



Atelier de consultation
sur la **biofabrication** canadienne



Canadian **Biomanufacturing**
Consultation Workshop

Final Report on Consultations

Consultations - Montréal, Toronto and
Vancouver 2016 - 2017

June 15th 2017



Attracted wide range of participants

Montréal	Dec 7, 2016	86 participants
Toronto	Feb 23, 2017	68 participants
Vancouver	March 23, 2017	60 participants

214
participants

6 High profile and
international
speakers

36 World Café
discussions

1 National map of
stakeholders (biotechs,
CMOs, VCs, gov, etc.)

6 Plenary
discussions

1000+ Lines of comments
captured

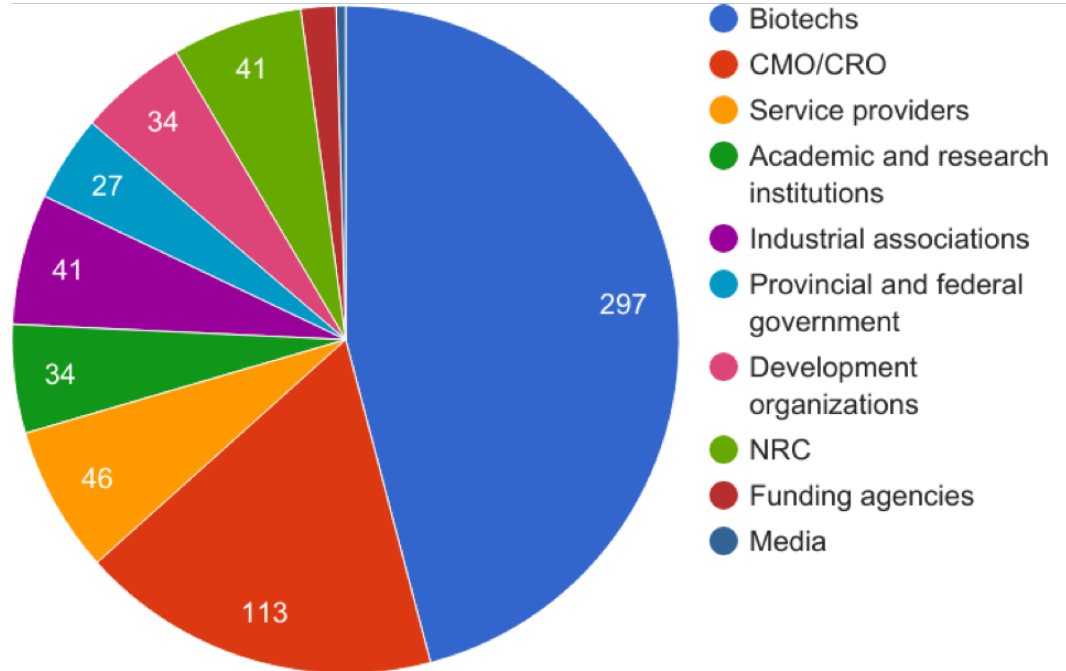
Canadian biomufacturing ecosystem

600+

Total identified
individual
stakeholders

214

Total participants
to consultation
workshops



Workshop Conference Series



Bernard Massie, NRC

- Large pipeline of biologics in Canada
- Lack of investment in biomanufacturing facilities
- Lack of commercial scale CMOs for mammalian cell biomanufacturing in Canada



David Hughes, BPA

- Gov funded CMO infrastructure - \$65M
- Successfully operated by private partner



Maureen O'Connor, Formation Biologics

- First medium scale GMP clinical batch manufactured in Canada!
- Delicate balance between time, risk and cost.
- Long list of suppliers to support development and biomanufacturing.



David Poon, Zymeworks

- No compromise on quality, no room for failure! – Pool of suppliers + backups to de-risk
- Global suppliers work but proximity would be better
- Local suppliers must offer a complete solution and meet high standards.



Stacy Luther, FUJIFILM

- Strategy: Increase capacity based on demand and location fit
- Leverage existing facilities and expertise - what else can we do with what we already have?
- Open to partnerships for expansion into niche or emerging technologies

Roundtables

4 ISSUES

- Biotech support ecosystem
- Infrastructure and production capacity
- Know-how and skills
- Funding

TIMELINE DIFFERENCIATOR – 3 STAGES OF NEEDS

- Preclinical Validated target
- Early clinical Proof-of-concept
- Late clinical / commercial Proof-of-product

3 LENSES

- Biomanufacturing as part of product development
- Biomanufacturing a success factor to reduce attrition of pipeline
- Biomanufacturing as a cornerstone of biotech ecosystem

SUMMARY OF DISCUSSIONS

Workshop	Consultation consensus	Specific regional focus
Montréal	<ul style="list-style-type: none">• GAP in CMO capacity• Assets and talents are present• Difficulty raising funding for infrastructure	<ul style="list-style-type: none">• Critical value inflexion point at Ph2• Lack of funding/incentives for local biomanufacturing• Opportunity in counter measures and biosimilars
Toronto		<ul style="list-style-type: none">• Shift from an academic to a business mindset• Set of practical skills needed for biomanufacturing• Risks in tech transfer to CMOs
Vancouver		<ul style="list-style-type: none">• Need for a champion, leadership• Collaboration / bio-incubators• Importance of capacity (“capacity first”)

