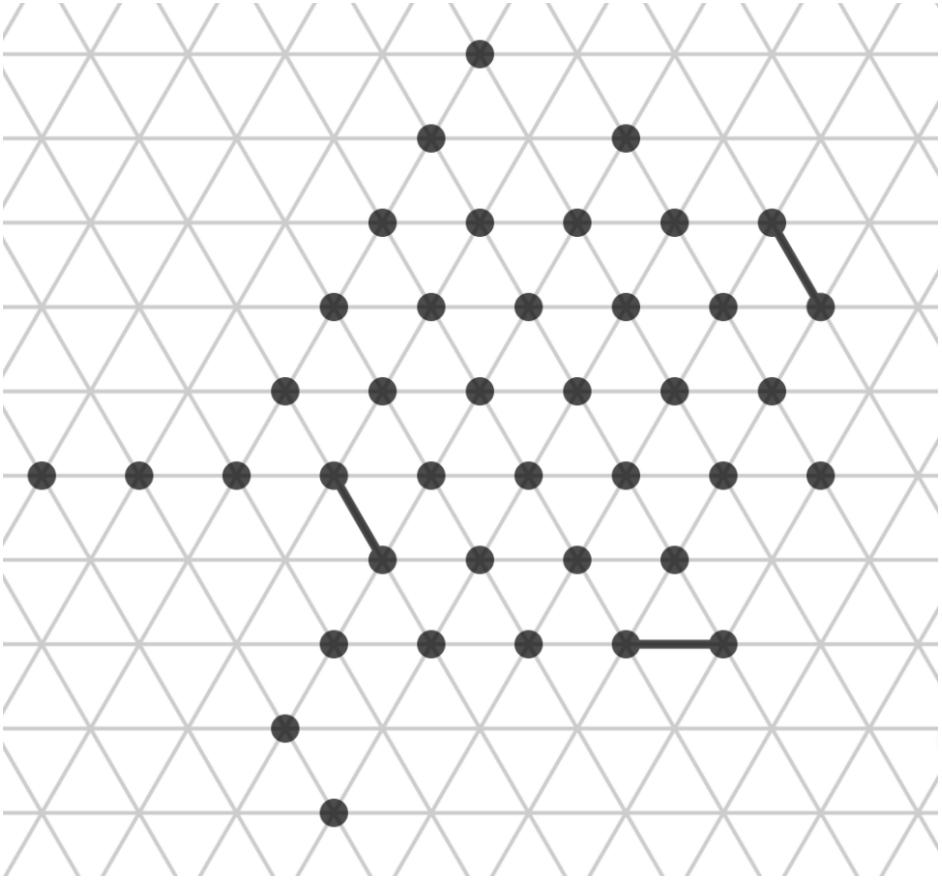

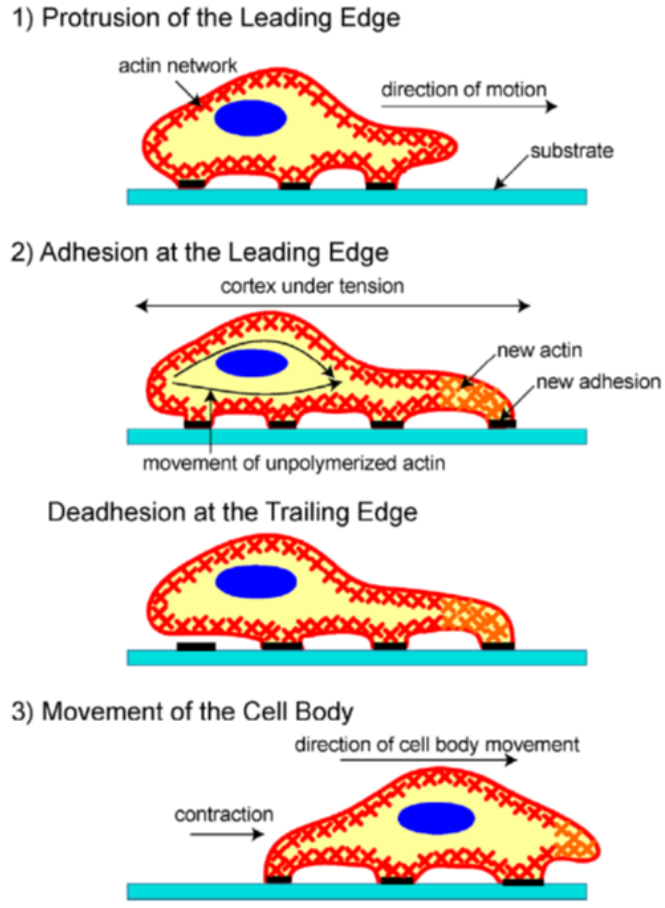

