

# Interdisciplinarity and my career

JESSICA ABBOTT, SENIOR LECTURER IN BIOLOGY, LUND UNIVERSITY

Image: Fredrik Tersmeden, Wikipedia

# My background and current research

---

- Originally from Canada



Image: L33th4x0r, Wikipedia

# My background and current research

---

- Originally from Canada
- Moved to Lund as exchange student

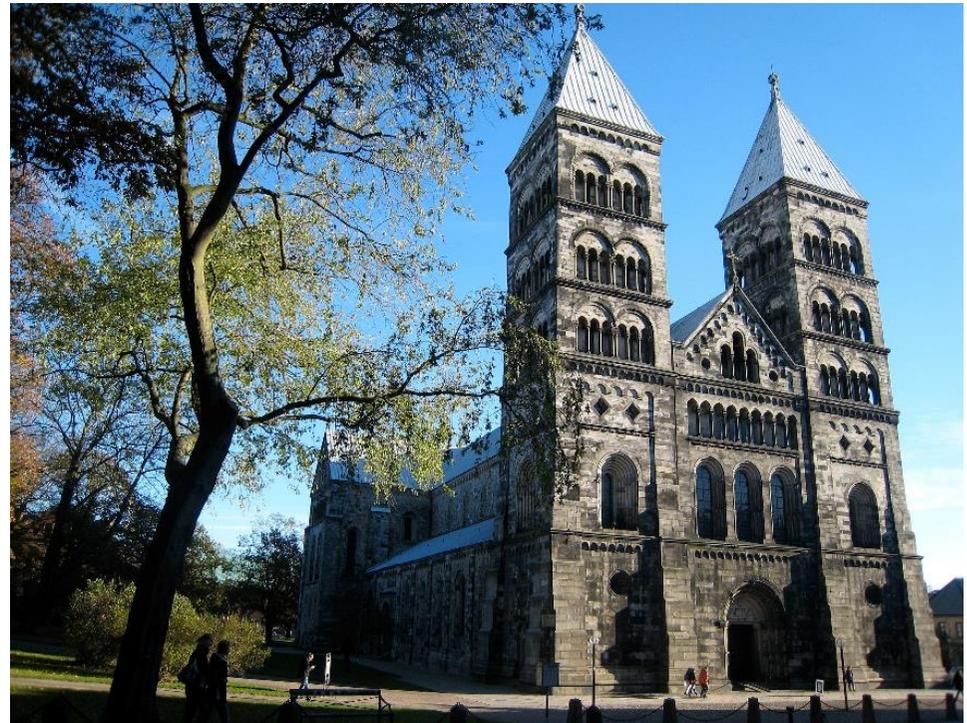


Image: Kallekn, Wikipedia

# My background and current research

---

- Originally from Canada
- Moved to Lund as exchange student
- PhD on colour polymorphism in damselflies



Image: Charles J. Sharp, Wikipedia

# My background and current research

---

- Originally from Canada
- Moved to Lund as exchange student
- PhD on colour polymorphism in damselflies
- Postdoc on evolution of sex differences in *Drosophila*



Image: Qinyang Li, by permission

# My background and current research

---

- Originally from Canada
- Moved to Lund as exchange student
- PhD on colour polymorphism in damselflies
- Postdoc on evolution of sex differences in *Drosophila*
- Working since 2012 on sex chromosome evolution using *Drosophila* and flatworms



Image: Lukas Schärer, by permission

# First encounters

---

- Workshops about interdisciplinarity



**WINGS**

A NETWORK PROMOTING  
GENDER BALANCE IN ACADEMIA

# First encounters

---

- Workshops about interdisciplinarity
- Outreach on various topics not directly related to my research



# First encounters

---

- Workshops about interdisciplinarity
- Outreach on various topics not directly related to my research
- Contacted as participant to Pufendorf theme



Image: Fredrik Tersmeden, Wikipedia

# Pufendorf institute: A plurality of lives

---

- What is the Pufendorf institute?

