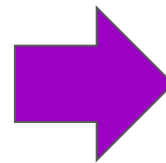
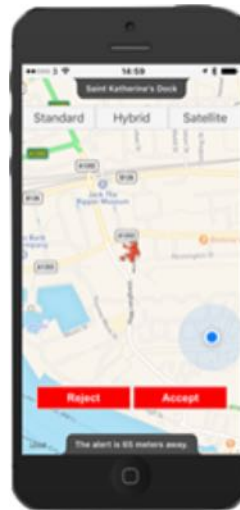
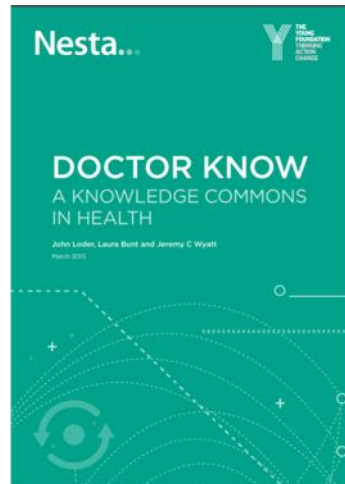


**Joining the dots on design for health -  
from homes to hospitals, bodies to  
minds, things to data**

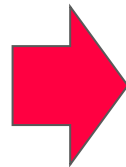
**Geoff Mulgan**

**nesta**

# Digital health combining data, AI and people power



# Social health – mobilising peer to peer and mutual support



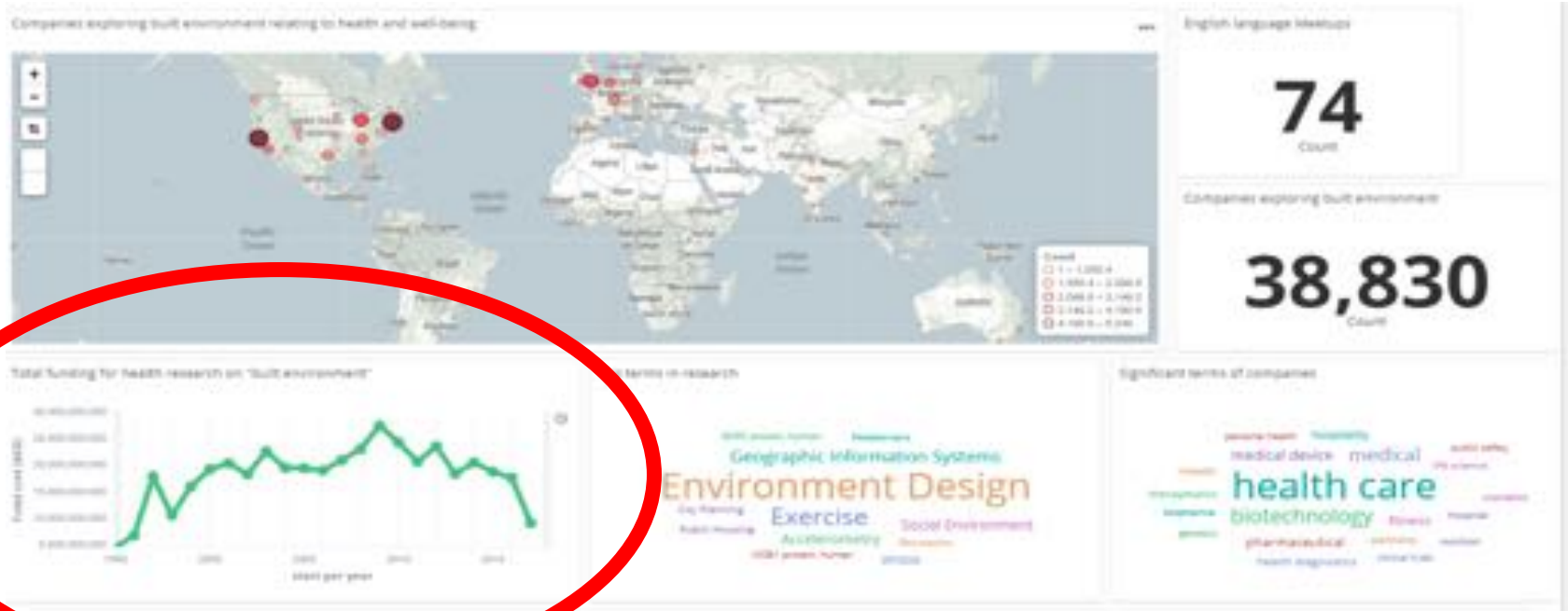
# Innovation methods to help systems think and act as systems