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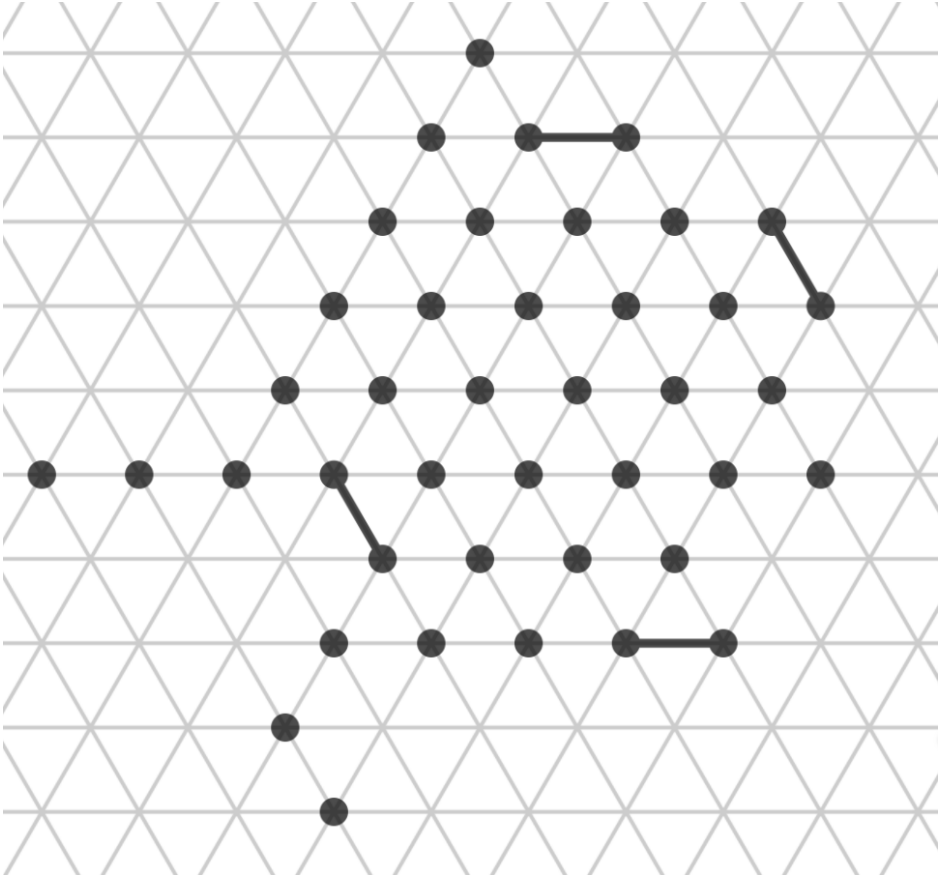

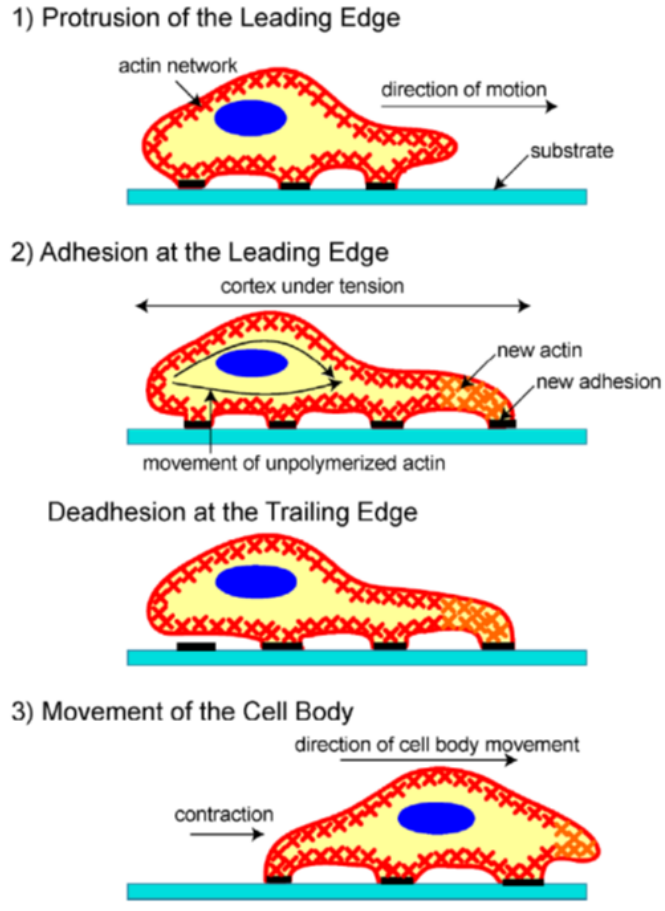

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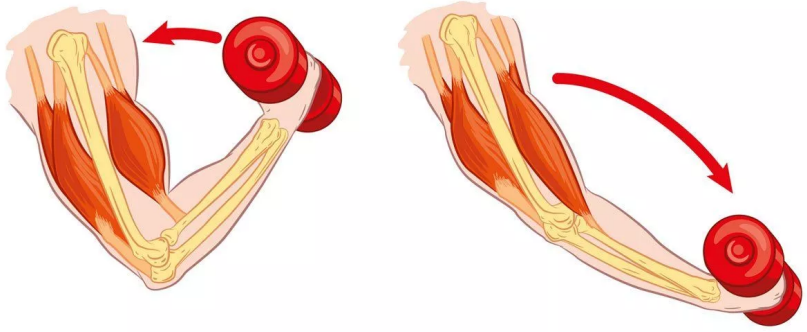
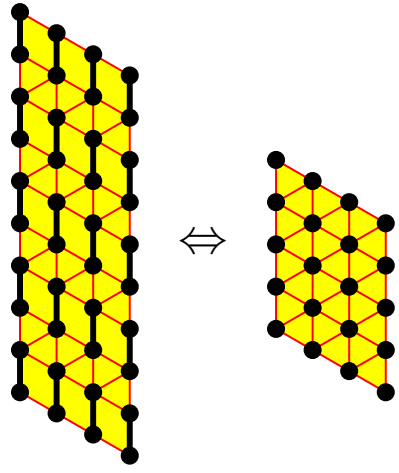
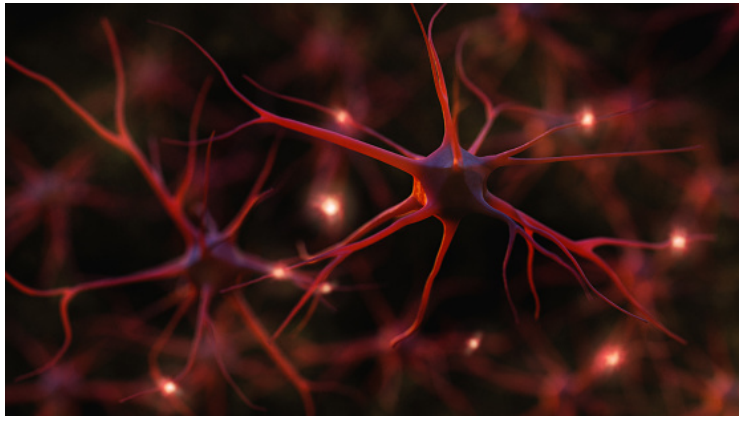
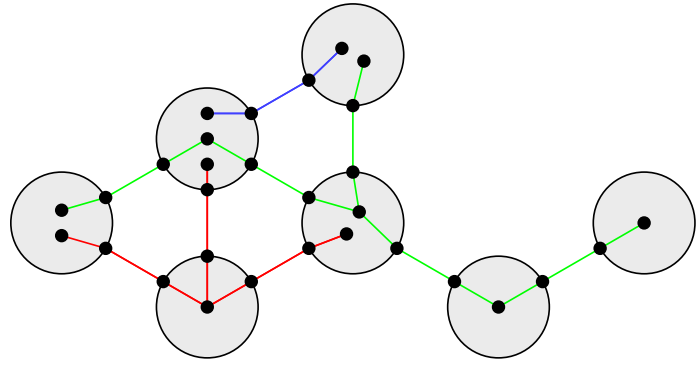
Extensions Inspired by the Muscular and Nervous System









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Structure of the Project Group

Goal

- Design, analyze, and simulate algorithms

First phase: Seminar

- Read papers about the amoebot model and the circuit extension

Second phase: Implementation/Design/Analysis

- Implement and test existing algorithms
- Design new algorithms

Prerequirements

- Ability to understand scientific papers
- Basic programming skills
- Ideally, also analytical skills
- High motivation (programmable matter is a cool topic!)

Thank you for your attention

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