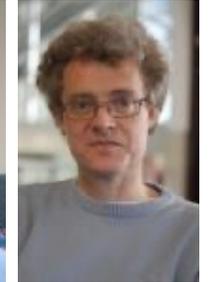
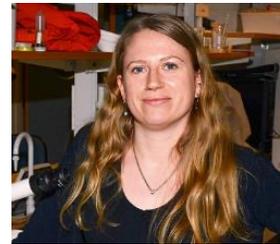


Image: Fredrik Tersmeden, Wikipedia

# Pufendorf institute: A plurality of lives

---

- What is the Pufendorf institute?
- Theme: A plurality of lives



Images: Lund University, by permission

# Pufendorf institute: A plurality of lives

---

- What is the Pufendorf institute?
- Theme: A plurality of lives
- My contribution: defining life

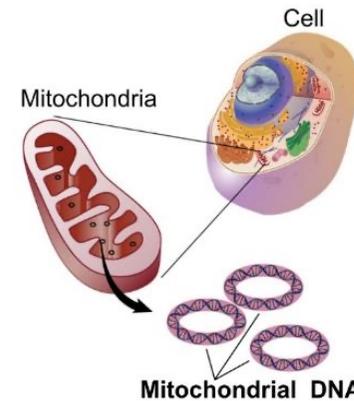
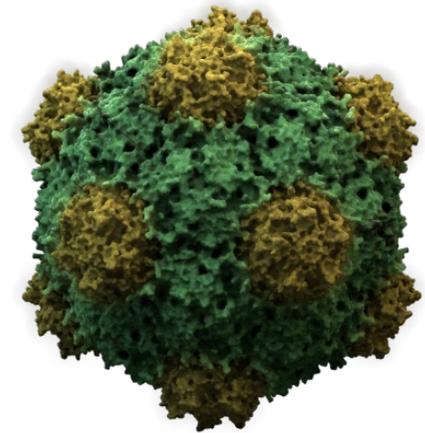


Images: Consumer Reports, Alvesgaspar, National Human Genome Research Institute, Thomas Splettstoesser

# Pufendorf institute: A plurality of lives

---

- What is the Pufendorf institute?
- Theme: A plurality of lives
- My contribution: defining life



Images: Consumer Reports, Alvesgaspar, National Human Genome Research Institute, Thomas Splettstoesser

# Pufendorf institute: Output

---

- Edited book

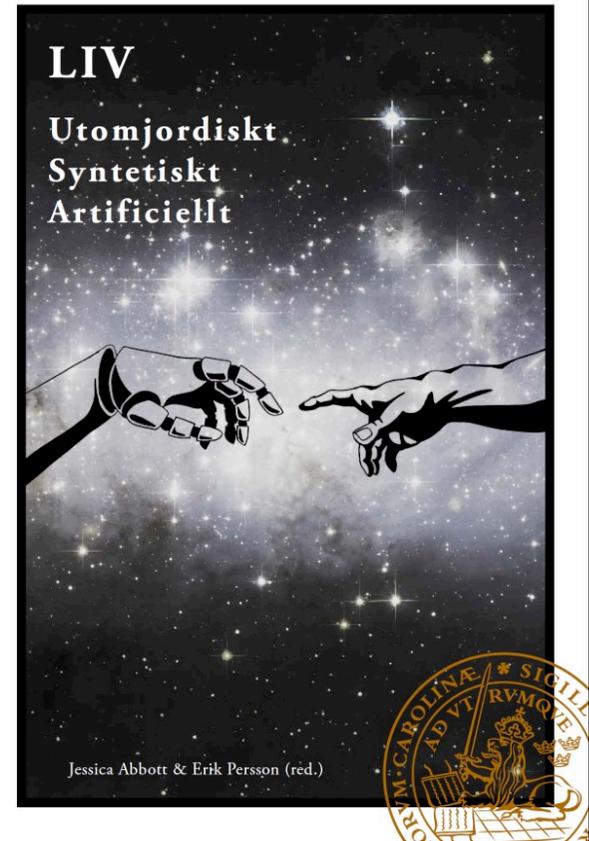


Image: Pufendorf Institute, by permission

# Pufendorf institute: Output

---

- Edited book
- Book chapter



Image: Pufendorf Institute, by permission

# Pufendorf institute: Output

---

- Edited book
- Book chapter
- Grant applications

*Knut och Alice  
Wallenbergs  
Stiftelse*



Logos: <https://kaw.wallenberg.org/>, <https://www.vr.se/>

# Pufendorf institute: Output

- Edited book
- Book chapter
- Grant applications
- Preprint manuscript



The screenshot shows the PhilSci Archive website interface. At the top, the browser address bar displays "philsci-archive.pitt.edu/19317/". The website header features the "PhilSci ARCHIVE" logo and navigation links for "Login" and "Create Account".