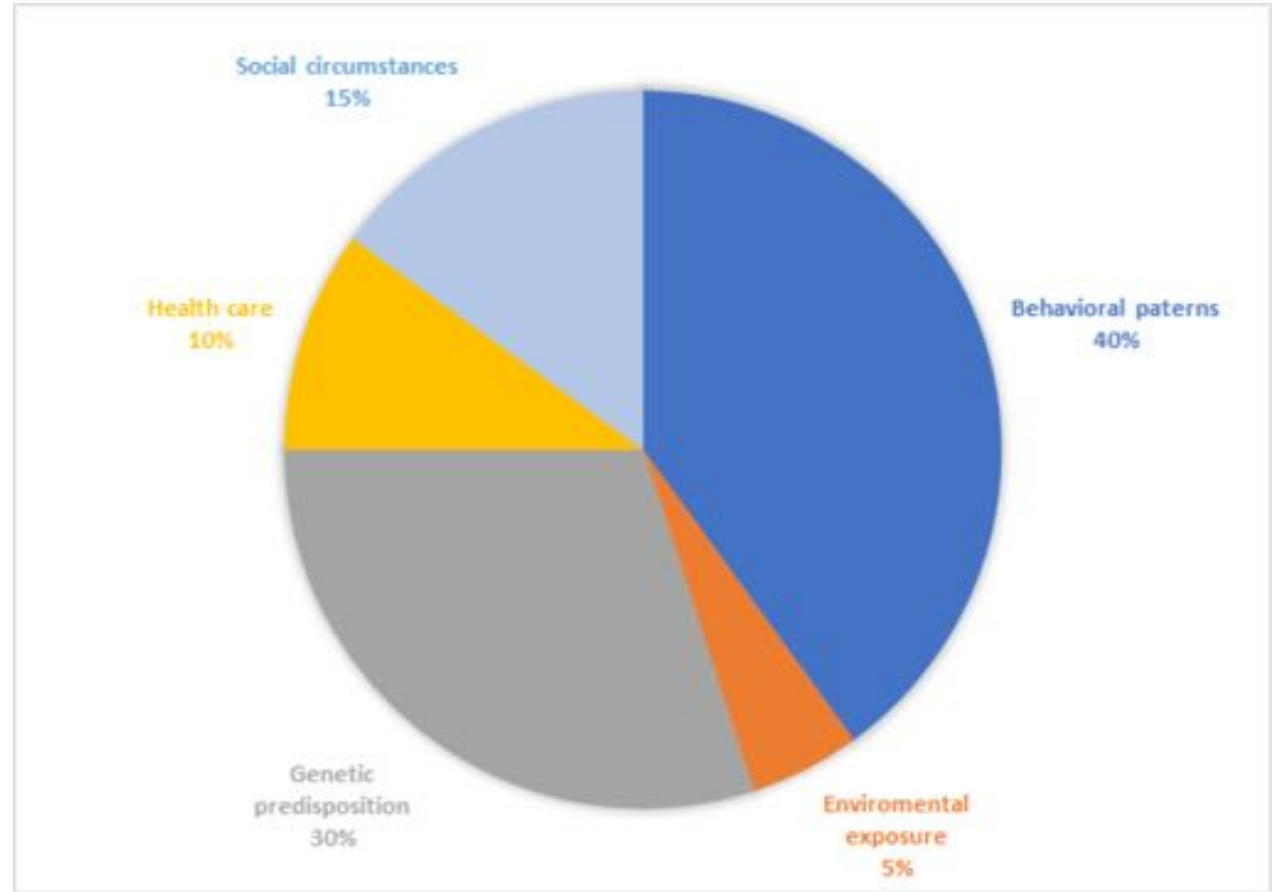
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Our Health Innovation Scanner will provide an overview of global research and innovation - eg on the boundary of health and architecture.



# Proportional Contribution to Premature Death



Source: Robert Wood Johnson Foundation

## Health spend

£8bn  
prevention

£97bn  
treatment  
of disease

## Health research

5.4%  
prevention

90+%  
biomedical  
& health  
services  
research



**Clean air, safe water,  
sewers, good housing, safe  
roads, low crime ...**



## 150 years of urban design for health:

Philanthropic settlements – Bournville, Peabody etc.

Garden cities – early C20<sup>th</sup>

New Towns Act - 1946

Healthy New Towns 2010s



George Cadbury's model village of Bournville



Welwyn Garden City, Hertfordshire



# Health and Mind Enhancing Environments (HEEs and MEEs)

Nature, light, control,  
sociability, art ..

