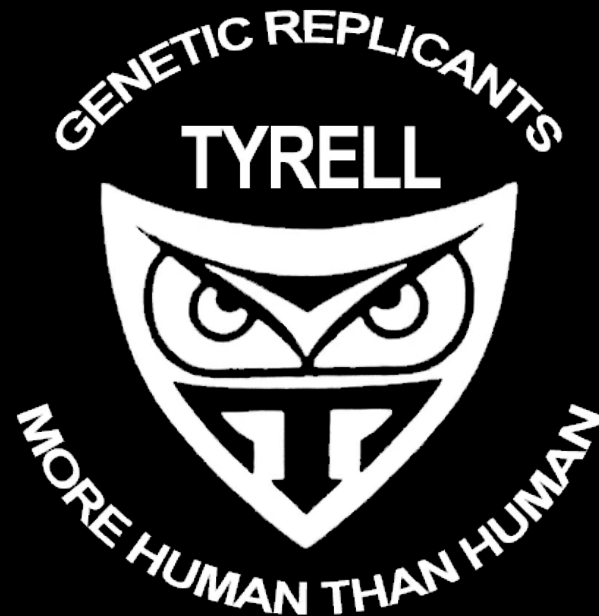


# REGULATING THE TYRELL CORPORATION: COMPANY LAW AND THE EMERGENCE OF NOVEL BEINGS



# INVESTIGATORS

Sarah:

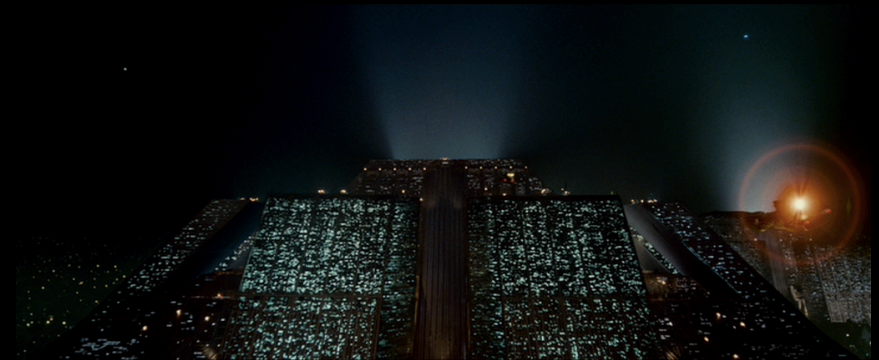
- Company Law
- Corporate Governance

David:

- Moral Philosophy/ Ethics of biotechnology and consciousness/ Neuroscience
  - Artificial Intelligence
  - Ownership of novel consciousnesses
  - What makes beings significant to the law?
-

# THE QUESTION

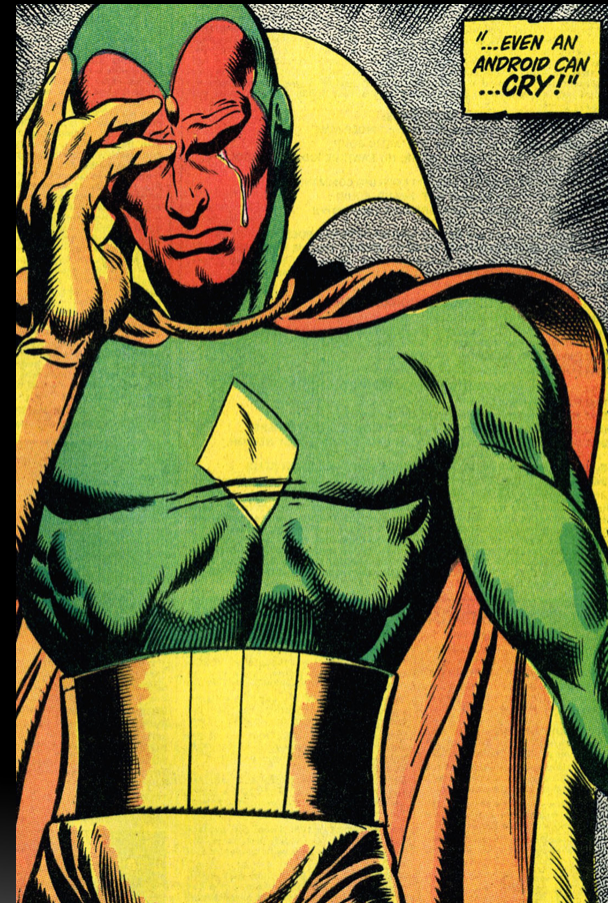
- To determine:
  - **Whether company law can, or should, be the primary means of regulating novel beings, and by extension their potential wide-ranging societal impacts.**
- Challenges for law posed by emerging technologies liable to give rise to morally significant beings
- Untapped area of legal and philosophical scholarship
- Three key areas:
  - **Defining Status**
  - **Development**
  - **Operation and Disposal**



