



# Building Innovation Ecosystems



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July 30, 2024

# Elements of a Functional Innovation Ecosystem **biolobs** Lab Central



# LabCentral A Successful Public/Private Partnership

#### GOVERNMENT **INDUSTRY & SPONSORS** Massachusetts **X**astellas BAYER Biogen he capital of scientific revolution eppendorf Johnson&Johnson Takeda Thermo Fisher AMGEN entral А **START-UP & INDUSTRY PRIVATE PARTNERS** mission **db**3 BIOCAPITAL MASSCHALLEN 🗘 biolabs MASSBIO

### **NEW BIOTECH COMPANIES – 830 COMPANIES SUPPORTED!**



+ So many more!

### Central

# Impact Highlights

8,339+ Life-Science jobs created

**\$30 BN** in funds raised by resident companies

30 IPOs

150+ Clinical trials launched\*

15,000 Patients dosed/enrolled\*

**180+** Patents granted\*

\*LabCentral companies only

### **Biotech = a Strategic Imperative for Japan biolabs** Lab Central $\langle \cdot \rangle$ • National Security Create Societal Value Economic Requirement from Intellectual Property **Development Engine 9 9**-9 Contraction of the second Innovation Pipeline Access For for Established Japanese Patients to Pharma Companies New Therapeutics

# Thank You!

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# Appendix

## **INNOVATION INFRASTRUCTURE INVESTMENTS**

- Models and precedent cases for public-private partnerships are well established in the US, Germany, and France.
- Modest public investment in innovation infrastructure can unlock huge economic potential and help diversify Japan's future employment and industrial base.
- Shared labs create cost efficiency and build community.
- Creating defined hubs increases network effects and attracts/retains talent.
- Infrastructure will go hand-in-hand with ecosystem building.

## **TECHNOLOGY TRANSFER and ACADEMIC MISSION**

- Shift focus from just basic research to a product-oriented mission for universities.
- Task universities with making life better for society by creating products that help people.
- Align interests between institutions and startups/investors:
  - Avoid upfront cash payment to obtain license rights from academic institutions or universities. This stands in the way of successful development as it requires scare seed investment capital to flow to pay license fees rather than to do the experiments to de-risk the technology or develop the product.
  - Make IP owned by institutions easily available to researchers and investors without upfront cash fees, allowing funds to be used for early development.
  - Align interests by allowing institutions to participate in the long-term upside of the value created.
  - Link license fees to revenue and product success.
  - Incentive structures for academic licensing offices should include direct parameters such as job creation, long-term revenue flows, the number of spinouts enabled, and the number of unicorns created, which holds significant reputation and marketing value for the academic institution.

## **CULTURAL CHANGE: Embrace of Risk**

- Entrepreneurial startup creation is full of risk: most startups fail.
- Startup entrepreneurship requires a high personal and societal tolerance for risk and failure. It is important to remove the stigma from entrepreneurial failure in startups.
- Government leaders should celebrate startup entrepreneurs as heroes, not only in success but also as role models for trying.
- Encourage second chances: those who failed before are less likely to repeat mistakes and have valuable experience. Industry, government, and academia should hire entrepreneurs.

# BioLabs Model | Faster Time to Value and Reduced Costs