Enhancing pro-health  
choices: walk, cycle,  
eat ...

Reducing anti-health  
influences

Blue and green

Friction and resistance

# Technology and place



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GoodSAM

# Smart phone activated community medics

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# Health design and value





# Public Value

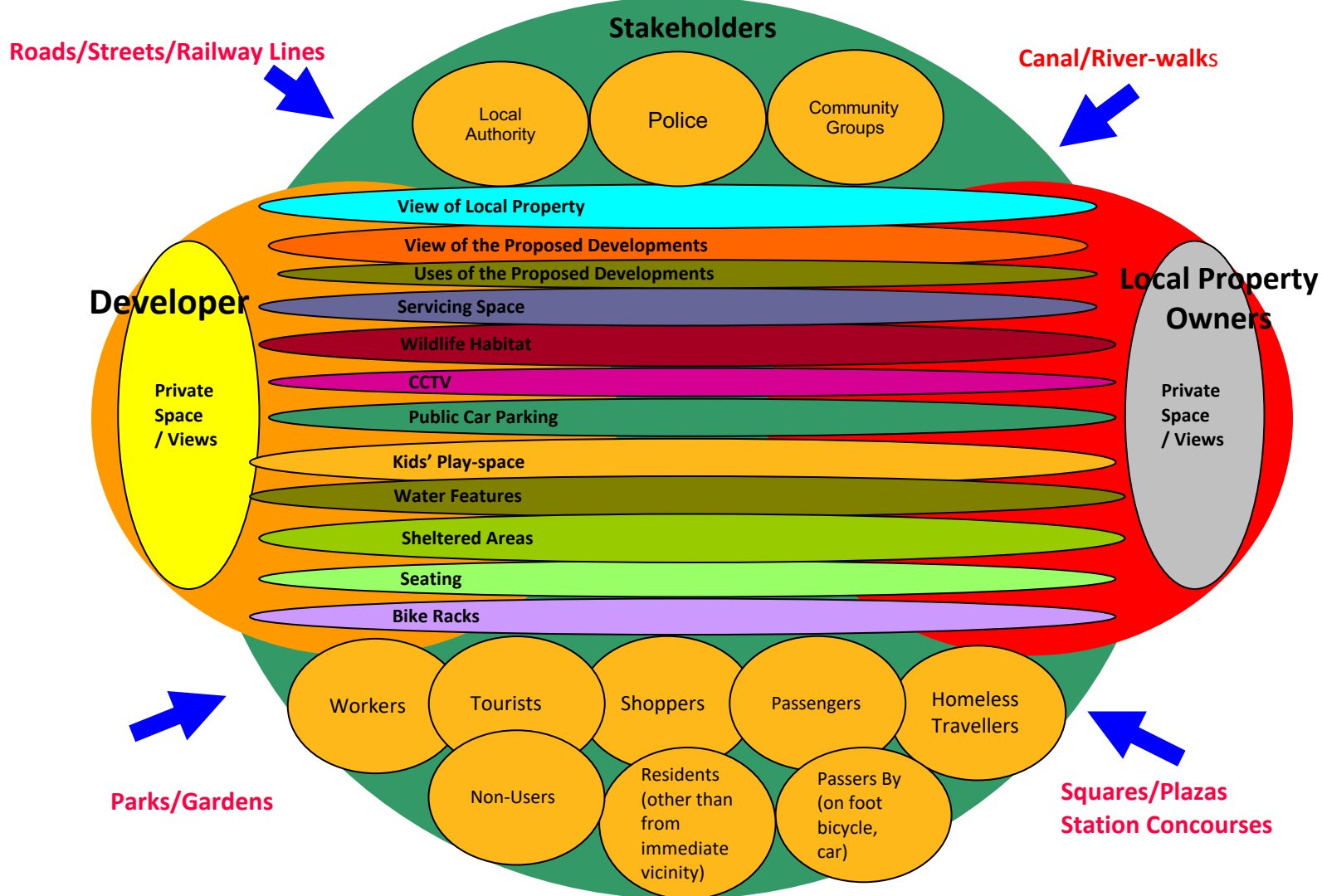
How can it be measured,  
managed and grown?

