

# **Immigrant Entrepreneurs in the Massachusetts Biotechnology Industry**

**Laurel Smith-Doerr**

**With James McQuaid and Daniel J. Monti**

**Boston University and NSF**

With thanks to:




# US STEM Workforce Context

Source: *CPST, STEM Workforce Data Project Report No. 4, “The Foreign-Born in Science and Technology”*

- 1994-2002, 38% of growth in US STEM workforce due to increase in foreign-born.
- All STEM fields, 18% of workers foreign-born. Life sciences, 21% foreign-born.

# Our focus in the US STEM Workforce

- For-profit, science-based biotechnology firms
  - Founders (self-described by firms)
  - Massachusetts and New England cluster of firms
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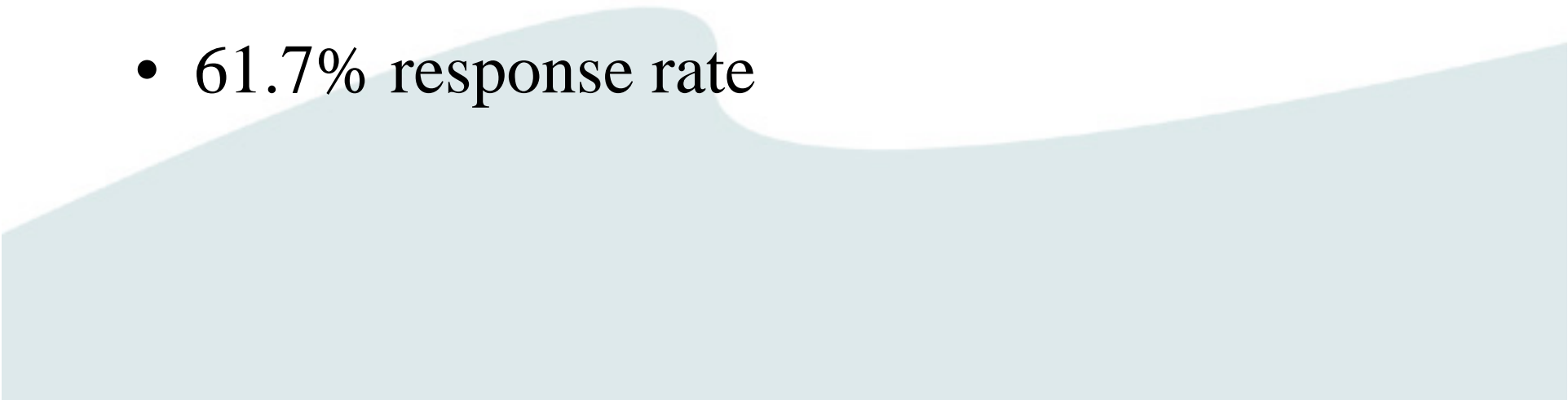
## Location of dedicated biotechnology firms

(source: Powell, Koput, Bowie and Smith-Doerr, 2002)