The main content area is divided into two columns. The left column contains a "Search & Browse" menu with the following options: Advanced Search, Browse by Author, Browse by Subject, Browse by Year, Browse by Conferences/Volumes, Browse Open Access Journals, Browse Open Access Books, Latest Additions, and Browse the PhilMath Archive. Below this is an "Information" menu with links to Home, About the Archive, Archive Policy, and History.

The right column displays the title of a preprint manuscript: "The problem of defining life: a case study using family resemblance". Below the title, the authors are listed as "Abbott, Jessica K. and Persson, Erik (2021) *The problem of defining life: a case study using family resemblance*. [Preprint]". A small thumbnail image of the PDF is shown next to the text "Text" and "The problem of defining life.pdf - Submitted Version". Below the thumbnail, it states "Available under License [Creative Commons Attribution No Derivatives](#)." and provides links for "Download (1MB)" and "Preview".

The "Abstract" section follows, with the text: "The question of how to define life has been an unresolved question in the philosophy of biology for many years, but developing a definition of life that is useful in both technical and everyday contexts has become more urgent as researchers around the world attempt to create fully synthetic cells in the laboratory, develop more and more intelligent and autonomous robots, and search for signatures of life elsewhere in the galaxy. Developments in these areas may end up overturning our current ideas about the distinction between life and non-life. It is therefore important to consider whether it is possible to develop a definition of life that encompasses currently known lifeforms, while at the same time having the potential to be applied to as-yet unknown lifeforms. Here, we discuss the pros and cons of some of the current approaches to defining life, then propose an alternative approach based on family resemblance. We also present preliminary data applying our new approach within a statistical modelling framework, and find that although living and non-living entities can be grouped according to overall similarity, it is difficult to find a single set of criteria which is sufficient for defining known forms of life while at the same time being inclusive enough to be useful in identifying or characterizing novel forms of life. We hope that the family resemblance approach will prove to be a fruitful alternative to traditional approaches to defining life."

