MDA/AAMD Updates

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MDA Updates - 2015

- MDA-CAP grant was NOT successful
- But we are a resilient bunch and are keeping motoring On:
- Completed and published vaccine studies
  - Animal model is key; validated
  - Promising candidates identified
- AAMD in second year
  - Diagnostic samples
  - Communications
  - Web-site – mycobacterialdiseases.org
- BMGF meeting in Morocco on bTB control in developing countries
- Launch of GRAbTB
- Joint MDA meeting with Mexico
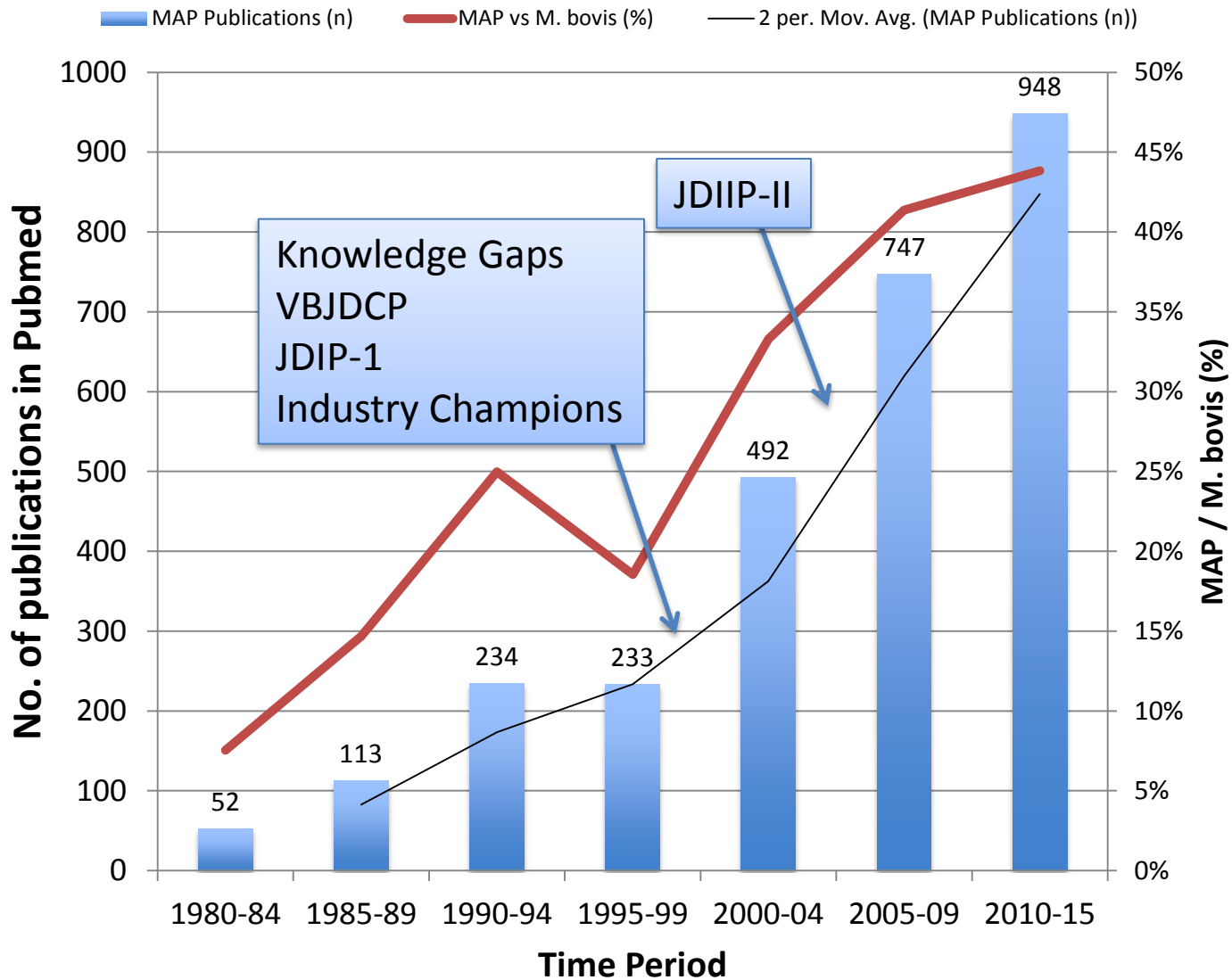- Explore interface with Genome Canada Vaccine Program
- What next?

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"Strategy without tactics is the slowest route to victory.