# TECHNOLOGIES FOR NOVEL BEINGS

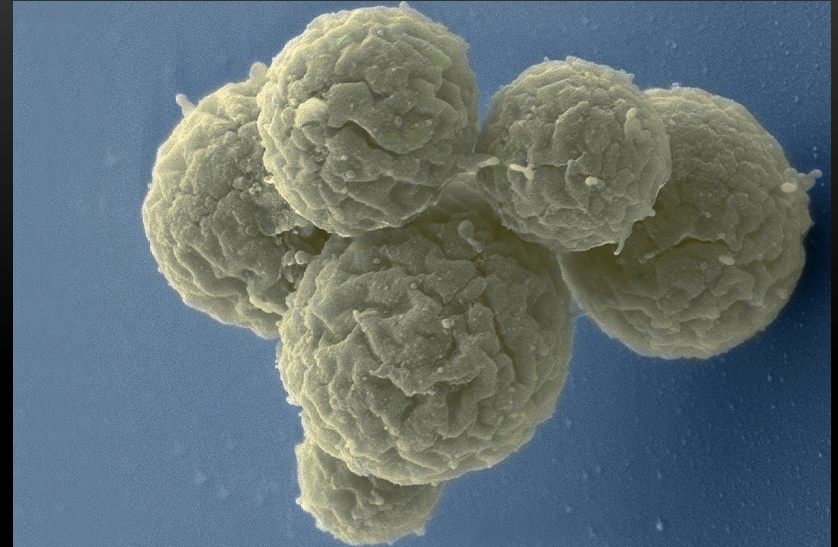
HERITABLE GENOME EDITING

ARTIFICIAL INTELLIGENCE



# COMPANIES

- Synthetic Genomics Inc- **JCVI-Syn3.0**
  - Partnerships with:
    - Novartis (vaccines)
    - United Therapeutics (organs)
    - Monsanto (crops)
  - Synpromics- Pharma, biotech
  - Spinout companies from Universities



- **CYC** (Cycorp)- AI with human-like reasoning, inference engine
- **Google Brain** (Alphabet subsidiary)- deep learning
- **FAIR** (Facebook)- language and memory
- Microsoft- logic, verbal reasoning- analogies and synonyms. High human IQ.





# LEGALLY HUMAN?\*

- **We need some useable definitions and boundaries for beings with moral value**
  - 14 Day Rule in embryology
- **A key existing determinant:**
  - Trespass to person / Homicide legislation
    - Murder *actus reus*-

**“a person of sound mind and discretion unlawfully kills any reasonable creature in being under the [Sovereign]’s peace with intent to kill or cause grievous bodily harm.”** (Coke E. *The First Part Of The Institutvtes Of The Lawes Of England*. London: Printed for the Societe of Stationers; 1628. Pt III, Ch 7: 47)