Screenshot from <http://philsci-archive.pitt.edu/19317/>

# Perspectives on astrobiology

---

- Medicinhistoriska sällskapet



Logo: <http://www.smhs.nu/>

# Perspectives on astrobiology

---

- Medicinhistoriska sällskapet
- Lectures for astrobiology course

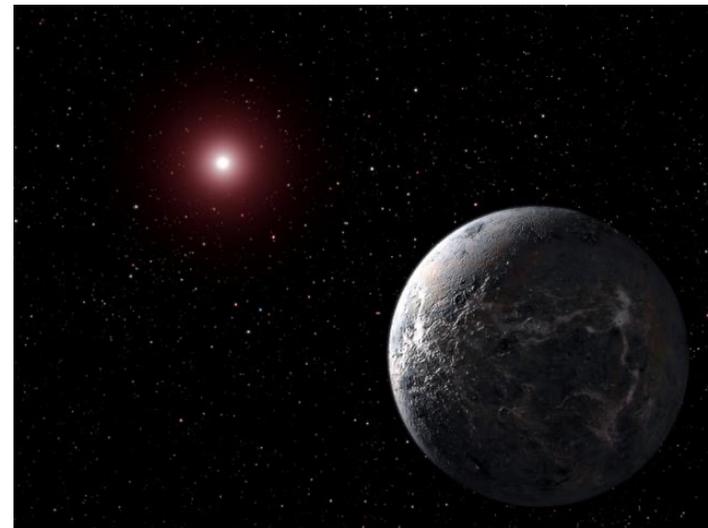
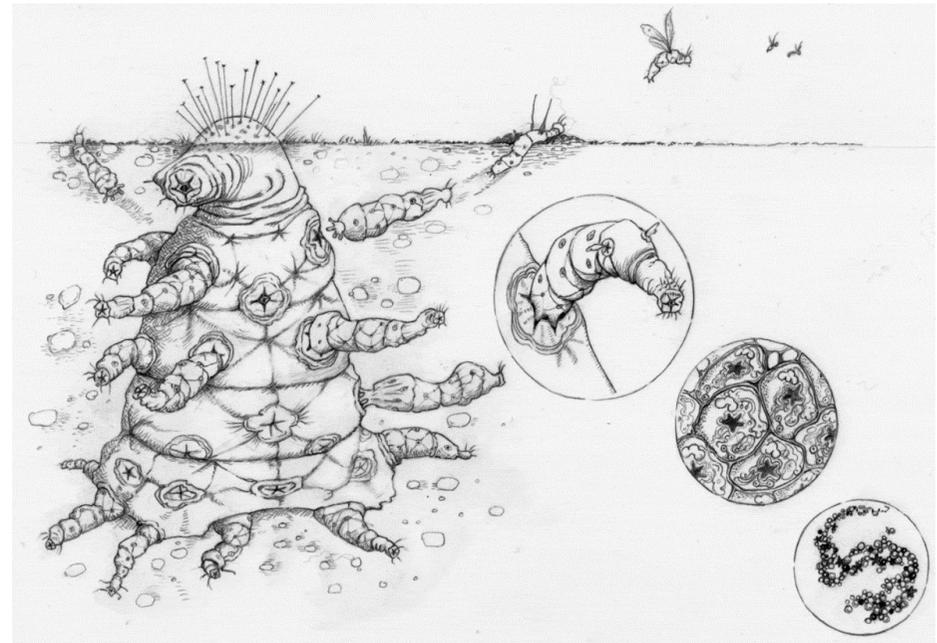


Image: NASA

# Perspectives on astrobiology

---

- Medicinhistoriska sällskapet
- Lectures for astrobiology course
- Book idea



# Swedish collegium for advances studies

---

- What is SCAS?



Image: Own work

# Review of rights of nature laws

---

- Collaboration initiated by Yaffa Epstein



Image: SCAS, by permission

# Review of rights of nature laws

---

- Collaboration initiated by Yaffa Epstein
- Rights of nature laws



Image: Public domain, <https://en.wikipedia.org/wiki/Ecuador>

# Review of rights of nature laws

---

- Collaboration initiated by Yaffa Epstein
- Rights of nature laws
- In revision after submission to *Science*