Geoff Mulgan, Jonathan Breckon, Mariola Tarrega,  
Hasan Bakhshi, John Davies, Halima Khan, Annie Finnis

May 2019

## Value: broadening the focus

<b>Not only...</b>	<b>But also...</b>
Specific clinical outcomes	Wider health and wellbeing impacts
What the system values, e.g. cost and value for money indicators	What people and their communities value, i.e. the outcomes most important to them
Patient experience, i.e. what direct contact with services feels like	Wellbeing, e.g. quality of life; people feeling supported, in control, socially connected and independent
Immediate outcomes of a single service, e.g. success of a treatment	Outcomes over time of all the services and support a person or community may draw upon
Individual outcomes for the person	Equity in health and wellbeing, with greatest value achieved by targeting people and groups with greater need, lower health literacy, least access etc



# Health design and happiness

# GREAT DREAM

Ten keys to happier living

- GIVING**  Do things for others
- RELATING**  Connect with people
- EXERCISING**  Take care of your body
- AWARENESS**  Live life mindfully
- TRYING OUT**  Keep learning new things
- DIRECTION**  Have goals to look forward to
- RESILIENCE**  Find ways to bounce back
- EMOTIONS**  Look for what's good
- ACCEPTANCE**  Be comfortable with who you are
- MEANING**  Be part of something bigger

ACTION FOR HAPPINESS

[www.actionforhappiness.org](http://www.actionforhappiness.org)



CHRISTIAN ROSS  
SAN FRANCISCO  
EMOTION MAP  
(2007)



