

# NATIONAL RESEARCH FOUNDATION



# National Research Foundation

- PMO Department established in Jan 2006
- Manages S\$5 billion National Research Fund
- NRF Board
  - Chaired by Dr Tony Tan, ex-DPM
  - Members include Ministers, senior civil servants, university presidents and corporate technology leaders
- Scientific Advisory Board (SAB)
  - Co-chairs
    - Dr Curt Carlson, President & CEO, SRI International
    - Prof Ulrich Suter, ex-VP (Research), ETH Zurich
  - Members include eminent academics and technologists

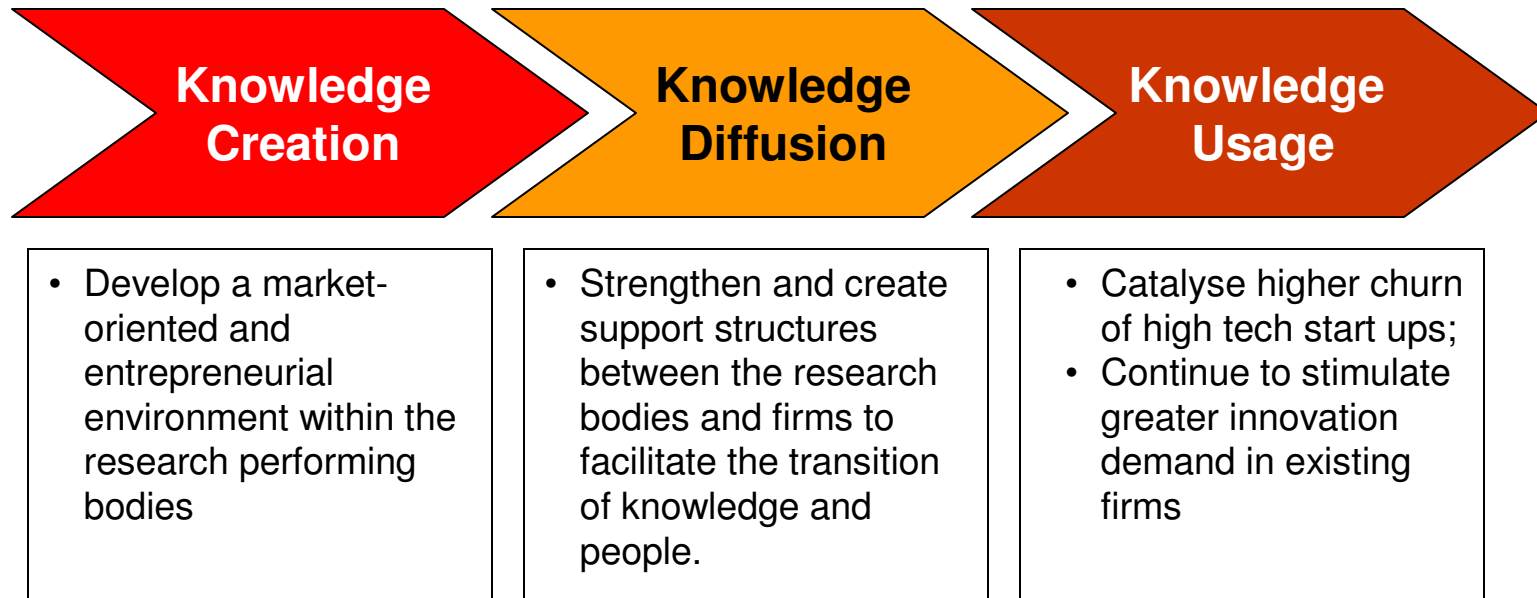
# Terms of Reference for the NRF

- To coordinate the research of different agencies within the larger national framework in order to provide a coherent strategic overview and direction
- To develop policies and plans to implement the five strategic thrusts for the national R&D agenda
- To implement national research, innovation and enterprise strategies approved by the RIEC, and to allocate funding to programmes that meet the NRF's strategic objectives
- To provide secretariat support to the RIEC