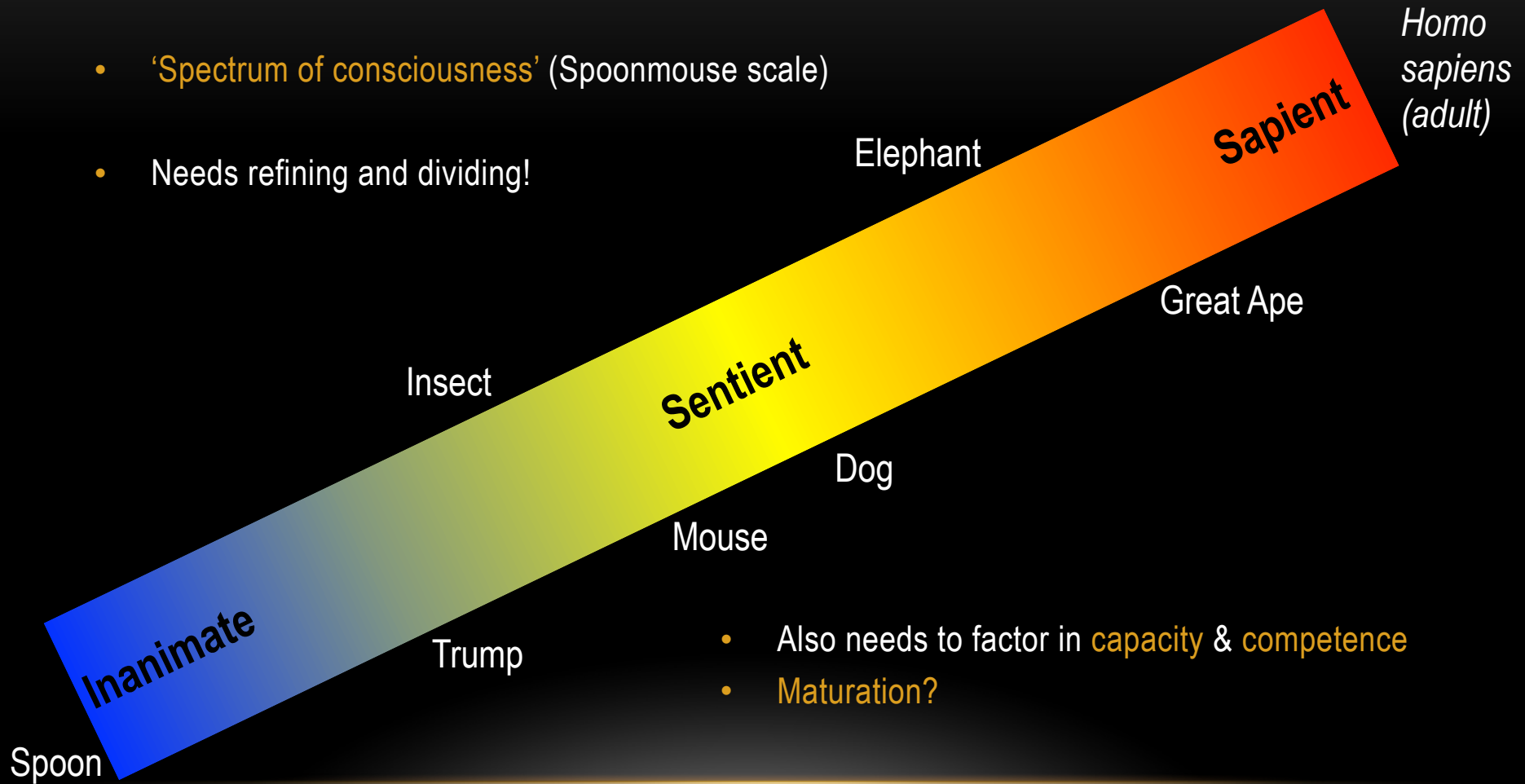
- Modern research into animal intelligence puts the lie to much of this

\* Lawrence DR, Brazier M. ‘Legally Human? The Status and Challenge of Novel Consciousness in Law’ *Medical Law Review* 2018. 26(2)

talks from last time

# ONE POSSIBLE SOLUTION

- 'Spectrum of consciousness' (Spoonmouse scale)
- Needs refining and dividing!





# BROAD CHALLENGES

- **Personhood**
  - philosophical
  - legal
  - corporate
  
- **Legal responsibility**
  - Lords Select Committee on AI (2018) [HL 100]