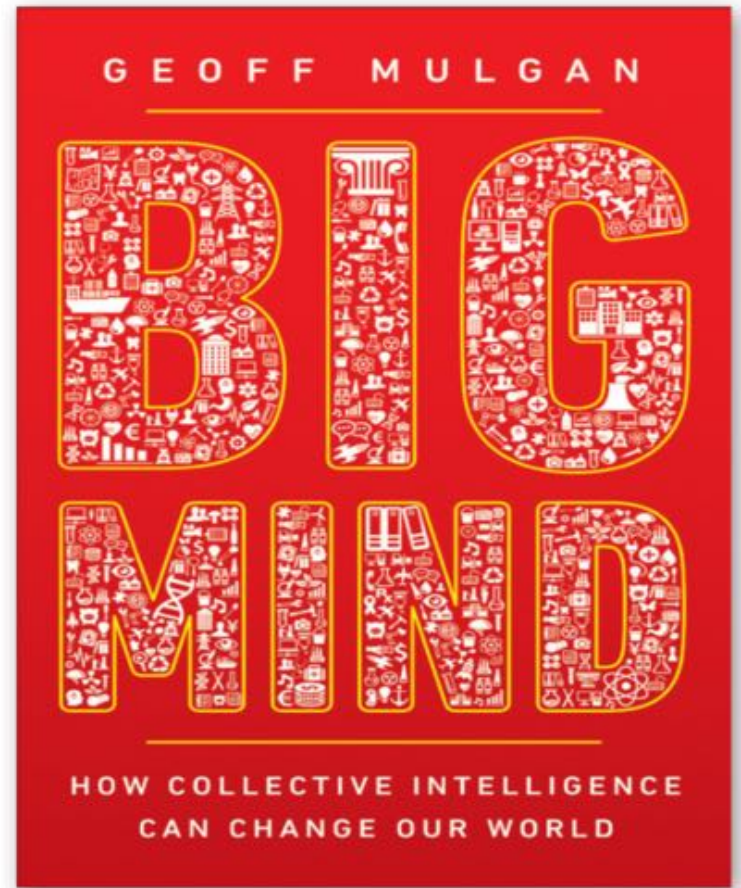
FILTERS ALL PICTURES VIDEO



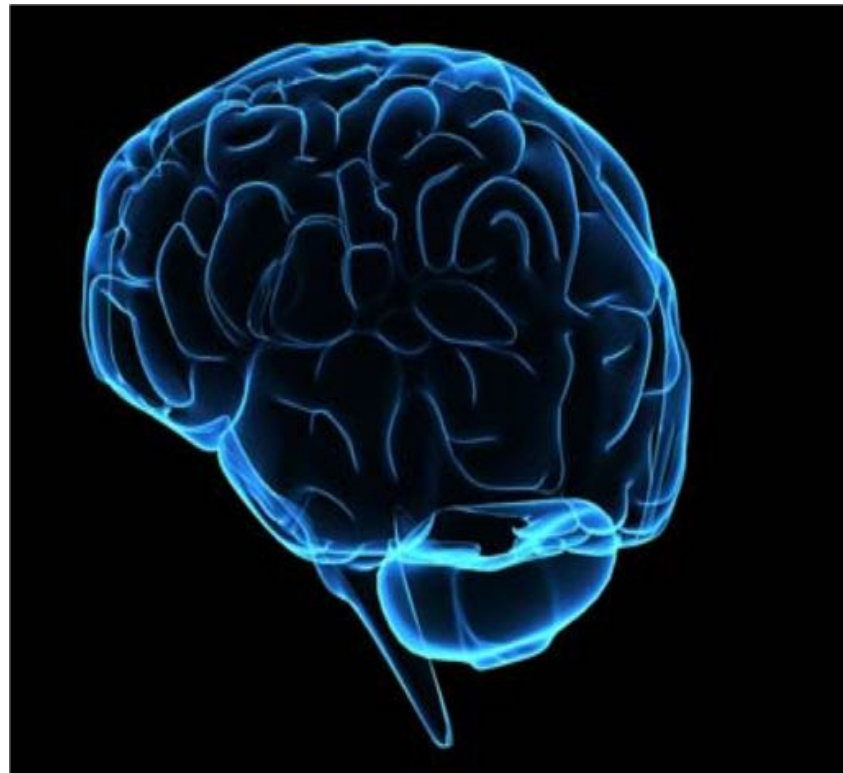
CATEGORY FILTER [ HIDE ]

- ALL CATEGORIES
- HAPPY
- EXCITED
- PROUD
- CONTENT
- THOUGHTFUL
- SURPRISED
- SAD
- ANGRY
- FEARFUL
- DEPRESSED
- THREATENED
- ANXIOUS

# Health design and collective intelligence



Observation and data  
Live models of the world  
Analysis and prediction  
Memory  
Motor coordination  
Creativity  
Judgement  
Wisdom



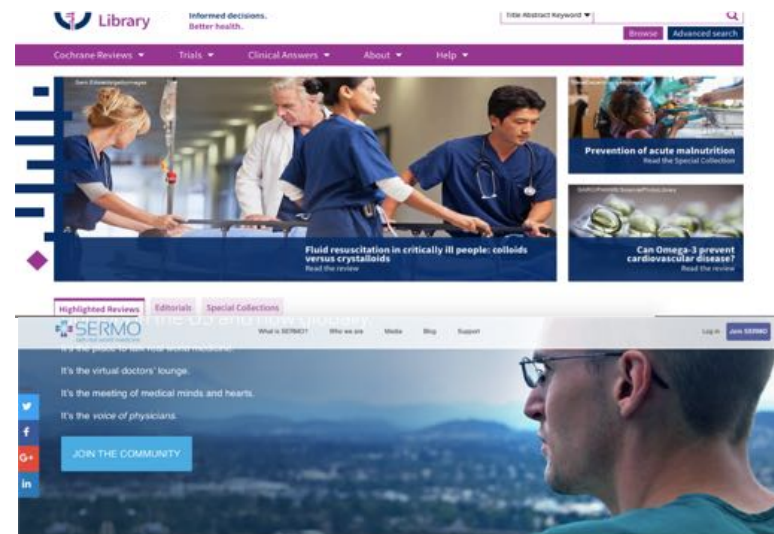




# Collective intelligence within the discipline – evidence, analytics, online communities of practitioners

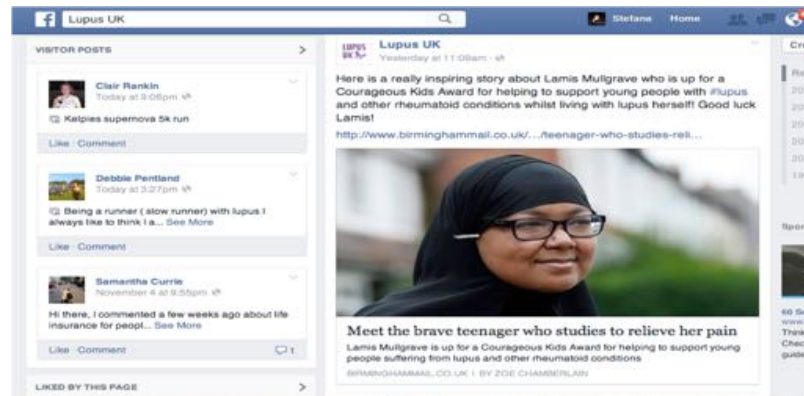


Combines the best of Evidence-Based Health Care, information technologies and a network of experts to provide a unique tool for people making decisions concerning clinical or health-policy questions.