Image: <https://www.science.org/>

# Fråga Lund

---

- Not research, but interdisciplinary



Image: Pernilla Isedal

# Fråga Lund

- Not research, but interdisciplinary
- Requires overlapping skill set

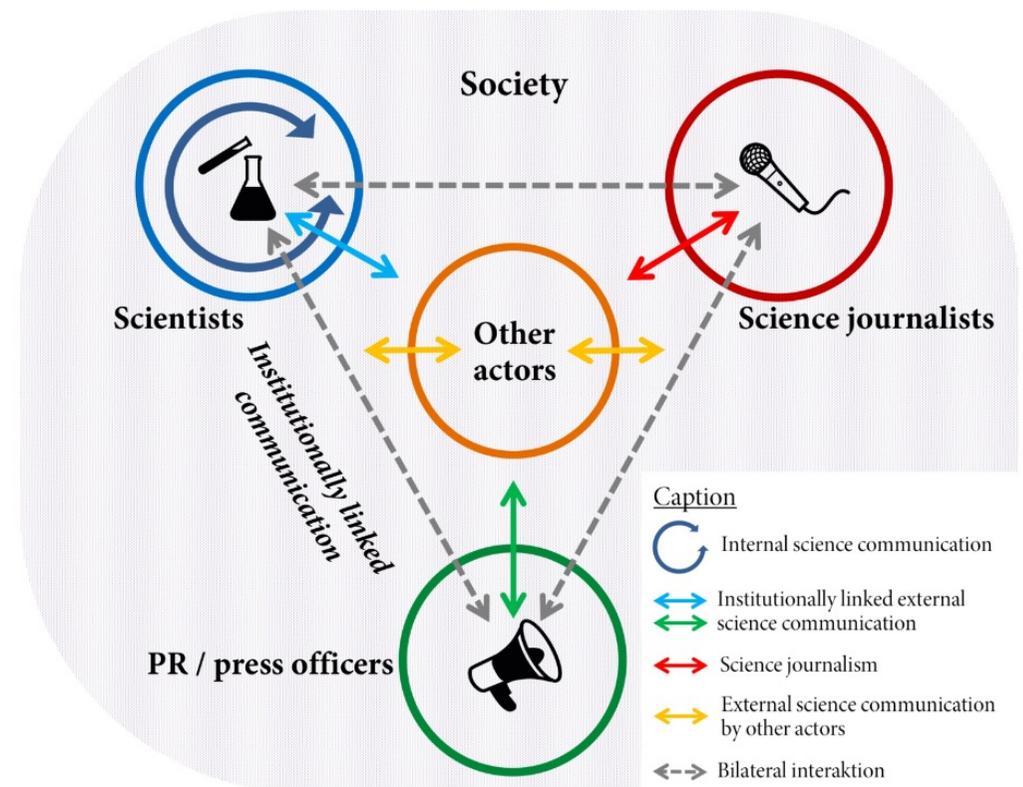


Image: Spektrumdw

# Fråga Lund

---

- Not research, but interdisciplinary
- Requires overlapping skill set
- Has indirectly led to other outputs:
  - Radio appearances  
(Filosofiska rummet)



Logo: <https://sverigesradio.se/filosofiskarummet>

# Fråga Lund

---

- Not research, but interdisciplinary
- Requires overlapping skill set
- Has indirectly led to other outputs:
  - Radio appearances (Filosofiska rummet)
  - Book chapters

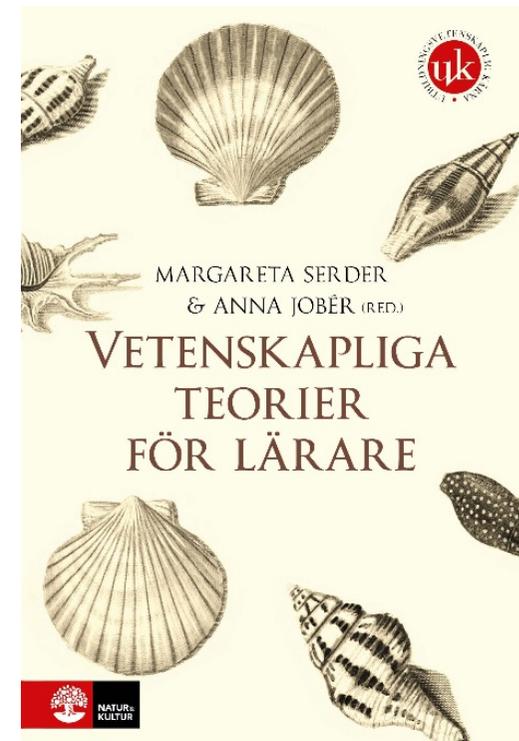


Image: Natur & Kultur, by permission

# Fråga Lund

---

- Not research, but interdisciplinary
- Requires overlapping skill set
- Has indirectly led to other outputs:
  - Radio appearances (Filosofiska rummet)
  - Book chapters
  - Article in social sciences journal

519

## Ett evolutionärt perspektiv på beslutsfattande

Jessica Abbott

### Abstract

The ability to make well-reasoned and deliberate decisions is often seen as a uniquely human capacity. And it's true that most other animals can't think as far ahead, or understand the consequences of their decisions, as well as a human can. However most of the decisions that we make in our everyday life aren't actually very well-reasoned or deliberate, and are made more or less spontaneously. Which is a good thing! If we needed to do a major review of our internal mental and physical state every time we were faced with a decision of what type of pastry to have with our morning coffee (croissant or cinnamon bun?), we wouldn't have time for much else. It's likely that most animal decision-making is similar to this type of spontaneous decision, which is based on "gut feeling" rather than rational weighing of pros and cons. This means that we can potentially gain insight into daily human decision-making by studying animal decision-making from an evolutionary perspective. In this article, I will discuss three basic types of animal decisions: decisions based on self-acquired information (individual decisions), decisions based on information from other individuals (social information), and decisions that are made in a group (collective decisions).

