



**William Bains**

*Rufus Scientific Ltd*

[william@rufus-scientific.com](mailto:william@rufus-scientific.com)



**After the BioBubble. Funding  
new therapeutics start-ups in  
the post-VC era**



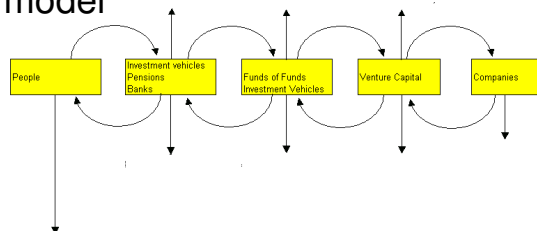
## Agenda

- the post-VC world - realities of European funding
- translational medicine and the move to the pharmaversity
- some models for funding new therapeutics programmes in new startups
- doing it together - biomutuals, social drug trials and other exotica



## Post-VC world?

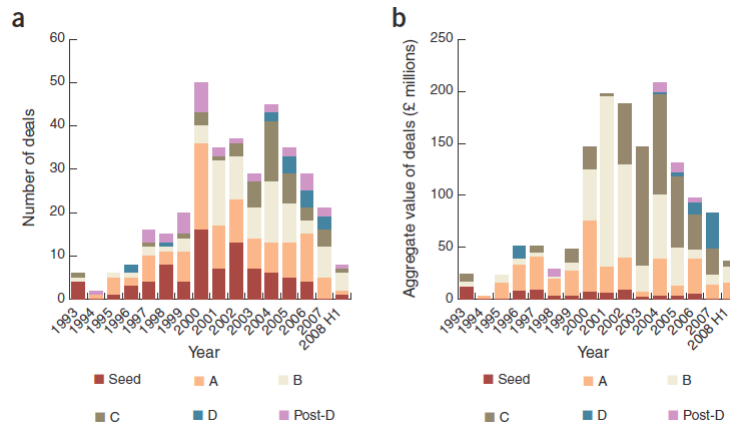
- Decline of concept of 'VC'
- Rise of PE involvement in private companies
- Slash-and-burn economics
- Management fee-based business model



For the real dirt ...



## Post-VC world?



## New start-up funding

- Angels doing drugs?
- Need for low-risk models:
  - me-too drugs
  - repurposing / reformulation
  - import/export
- Decline of investment in new medicines



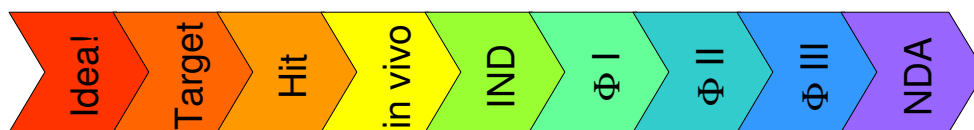


## The vanishing pipeline



## Pharmaversity

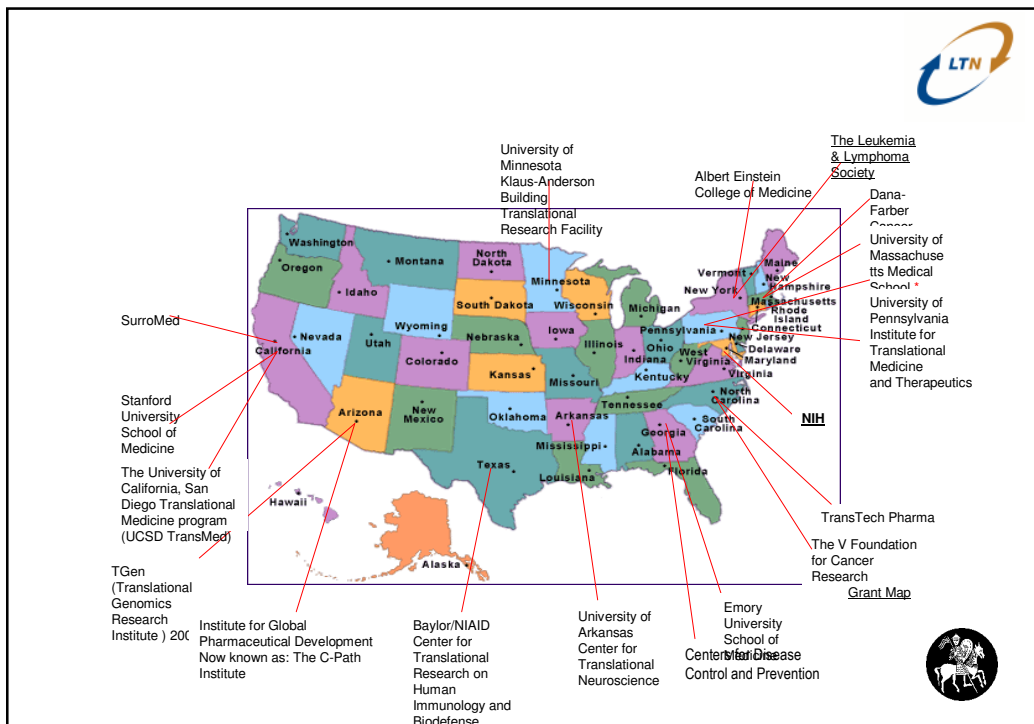
- What is the problem?