# AIMS

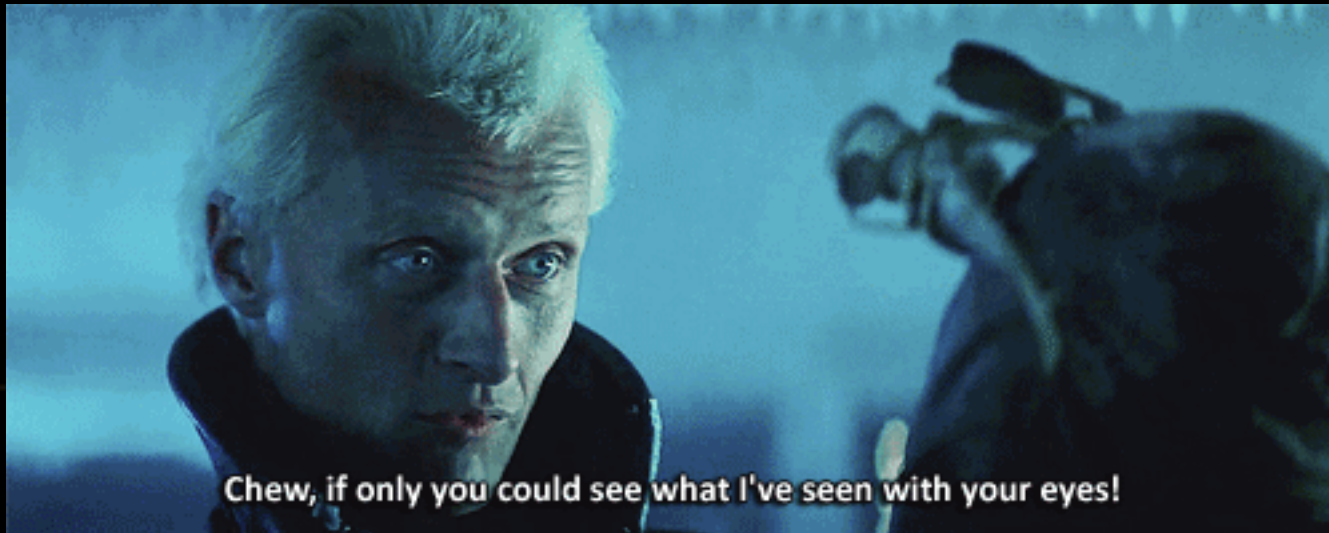
- **Defining status**
    - Analysis of legal status for novel beings for the purposes of regulation.
  - **Development:**
    - Whether the drivers of public companies (i.e. shareholder primacy) are appropriate drivers of morally significant technological development.
  - **Operation and Disposal:**
    - Who or what entity is responsible for the lifespan of the potential being, its deployment, and ultimate fate.
-

# EVENTS

- **Jan 18: Roundtable** (London) for invited stakeholders, advisory board
    - Establish primary concerns
  - **April 27: Symposium 1** (NCL) for roundtable participants and other invitees identified at roundtable
    - Defining consciousness for legal status
  - **June 12: Symposium 2** (NCL)
    - Development
    - Operation and Disposal
    - Lack of direct legislation
  - **Oct 25/26: Conference** (London) for invited speakers, open attendees
    - Addressing core questions, future work
-

# OUTPUTS

- Peer reviewed research articles (3-6) including solo and co-authored
- Possible edited collection/ special issue
- Establishment of new and unique network
- Future funding application



# FUTURE

- Broad project
- Only the first steps
- Implementation is a major hurdle beyond our scope
- Future significant funding project to expand the concepts set out this year
  - Fully conscious AI- capacity
    - Legal ramifications



# MATERIALS

- Parliament, House of Lords (2018) AI in the UK: ready, willing and able? (HL 2017-2019 (100)). London: The Stationery Office.
- Companies Act 2006
- European Parliament Committee on Legal Affairs. Draft Report With Recommendations To The Commission On Civil Law Rules On Robotics (2015/2103(INL)). Brussels; 2016
- Gillick v. West Norfolk and Wisbech AHA [1986] A.C. 112  
House of Commons Science and Technology Committee. Report on Robotics and Artificial Intelligence. London, 2016, HC145
- National Science and Technology Council Committee on Technology. Preparing For The Future Of Artificial Intelligence. Washington D.C.: Executive Office of the President; 2016.
- Lawrence DR, Brazier M. 'Legally Human? The Status and Challenge of Novel Consciousness in Law' Medical Law Review 2018. 26(2),
- Lawrence DR, Palacios-González C, Harris J. Artificial Intelligence: The Shylock Syndrome. Cambridge Quarterly of Healthcare Ethics 2016, 25(2), 250-261.