Abbott, J. (2020) Statsvetenskaplig tidskrift 122(4):519-529.

# Reflections

---

- Limited concrete outputs so far – hard to find time for side projects

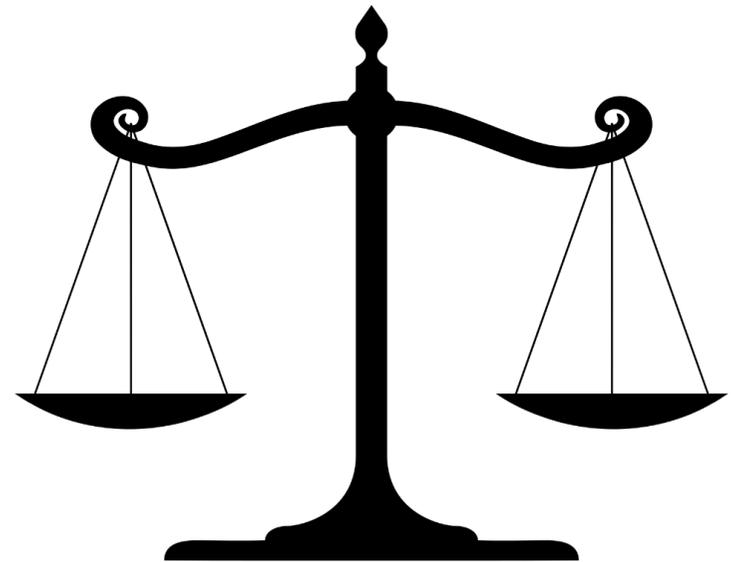
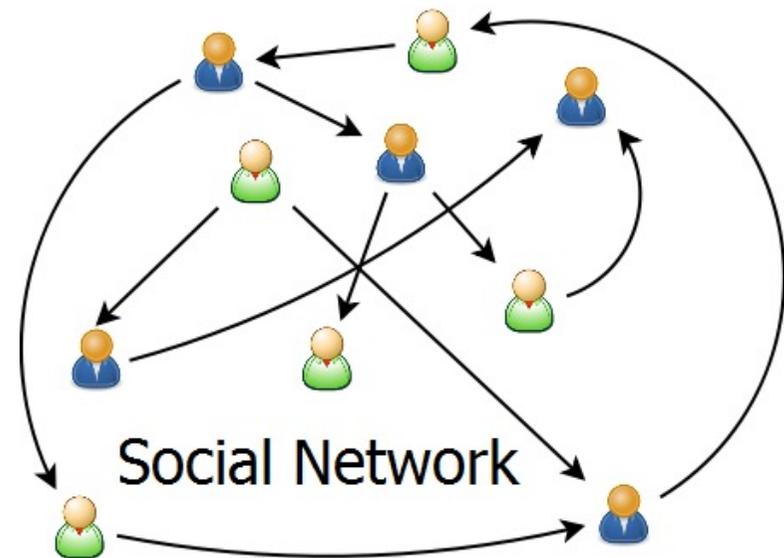


Image: Perhelion

# Reflections

---

- Limited concrete outputs so far – hard to find time for side projects
- Has greatly increased my professional network



# Reflections

---

- Limited concrete outputs so far – hard to find time for side projects
- Has greatly increased my professional network
- Extremely personally rewarding and fun



Image: Own work

# Reflections

---

- Limited concrete outputs so far – hard to find time for side projects
- Has greatly increased my professional network
- Extremely personally rewarding and fun
- Try to think outside the box and be open to new opportunities



Image: VideoPlasty.com

# Thanks!

---

<https://tinyurl.com/jessicakabbott>

@jessicakabbott 