*The ever-expanding gap*

- Do more of 'the gap' in academia?
- 'Translational Medicine'
- University becomes drug developer





## Translational medicine

- Basic research → PoC:      Academia
- PoC → product:            Pharma
  
- Academia:    \$\$ / shiny buildings / Professorships
- Pharma:      pipeline / personalised med?  
                   – will it work?
- No role for start-ups etc.



## Radical alternatives

- Why discover drugs?
  - quick buck (UK Biotech 1980 – dead)
  - share price increase (Pharma model 2000 – dying)
  - cure disease?
- Two other rising trends:
  - venture philanthropy
  - democratic discovery



## Venture Philanthropy

- ~~VC making money being Mr Nice Guy?~~
- ~~Hedge Funds investing for the long-term?~~
- ~~Banks supporting business growth?~~
- Philanthropic organizations engaging to *get things done*
- aka 'Social entrepreneurship', 'Passion Capital'





# Why do charities support companies

- Charities engaging with companies
  - charities want medicines *developed* and *launched*
  - not knowledge or profits

EG Michael J Fox Foundation web site front page



# Conventional charities

- Yes, Gates' Foundation, and .....
- Charities with conventional grant functions
- 'Therapeutic' programmes: eg
  - Michael J. Fox Foundation Novel Approaches programme, Therapeutic Development Initiative etc.
  - Leukemia and Lymphoma Society Therapy acceleration programme
  - Cystic Fibrosis Foundation
  - Prostate Cancer Foundation
  - Alzheimer's Drug Discovery Foundation
- Fund high-risk, high-reward development programmes to human PoC





## Conventional charities

- Won't they only support
  - established approaches
  - 'respectable' groups
  - late stage
- Surely BioCo still cannot get grants for
  - radical new mechanisms
  - 'boring' things like formulation
  - *applied* grants for biomarkers, outcomes studies etc (no 'route to market')



## Conventional charities

- Yes, Gates' Foundation, and .....
- Charities with conventional grant functions



KineMed: biomarker discovery and validation

Celator: mid-stage company formulation and delivery project

Vertex: Invest in established company, new high-risk programme

Velcade/Proscript: support programme in failing company to keep asset alive

Pharmatrophix: create new company to develop academic research

programmes to human PoC

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...iative etc.

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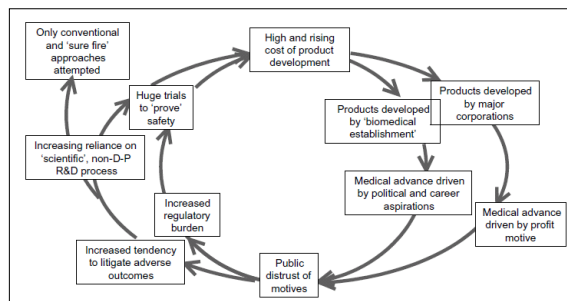
# Specialist groups

- Organizations specifically set up to side-step developmental log-jam, eg
  - Stanley Medical Research Institute
  - The Healthcare Foundation of New Jersey
  - Accelerate Brain Cancer Cure
  - Institute for Pediatric Innovation
  - FasterCures
- Companies set up based on non-profit, cure-orientated goals, eg
  - Seaside Therapeutics
    - Fragile X. Possible extension to autism, \$30M financing closed Sept 17<sup>th</sup> 2009 – private, philanthropic, anonymous



# Democratic discovery

- High cost, risk-aversion driven by *fear* and *mistrust*
  - *not* getting better
- Mutualise DD → align motives



“Biomedical Mutual Organization”





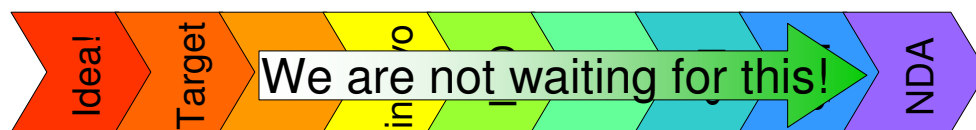
## EG TA Therapeutics

- Co-operative / mutual : shareholders = funders = trial participants
- Self-administration of Geron telomerase activators
  - experimental compounds
  - on-patent
  - no FDA approval etc
- Self-test and monitor for anti-ageing effects



## Pharmaversity

- What is the problem?



*"the ever-expanding gap"*

- Do more of 'the gap' in academia?
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## Face of the future

- Big bucks for big start-ups?
- New corporate structures?
- People power!