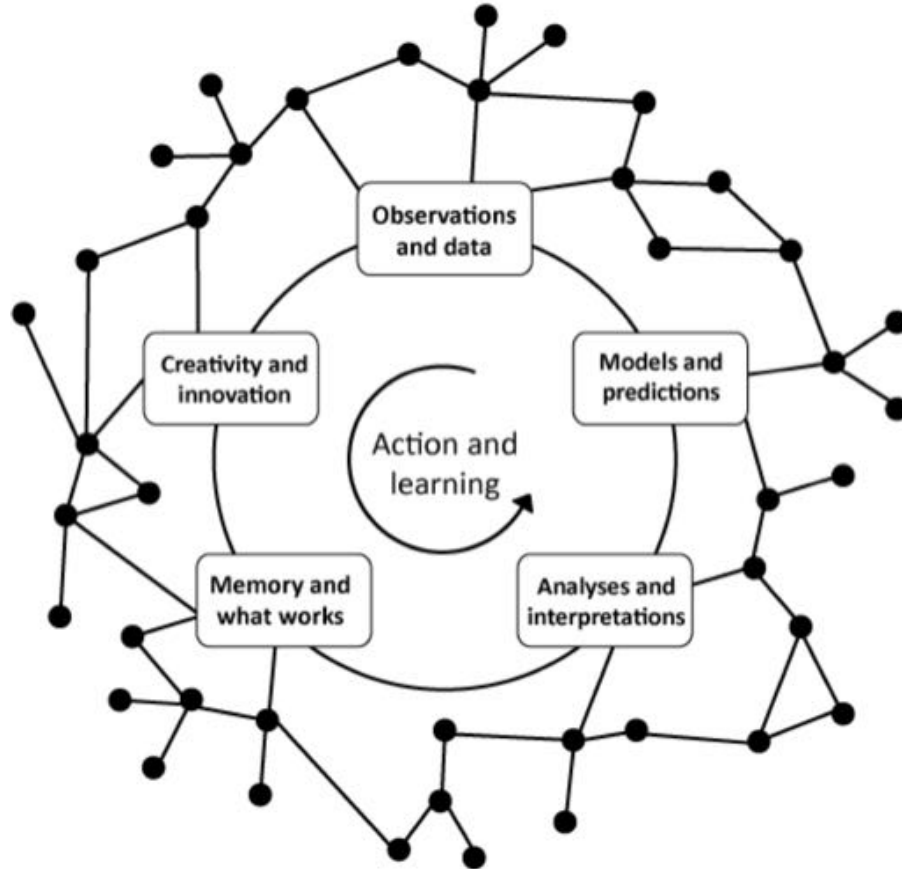


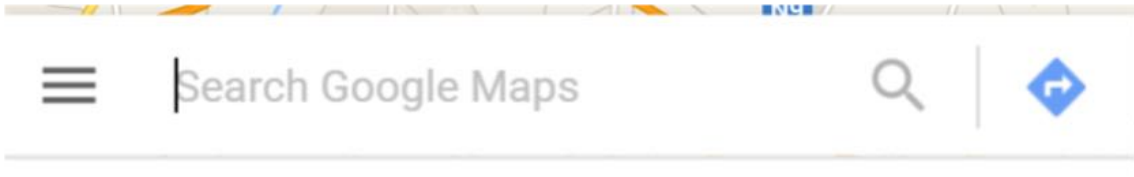
Why doctors love SERMO  
 "Exciting doctor interaction, very helpful with difficult cases, very interesting social topics and discussions... It is a form of collective intelligence that allows individuals to achieve more than they could on their own."

Collective intelligence with patients sharing experiential knowledge and synthetic research