Criteria:

Number of jobs created
Economic impact, export potential
Foreign investment

Recommendations

Best practices for a functional ecosystem

1. Building a national biomanufacturing ecosystem
2. Best practices vs globalization
3. Biomanufacturing incubation strategy

Building additional biomanufacturing capacity in Canada

4. Biomanufacturing facility funding model
5. Leveraging upgraded facilities
6. Biomanufacturing: moving forward with a business case
7. Create financial support for local biomanufacturing

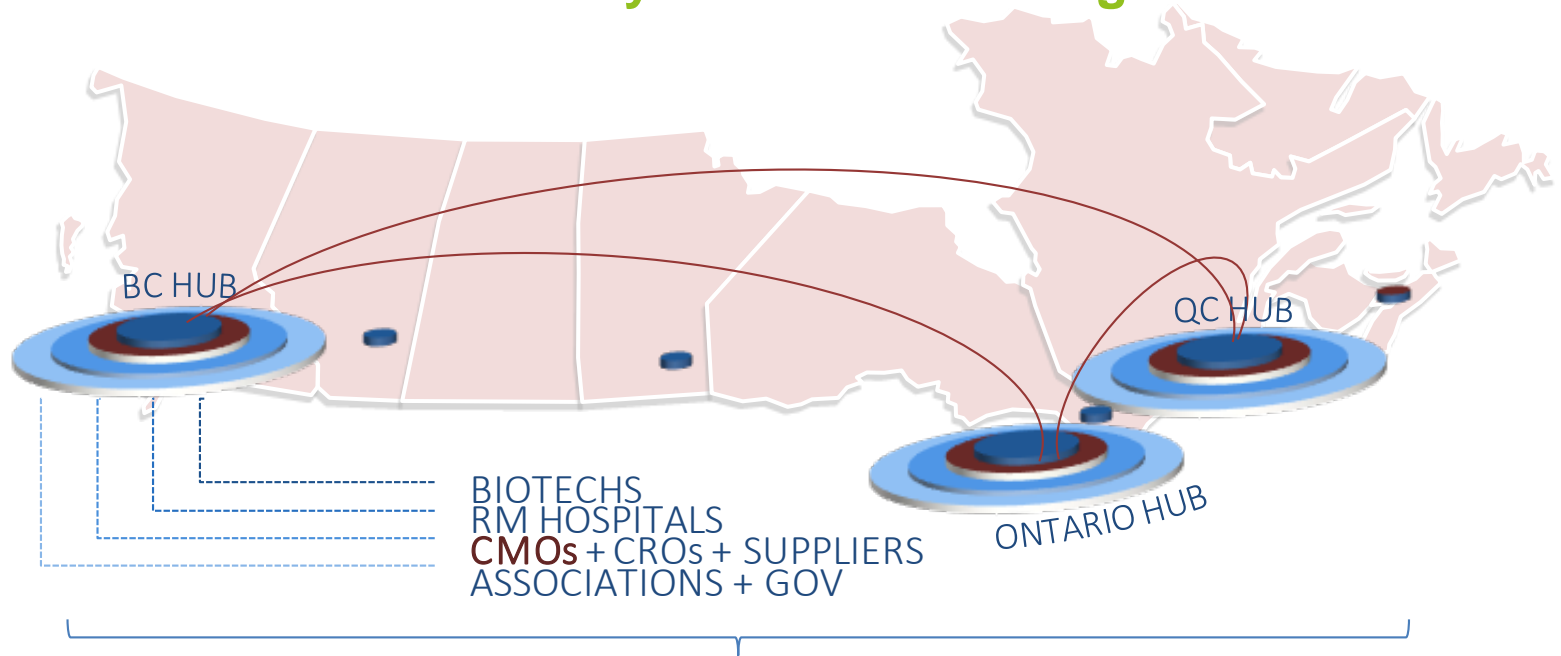
Building an integrated biotech cluster

8. Speak as one voice
9. Government commitment

People and talent at the center of the national biomanufacturing strategy

10. National talent strategy

Canadian Biotech Industry : Create One Integrated Cluster



Integrate the specialized hubs into a functional industrial cluster unified by advanced biomanufacturing

National Strategy project

- Discrete recommendations should be part of a national biomanufacturing strategy.
- Crafting of this strategy needs to be co-lead by industry and key stakeholders (steering committee).
- Short, mid and long term plan to maximize impact and growth of biotech ecosystem in Canada.

SHORT TERM 1/2

Immediate actions

- **Identify key leaders and their roles** to establish and develop the biomanufacturing agenda in Canada (planning and implementation)
 - Develop an integrated communications strategy with stakeholders: website (information), LinkedIn (community), media (advocacy), events
- Maintain (and formalize) an **industry-wide steering committee** for the biomanufacturing agenda (strategy, advocacy)
- Form **working groups** with industry representatives and experts to analyze opportunities
 - **Topics to be determined** (identify niches, develop business models, international relations, advocacy plan, etc.)

SHORT TERM 2/2

- National strategy document
- Industry-led LOI for national supercluster submission
- Global Affairs plan to attract foreign investment
- Adopt an integrated communications strategy

MID AND LONG TERM ACTIONS

- Launch cluster – 5 year plan
- Supporting programs
- Monitor results and correct gaps