

Venture Capital for Knowledge Economy Workshop  
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**Accelerating the Development of  
Knowledge Based Economies:  
*Accessing Innovation Without Boundaries***

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# Particularly Relevant to Economic Growth Strategies for Emerging Economies

*(Malaysia, Indonesia, Chile, Turkey, etc)*

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Market driven

Sustained competitive advantage

Open innovation

Adapt, integrate, commercialize

# Open Innovation Principle

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- No one has all the good ideas, the required human capital, the financial resources for sustained growth in a globally competitive marketplace.
  - TOO SLOW
  - TOO EXPENSIVE
- Therefore to sustain rapid economic growth requires global access to technology, products, capital, and markets in order to leverage the local sustained competitive advantages into rapid economic growth.

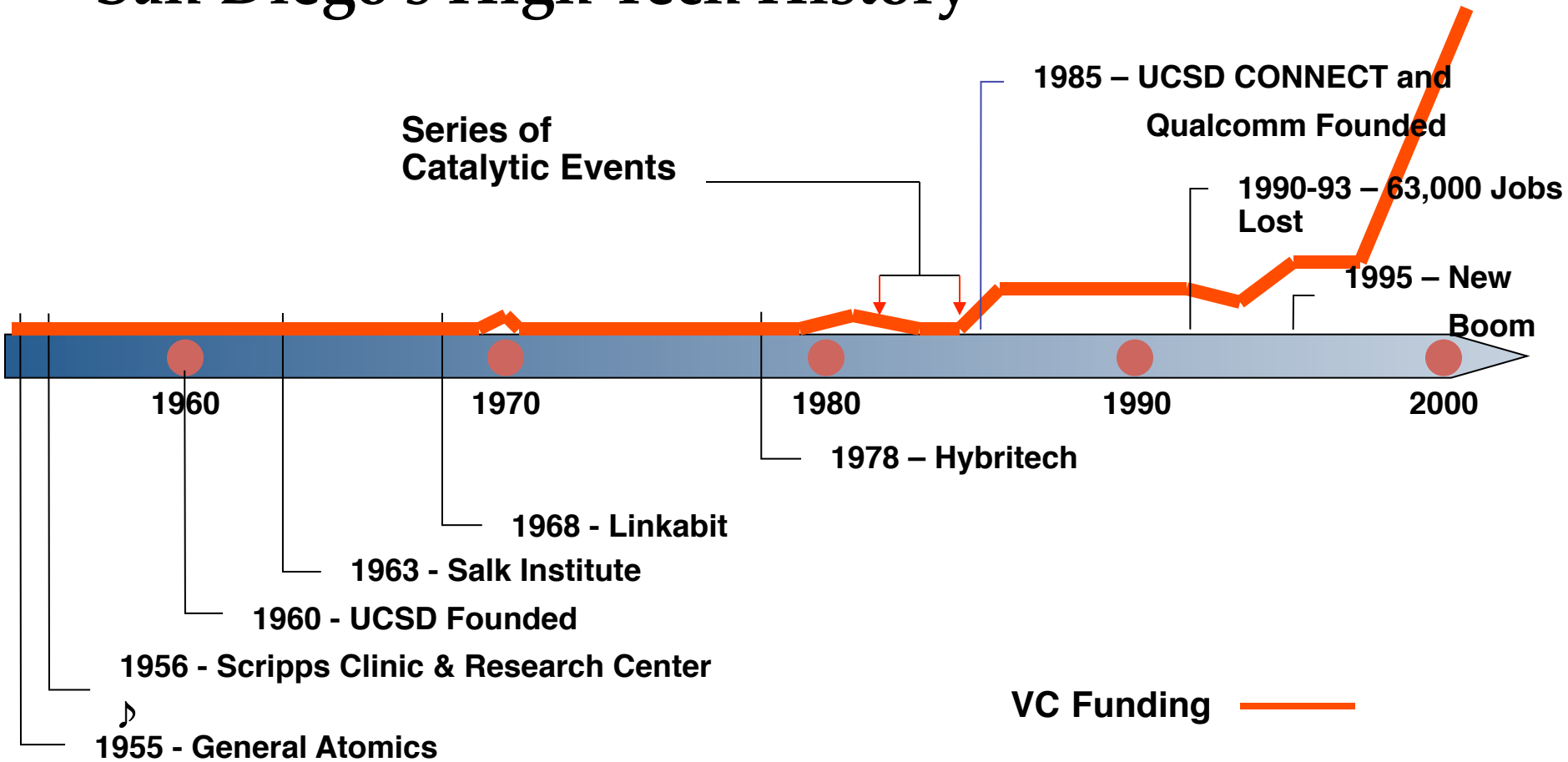
# MNC Open innovation Model

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- Strong internal R&D
- Global scouting for relevant innovation
- Incubation to nurture early stage technologies
- Venture capital funds
  - Innovation occurs in small companies
  - Small companies need capital
  - Venture capitalist provide risk capital
  - VC deal flow is a global window on innovation