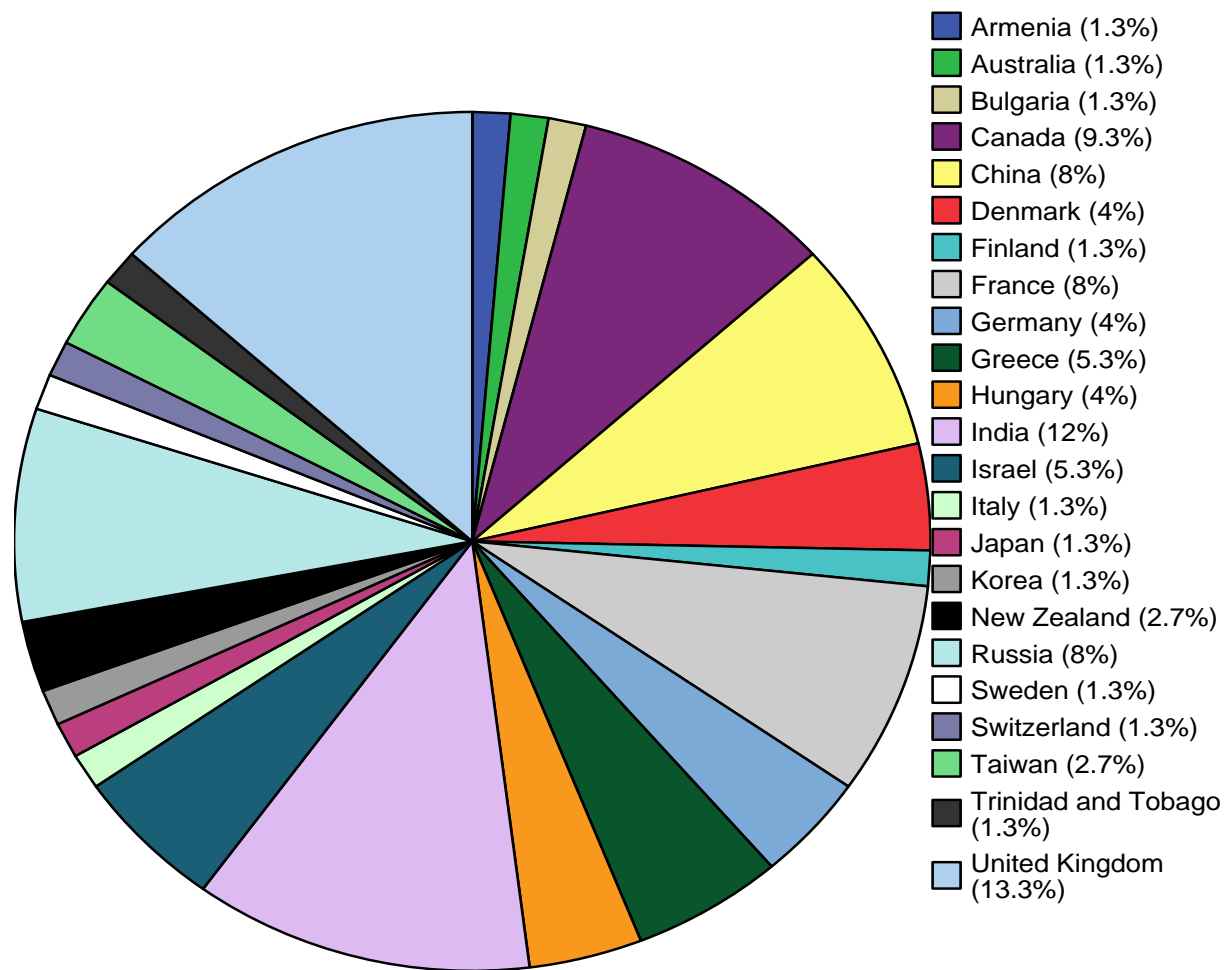
# Data Collection: Companies

- List of 261 companies
  - (drawn from the member list of the Massachusetts Biotech Council)
- Financial Information from sources including:
  - Public companies: Mergent Online
  - Private companies: Reference USA, Ward's Business Directory, and LexisNexis Business Search