# Intelligence Assemblies





**Google Maps =**

**Google**

**+ Where 2 Technologies**

**+ Keyhole**

**+ ZipDash**

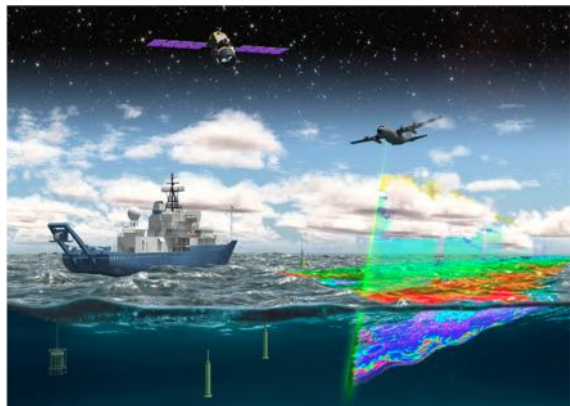
**+ Google Maps API**

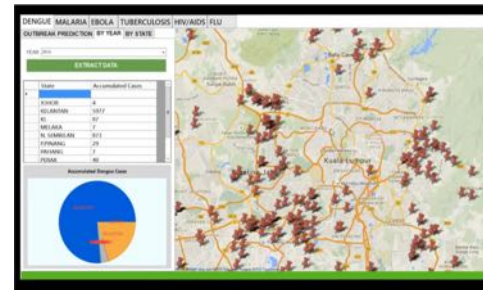
**+ Vutool**

**+ iPhone loading**

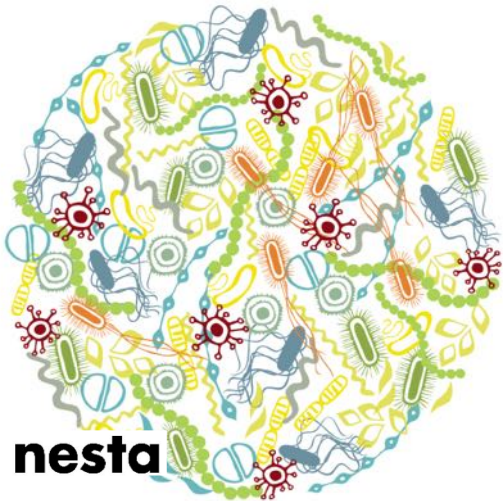
**+ Google Map Maker....**

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**Epidemiology**



**DISEASE  
OUTBREAK  
PREDICTION**

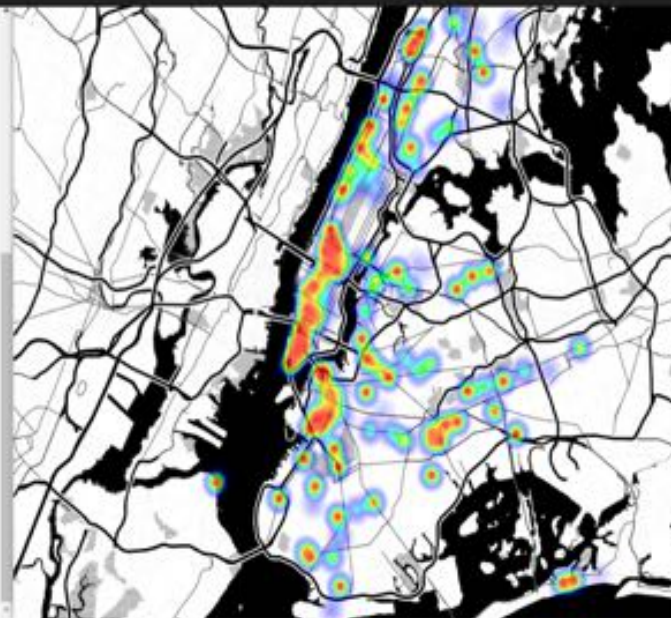
**Machine Learning**





PathMap A P About Heatmap Panel Showing data for: Viruses

- Organism
- None
  - Archaea
    - Euryarchaeota
  - Bacteria
    - Acidobacteria
    - Actinobacteria
    - Bacteroidetes
    - Chlorobi
    - Deinococcus Thermus
    - Firmicutes
    - Fusobacteria
    - Proteobacteria
    - Spirochaetes
    - Thermotogae
  - Eukaryota
    - Ascomycota
    - Basidiomycota
  - Viruses



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# UNDP Accelerator Labs

We're building the world's largest and fastest learning network around development challenges.  
We're hiring people who are curious, persistent, and deeply committed to social change.