# Organic IP Development Alone is Too Slow

## San Diego's High Tech History



# **Countries who desire to establish a innovation driven knowledge based economies must adopt the same hybrid model**

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US does it by encouraging international entrepreneurs to start companies in US.

Majority of SV CEOs are foreign born

# Malaysia as a case study

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- Fifty year old country
- Population of 27 million with a GDP of USD190 billion
- Desires to transition from a manufacturing natural resource based economy to a knowledge based economy driven by innovation.
  - 2020 goal is to double personal income on a GDP of USD550 million
  - Become a green economy
  - Reduce carbon intensity by 40%

# Malaysian Bio Sector

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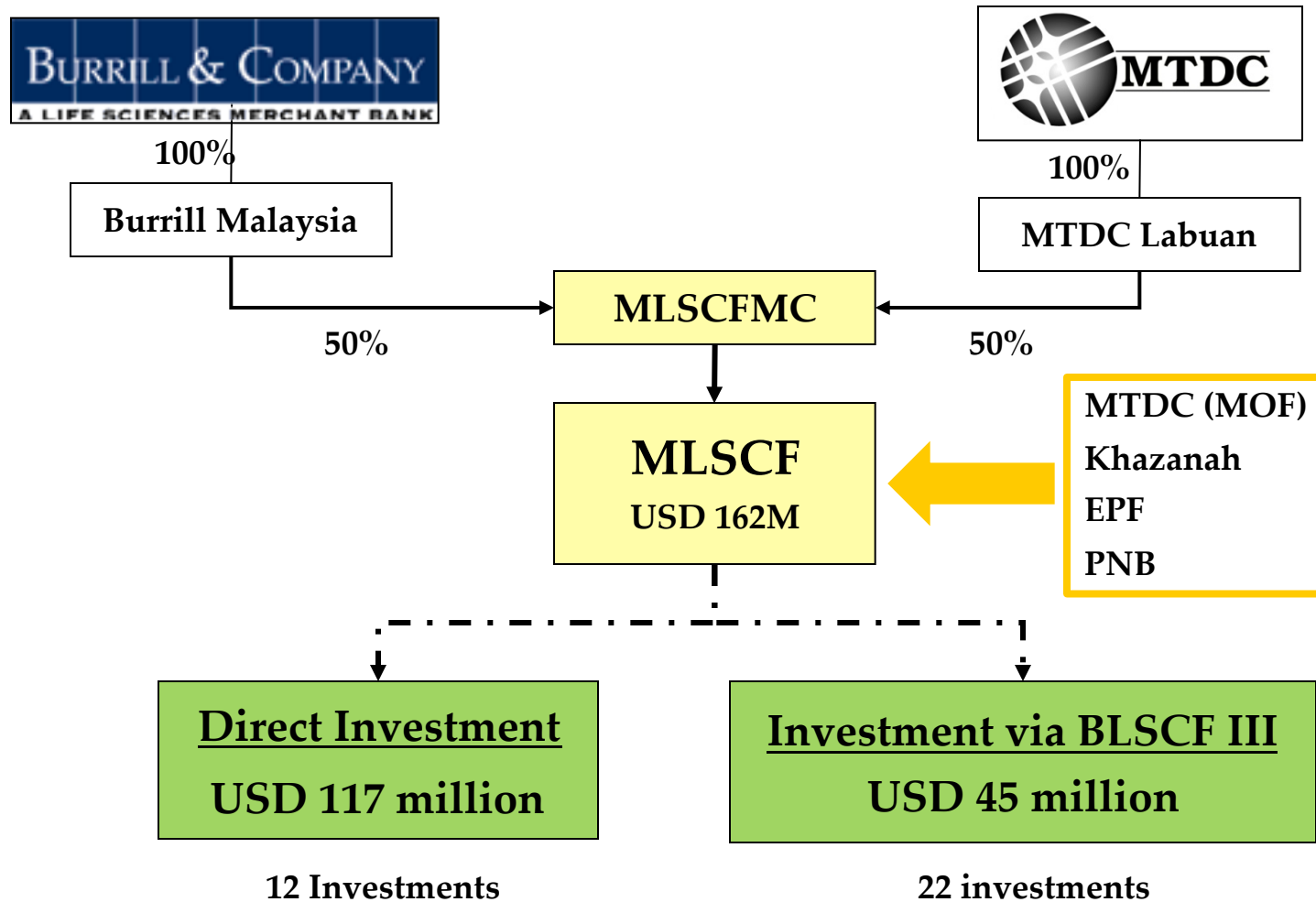
- Nascent
- Weak R&D
- Huge Market When Malaysia Has A Sustained Competitive Advantage
  - Established Oil Palm plantation industry
  - 80 million tons of biomass produced annually
  - Sustainability being challenged
  - Geographically located near large and growing markets
  - Climate conducive to rapid biomass production
- Goal become the hub of a biorenewables industry