# Five Strategic Thrusts for the National R&D Agenda

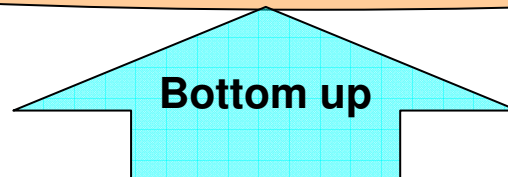
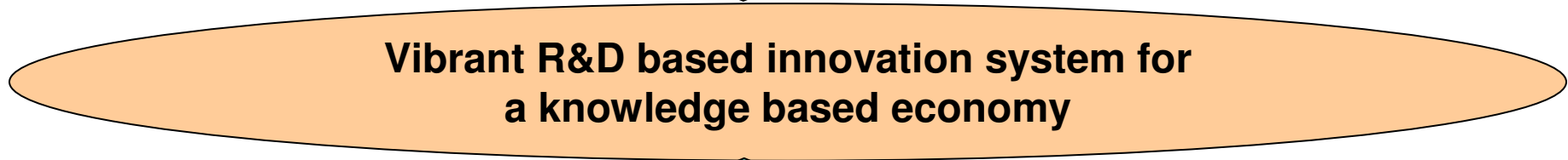
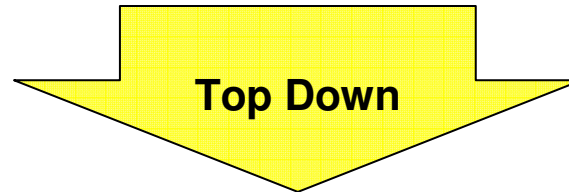
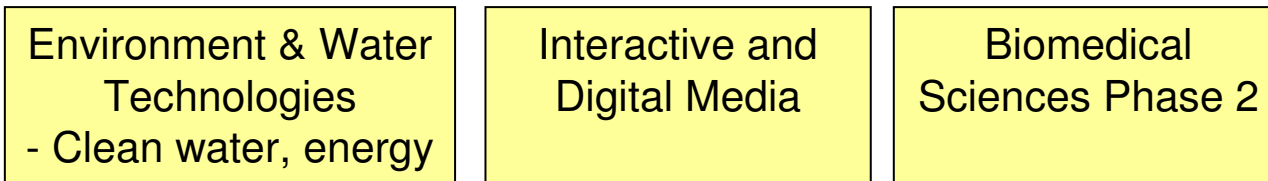
- Intensify national R&D spending to achieve 3% of GDP by 2010
- Identify and invest in strategic areas of R&D
- Fund a balance of basic and applied research within strategic areas
- Provide resources and support to encourage private sector R&D
- Strengthen linkages between public and private sector R&D

# The NIS Framework



# Overview of NRF Programs

**Strategic R&D Areas** → **New industries**



**NRF initiatives** → **Increased R&D capacity and capabilities**

# Competitive Research Program (CRP) Funding Scheme

*supporting broad based, high impact research  
groups through competitive funding*

# CRP Funding Scheme Details

- Funding for programs each comprising multiple related projects
- Open to all Singapore-based researchers
- \$10 million (max) per award (including overheads)
- 3+2 years with mid-term review
- CRP calls would be held twice yearly and include:
  - General Call
  - Scenario-based Call \*\* *NEW!*

# What NRF Looks for in a CRP Proposal

- Excellent science
  - High impact, potential for breakthrough
- Maximum societal and economic benefits
  - Not purely curiosity driven, but use-inspired
  - Will this potentially lead to future economic payoffs for Singapore?
  - Can this enhance public-private collaboration? Consortium?
- Track record in managing large grants
  - Coherent program, not disparate projects
  - Program director, not just another PI

# Some Observations from the First Round

- Co-PIs and collaborators
  - Active participation, not just to include big names
  - Funding overseas not allowed generally
- Industry participation
  - Not just letters of support
  - Companies can be funded up to 70%
- Declaration of other funding support
  - Do not send us what is being considered elsewhere

# Some Observations from the First Round

- Budget calculations

Items	Calculation	Cost
Qualifying direct cost (less exceptional items)	-	S\$ 5 mil
Exceptional item (e.g. equipment)	-	S\$ 1 mil
Overheads	$20\% \times \text{S\$}5\text{mil}$	S\$ 1 mil
Support for IP & commercialisation activities	$(5\% + 5\%) \times \text{S\$}5\text{mil}$	S\$0.5 mil
<b>Total amount awarded</b>	$\text{S\$}5\text{mil} + \text{S\$}1\text{mil} + \text{S\$}1\text{mil} + \text{S\$}0.5\text{mil}$	<b>S\$7.5 mil</b>

# Some Observations from the First Round

- Budget management
  - Overheads managed by university admin
  - IP / commercialization managed by university admin (TTO)
- Budget submission
  - Let us know only the direct costs of the research program
  - We need you to justify the need for buying new major equipment
- CV
  - 2 page CV with the right information is all that is needed
  - We use a template that is very similar to what NSF uses

# IP Policy

- Foreground IP
  - Owned by organizations of inventors (on equal shares where relevant)
  - Royalty-free licence to use for research and educational purposes to Government and IHLs if owned by private company
  - Managed and commercialized from Singapore
  - No assignment to 3<sup>rd</sup> parties in general
- Background IP
  - Free access to all collaborators if necessary
  - Negotiations in good faith between parties if necessary for subsequent commercialization

**~ End ~**

**Thank You**

# NRF Research Fellowship

The National Research Foundation  
Research Fellowship Scheme  
aims to attract promising young  
scientists from all over the world  
to conduct independent research  
in Singapore.



*Inaugural meeting of the NRF  
Scientific Advisory Board  
25 - 27 April 2006*

# Terms and Conditions of the Fellowship

- Open to all areas of science and technology with no quota on specific disciplines.
- Targeted at young talented post-doctoral fellows of all nationalities.
- Appointed Fellows will be given complete independence and freedom to pursue their own research directions.
- Appointed Fellows will be free to choose the host organisations to work in.
- Each appointed Fellow will be provided with a research grant of up to US\$1.5 million over three years with the option of a second round of three-year funding provided at the discretion of NRF to support projects that exhibit a high likelihood of a research breakthrough.
- Salary of appointed Fellow will be covered over and above the research grant, pegged to that of an Asst. Prof. at a local university.