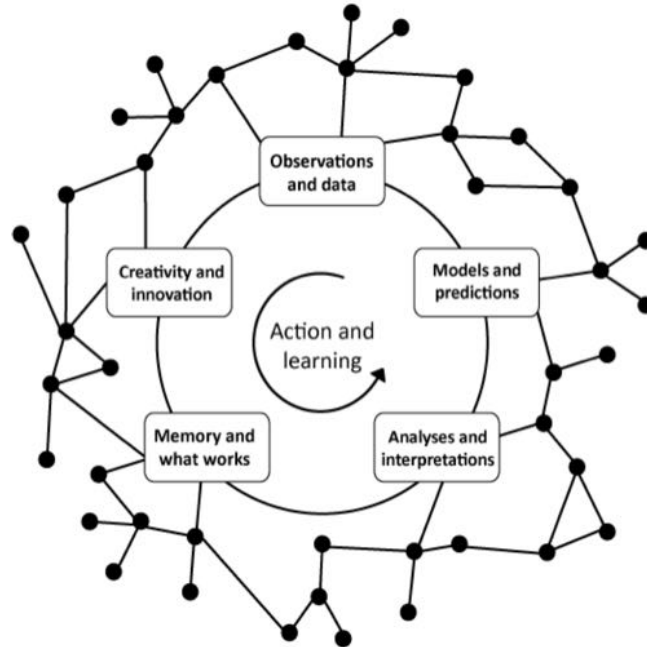
**What if you joined us?**

[Who are we hiring?](#)

[Why are we doing this?](#)



# What would a **health design** intelligence assembly look like?



# Health design and research

# Health research priorities

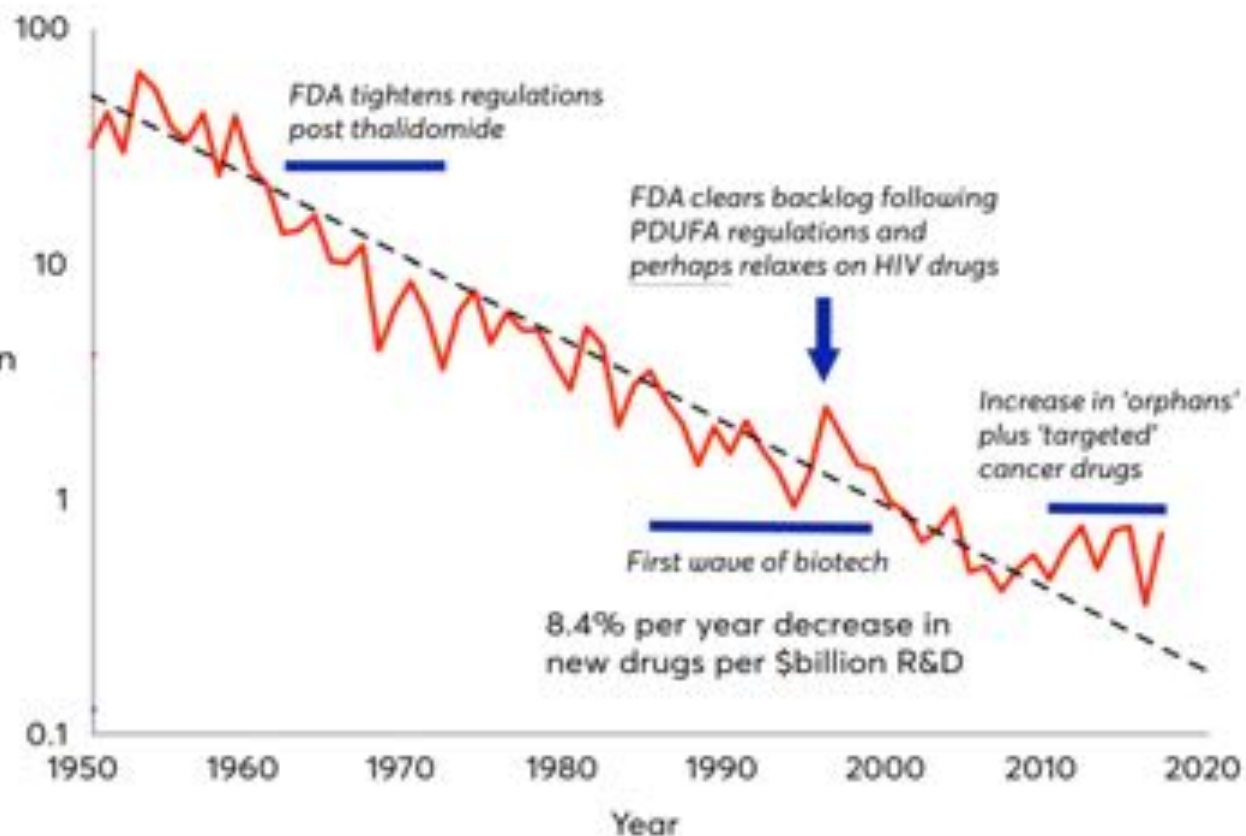
5.4% prevention

90+% biomedical &  
health services  
research

# What priorities?



New drugs per \$billion R&D (log scale)



# The Nightingale Centre



A new initiative to promote systematic research, experiment and action on the **behavioural, social** and **environmental** influences on health.



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