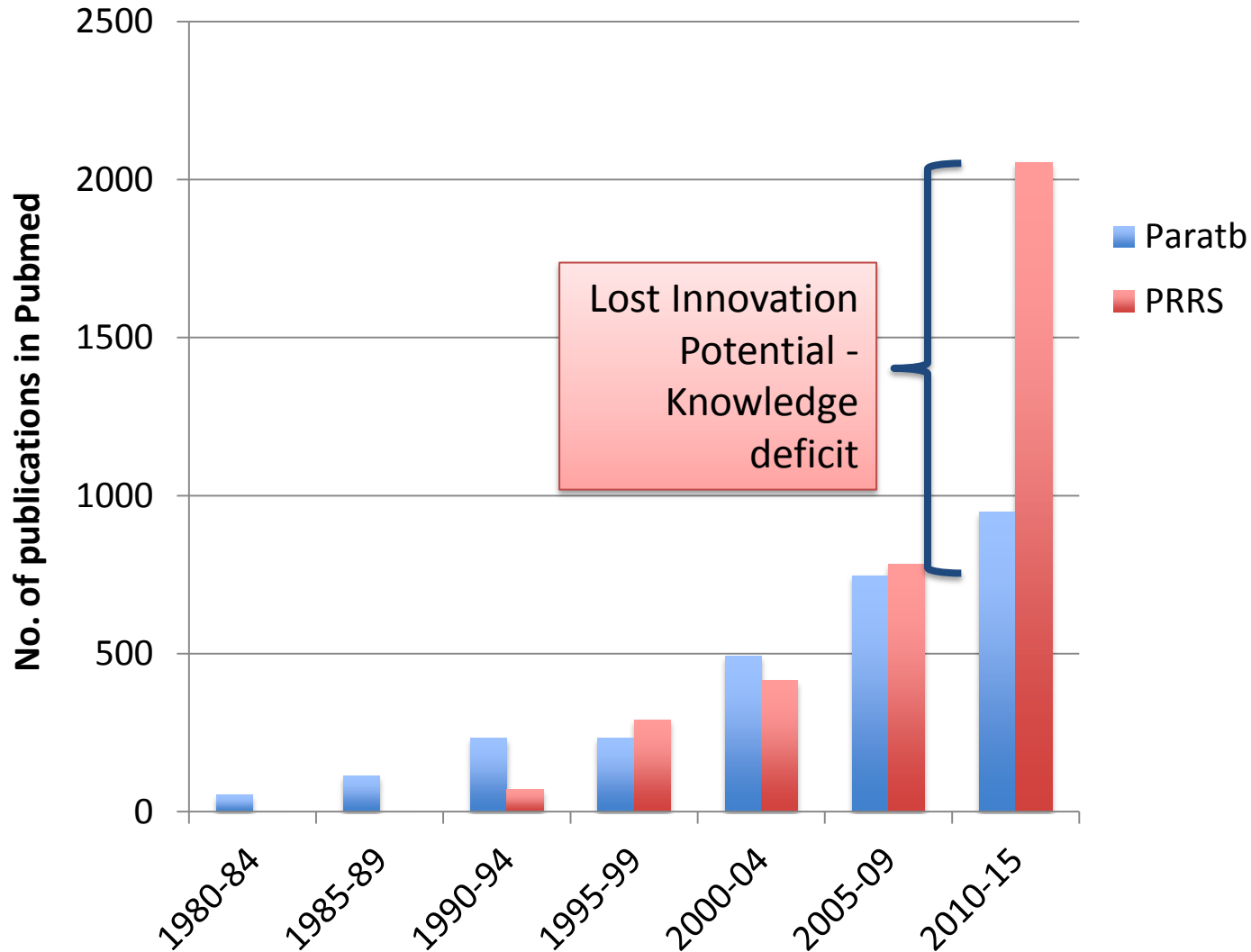Tactics without Strategy is the noise before defeat."
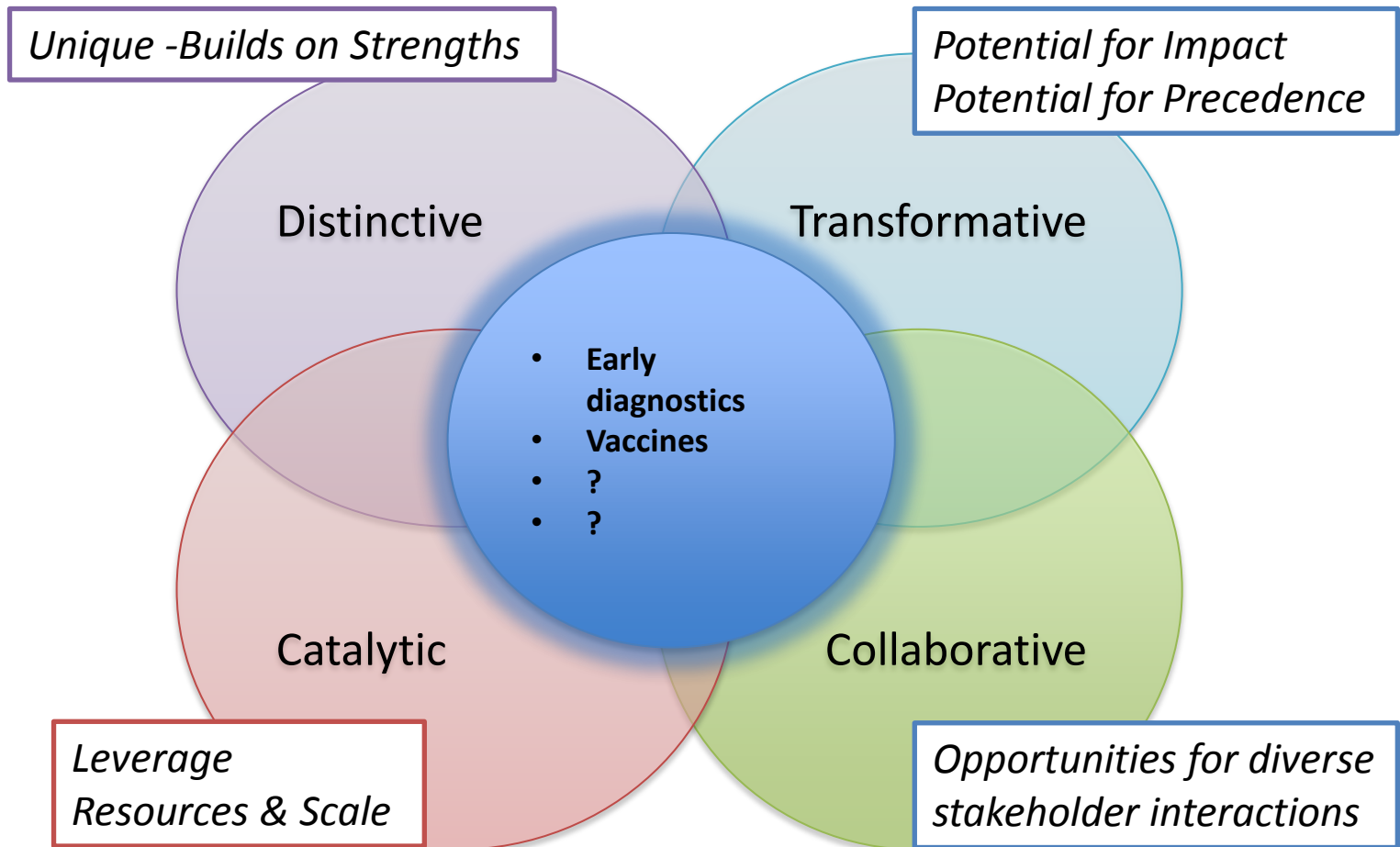
Sun Tzu