# Strategy

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- Conducive environment
- Strengthen internal R&D with emphasis on translational research
- Global Window On Innovation via USD162 M Malaysian Life Sciences Capital Fund
  - Invests globally in Malaysia centric companies
  - Brings companies to Malaysia for FDI, and partnerships with Malaysian companies
  - Managers assist in building a bio sector
    - Policy
    - Human capital

# Malaysian Life Sciences Capital Fund



# Innovation Requires Access to Risk Capital

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- Need ample “cradle to commercialization” risk capital managed by individuals with **domain expertise**
  - Targeted grants
  - Seed funding for Malaysian start ups
  - Venture capital in targeted sectors
  - Project financing for capX
  - Debt financing
  - Private equity/Growth capital
  - Public markets

# Risk Capital Vital To Acceleration Model

- Need ample “cradle to commercialization” risk capital managed by individuals with domain expertise


















- Targeted grants
- Seed funding for start ups
- Venture capital investing locally and globally
  - **Local – Invest in local entrepreneurs**
  - **Global – to access global innovation (MLSCF model)**
- **Project financing for CapX**
- **Debt financing or loan guarantees**
- **Private equity/Growth capital**
- **Public markets**

Important But  
Too Slow

**Key To  
Acceleration  
Deals**

# Current MLSCF Portfolio


















Sold for USD65 million

Company	Role:	Board Seat:	Own %	Investment Partners:
	Founded	✓	40.6%	
	Lead	✓	20.1%	 
	Lead	✓	21.6%	
	Co-Investor	✓	5.4%	 
	Co-Lead	✓	19.5%	 
	Co-Investor		1.2%	  

IPO - USD 400 million

# MLSCF Portfolio - Top Tier Investment Partners

IPO – USD650 million

Company	Role:	Board Seat:	Own %	Investment Partners:
	Lead	✓	7.4%	 venture assistance, strategic advice, venture capital 
	Co-Investor	✓	9.7%	 
	Co-Investor	Observer	2.9%	 
	Co-Investor	Observer	0.8%	 venture assistance, strategic advice, venture capital  
	Lead	✓	10.5%	 venture assistance, strategic advice, venture capital
	Lead	✓	36.1%	

Founded by MLSCF, Vaccines for infectious diseases

# Benchmarked Investment Performance

March 2011

Fund	Rank	Year	Investment Cost	Total Value	Distributed Capital	Booked Returns <sup>1</sup>			Cambridge Associates <sup>2</sup>	
						Gross IRR <sup>3</sup>	CoC Return	Net IRR <sup>4</sup>	Net IRR Upper Quartile	Net IRR Median
Burrill Life Sciences Capital Fund III	2nd Quartile	2006	\$136,309,708	\$172,123,188	\$8,227,231	11.9%	1.3x	0.1%	2.15%	-4.1%
Malaysian Life Sciences Capital Fund	Top Quartile	2006	\$53,383,788	\$83,588,118	---	22.6%	1.6X	7.9%	2.15%	-4.1%

- (1) Booked Returns – Realized and unrealized gains as of 3/8/11
- (2) Cambridge Associate Benchmark Statistics – U.S. Venture Capital as of 9/30/10
- (3) Gross IRR as of 3/8/11
- (4) Net IRR as of 3/8/11

**Top 10% of all VC funds started in 2006!**

*Vintage year funds formed since 2006 are too young to have produced meaningful returns. Analysis and comparison of partnership returns to benchmarks may be irrelevant*

# Summary

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- Market driven – clear technology and issue map
- Strengthen internal R&D
  - Focused on translational research
  - innovation support and train knowledge workers
- Global window on relevant innovation supported by a venture fund
- Adapt, Integrate and commercialize with local companies

# Thank you

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