



# Innovation and Research Trends in Research Commercialisation

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# Research enables innovation

- If innovation is the application of a novel idea to create something of value to others

THEN

Innovation = ‘Discovery’ + ‘Commercialisation’

- Research can be the source of many novel ideas (but is not innovation on its own)
- Commercialisation is the application or conversion process





# Research

- Excellence in research remains absolutely imperative
- ..but should not be measured solely on publications and citations alone
- Translation of research is worth something too!

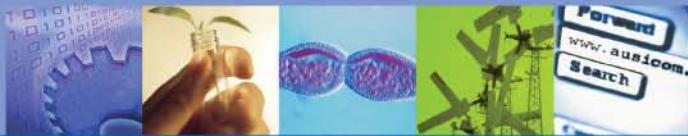


# Research Commercialisation

## It's about the triple bottom line

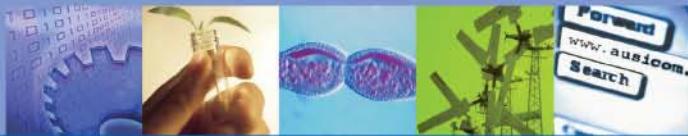
- **Economic development**
  - e.g. advances in mining services (Groundprobe)
- **Environmental sustainability**
  - e.g. clean water technologies (Biolytix)
- **Health and community outcomes**
  - e.g. incontinence monitoring (Fred Bergman Healthcare)





# GroundProbe - Mine site slope stability monitoring





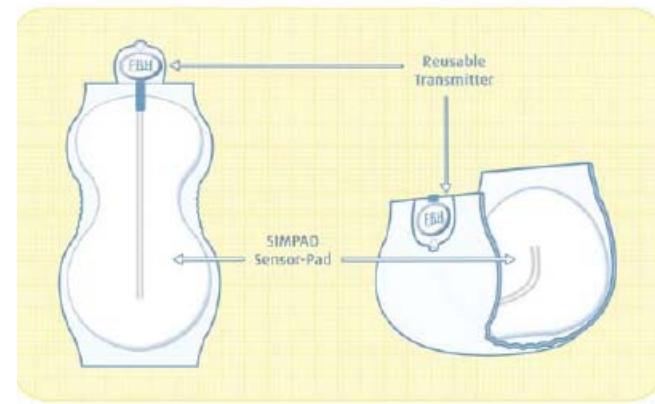
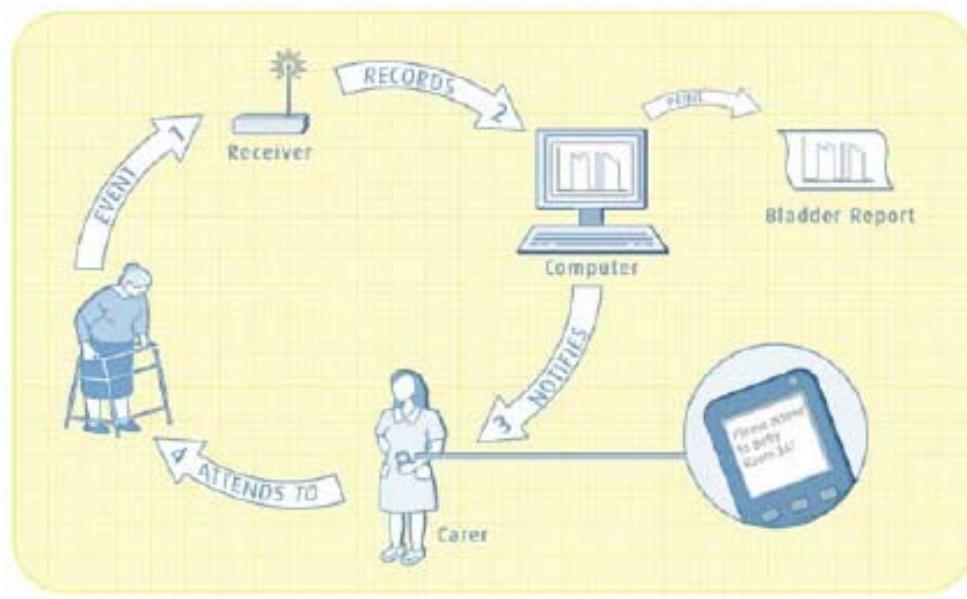
# Biolytix – grey water recycling



 **BIOLYTIX®**



# Fred Bergman Healthcare – improving quality of life for the elderly



**FredBergman**  
HEALTHCARE



Australian Institute  
for Commercialisation

→ ideas → opportunities → outcomes



# The trends

- **'Linear' commercialisation indicators have dropped (as a % of research spend)**
- **Broad commercialisation indicators are better**
  - contract research and consultancy income an order of magnitude higher than licence income
  - collaboration is the most meaningful indicator
- **Only 2% of Australian industry collaborate with the research sector – collaboration results in commercialisation and innovation.**



# External collaboration by firms

	EU27	Den.	Ire.	Fin.	Neth.	Swed.	Australia
Innovating enterprises	42%	52%	52%	43%	34%	50%	34%
Collaboration with clients or customers	14%	28%	25%	41%	22%	28%	12%
Collaboration with suppliers	17%	28%	23%	41%	30%	32%	11%
Collaboration with universities or other higher education institutes	9%	14%	10%	33%	12%	17%	2%
Collaboration with public research institutes or govt. agencies	6%	7%	6%	26%	9%	6%	3%
All types of external collaboration	26%	43%	32%	44%	39%	43%	28%

From Steen ABF (*eurostat news release 27/2007 22 Feb. 2007* and ABS Cat. 8158.0)

External collaboration by innovating firms in the EU (2002-04) & Australia (2004-05)



# **Collaboration and connectedness with the research sector are not straightforward**

- **Most interactions are one-off**
  - No single model, entry point or process to work with the research sector
  - Different skills, agendas, and cultures
- **Knowledge to be transferred may not be identifiable**
  - IP is not 'packaged' and waiting
  - Different perceptions of risk and IP value
- **The transaction costs of working with a small company are high for a research organisation**



# The national challenge of innovation

- Innovation is inherently risky
- There is a general lack of awareness about the organisational, economic, and social benefits from innovation
- Collaboration is all about people, trust, and relationships



# Suggestions to improve the role of research within innovation

- **Focus on skills development in innovation and commercialisation – including creativity in business**
- **Increase collaboration**
  - identify demand pull from companies or communities
  - use incentives for research organisations
  - scale-up of ‘untethered’ intermediary organisations
- **Provide funding for proof of concept and feasibility demonstration projects**
  - provides a more tangible expression of know-how and IP
- **Host industry round-tables to align appropriate research**
  - gain a shared understanding of the issues and challenges
  - collaborative R&D can be a prelude to government procurement