Strategy and Resources Drive Innovation

Strategy and Resources Drive Innovation – Industry as a catalyst!

Points to Ponder - reprise

- Are we depending on incremental and "tactical" but not "strategic" progress?

- MDA Community and JD Committee need to help refine strategy and prioritize tactics:
  - What is slowing progress in disease control? (Technology? Biology? Resources?)
  - What are the key inflection points?
  - Do we have a strategy to address potential public health concerns for MAP and bTB?
  - Roles of ARS, APHIS, Academia, Industry, Global Alliances?

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Possible Strategic Planning Decision Tree

Unique -Builds on Strengths

Potential for Impact
Potential for Precedence

Distinctive

Transformative

- **Early diagnostics**
- **Vaccines**
- **?**
- **?**

Catalytic

Collaborative

Leverage Resources & Scale

Opportunities for diverse stakeholder interactions

MDA-CAP – Knowledge Gaps

Area	Motivation (TB and JD)
Pathogenesis	• Define the infectious phenotype • Identify novel diagnostic and vaccine targets
Host Response	• Characterize the early host immune response • Define correlates of protection
Diagnostics	• Identify animals early in infection • Differentiate infected from vaccinated animals
Vaccines	• Evaluate candidate vaccines (JD only)
Host Genetics	• Identify markers for susceptibility • Determine sire Predicted Transmitting Ability (JD only)
Epidemiology	• Understand mechanisms of transmission • Economic analyses of targeted interventions and control strategies
Extension and Education	• Communication and stakeholder engagement • Socio-behavioral dimensions of control programs • Educational modules including "One-health" programs for train the trainer and health professionals; Minority engagement and training

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GRAbTB Alliance

- Vision - A coordinated global research alliance enabling improved understanding and control of bovine TB

- Mission - To establish and sustain global research partnerships that will generate scientific knowledge and tools to contribute to the successful control and eradication of bovine TB

- Part of a group of Global Strategic Alliances for the Co-ordination of Research on the Major Infectious Diseases of Animals and Zoonoses (STAR-IDAZ)

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GRAbTB – Strategic Goals

- Identify research opportunities and facilitate collaborations within the Alliance

- Conduct strategic and multi-disciplinary research to better understand bovine TB

- Develop novel and improved tools to control bovine TB

- Serve as a communication and technology sharing gateway for the global bovine TB research community and stakeholders

- Promote collaboration with the human TB research community