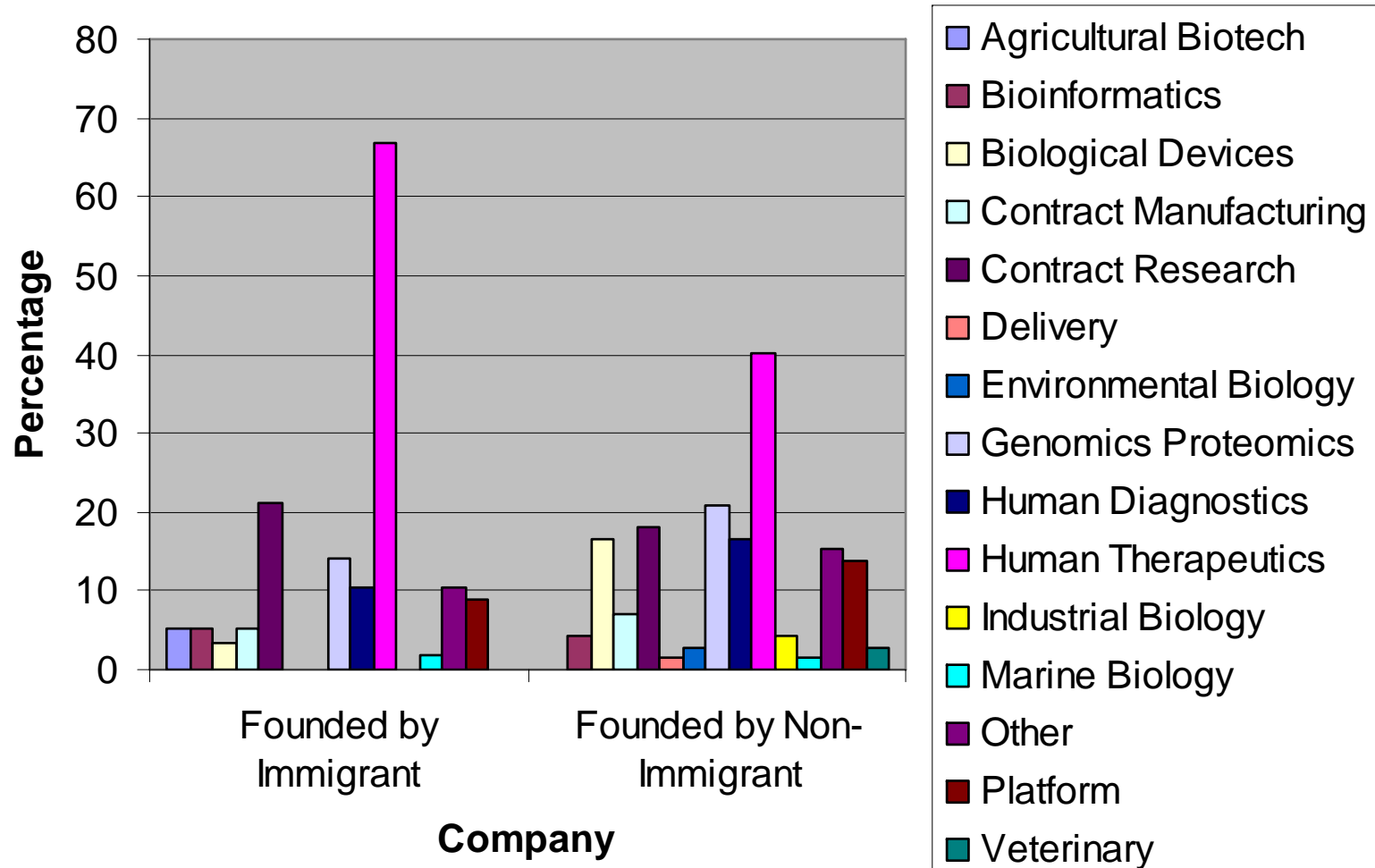
# Data Collection: Founders

- Sources of information
    - Biographies on company websites
    - E-mails to companies
    - Phone calls to companies
  - 61.7% response rate
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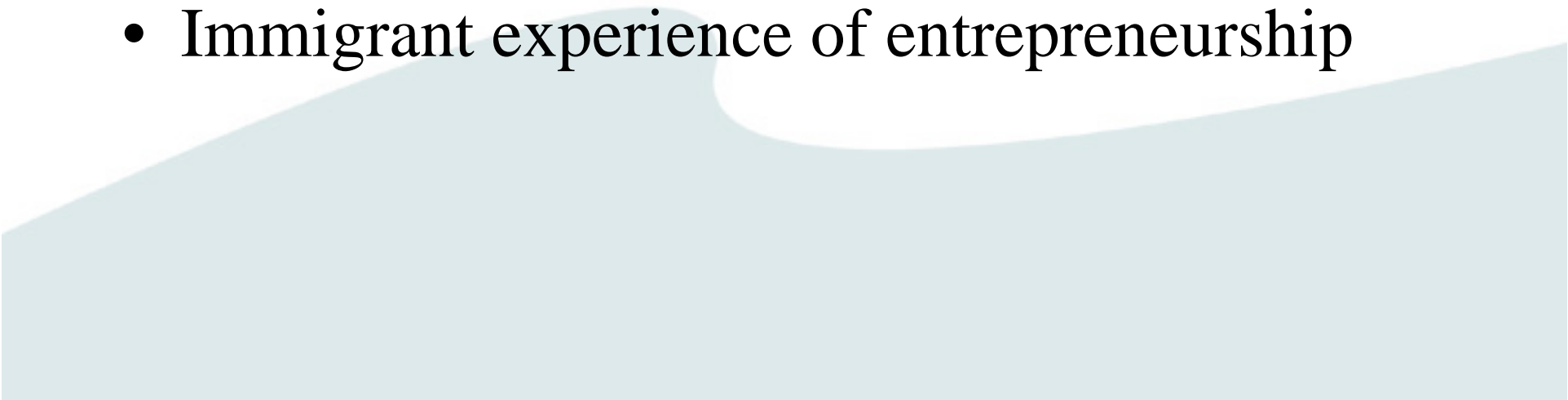
**Figure 1. National Origins of Foreign-Born Founders of Biotech Firms, Percentages**



**Figure 2. