
Science for new frontiers

Prof. Martin Kropff

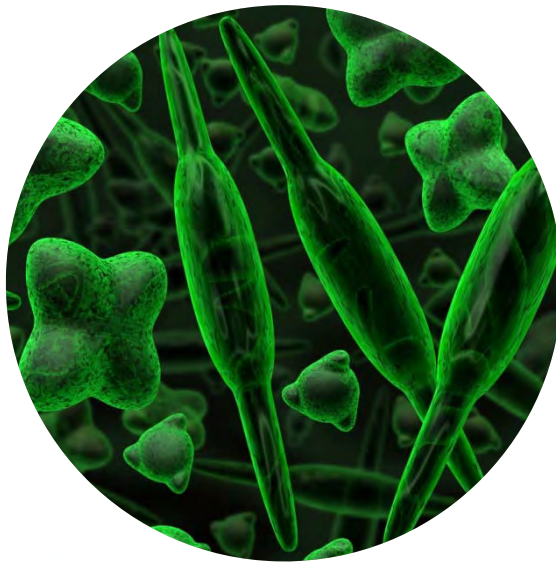
Dies Natalis Wageningen University

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Scientific developments

The image features a central diagram and three journal covers. The central diagram is a circular hub-and-spoke model with a white center containing the text "A complete understanding of a System". Four arrows point from the center to four segments: "Environment" (top), "Cells" (left), "Signaling Networks" (bottom), and "Proteins" (right). Each segment contains a grayscale illustration related to its theme. Surrounding the diagram are three journal covers:
1. **Science** (top left): Issue dated 3 April 1998, Volume 280, Number 5348. The cover features a colorful molecular structure.
2. **Nature** (top right): Issue dated 17 April 1998, Volume 393, Number 6700. The cover features a colorful grid of dots and the headline "ATOM-BY-ATOM ANALYSIS: Elements mapped by annular dark-field electron microscopy".
3. **The Lancet** (bottom left): Issue dated 17 April 1998, Volume 351, Number 9126. The cover features a panda and the headline "The New Stop TB Strategy and the Global Plan, with the important new developments outlined in this issue, present an ideal opportunity to turn the tide against tuberculosis."

Grand challenges

Food security



Climate change



Nutrition and health



Biobased economy

Stewardship

High ranking universities

- Dutch Universities in global top 5
- Universities individually 50-150
- Wageningen 75 (THES)
- Nr 2 Dutch university (THES)
- Nr 1 according to students



Challenges Dutch universities

- Profiling
- Further enhancing performance
- Developing indicators



Challenges

Budget reductions
Top sector policy

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Threats and challenges



Three Frontiers

1. Science: strategic investment themes
2. Quality: excellence
3. Impact: make knowledge available for partners

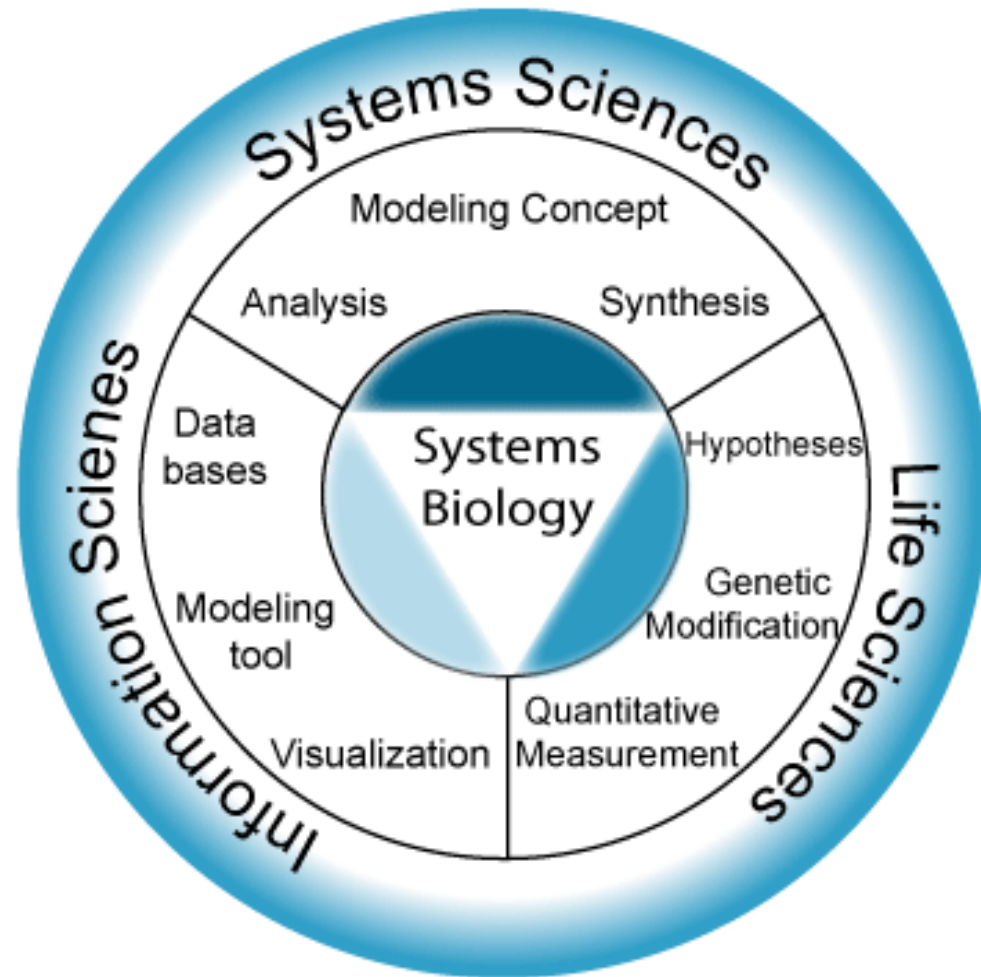
Frontier 1: Informational governance

- Agro food chains
- Environment and natural resource management
- Theory and methodology



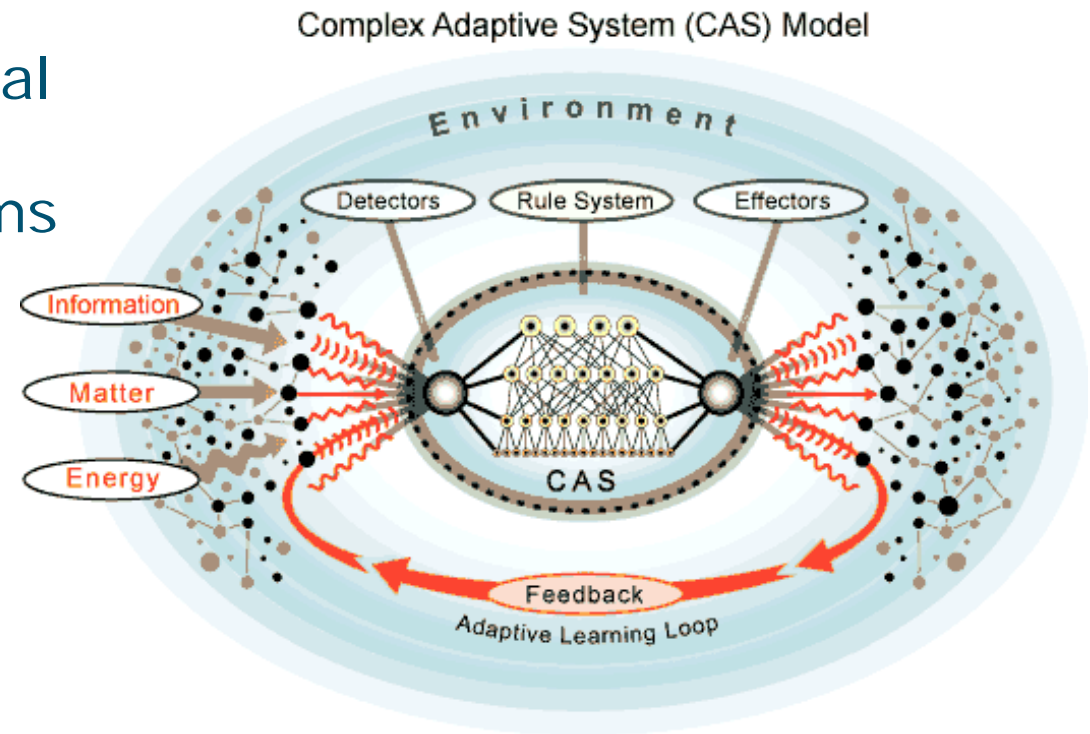
Frontier 1: Systems biology

- Virtual Modelling Laboratory
- Synthetic biology



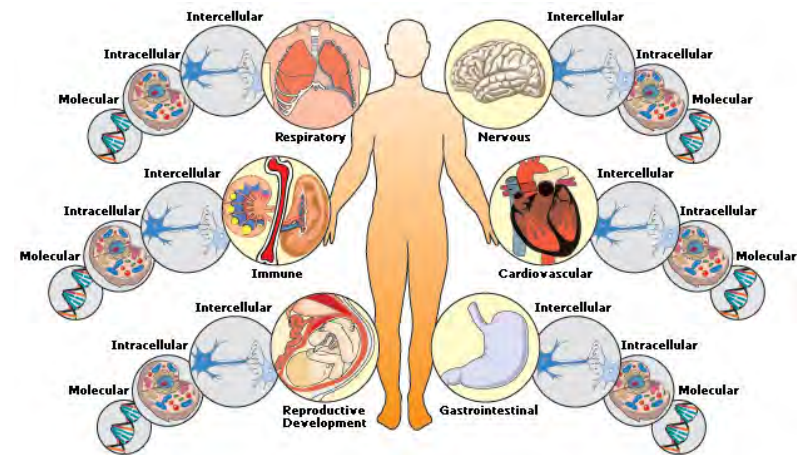
Frontier 1: Complex adaptive systems

Interaction between social systems, ecological systems and food systems



Our ambition

- Leading in systems research



Frontier 2: excellence

- New ERC and VVV grants
- Individual talents in teams
- Tenure track
- Wageningen Young Academy
- Talent programs in education



European Research Council

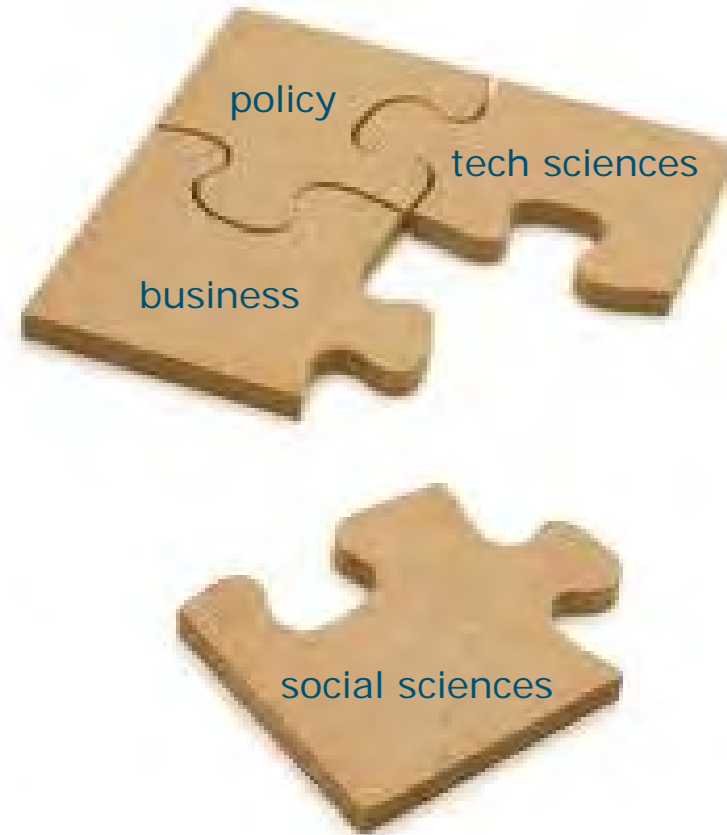




Frontier 3: Impact

Our domain: innovation in progress

Involve social sciences



Frontier 3: Entrepreneurship



StartLife

FOSTERING ENTREPRENEURSHIP

Framework: academic values

- Carefulness
- Responsibility
- Verifiability
- Independence
- Reliability
- Objectivity



Framework: Integrity

Society rightly looks to scientists for fairness and impartiality. Dishonesty, whatever its form and motivation, is a stain on the individual and the profession

Editorial in Nature

Wageningen UR safeguards its integrity through its scientific integrity officer and a new committee scientific integrity

Conclusions

Wageningen UR is:

- Ready for a leading role in our domain
- Ready to take the lead in systems research
- Ready to address societal challenges
- Safeguarding scientific integrity

Through coherent education and research programs
with our partners

Thank you

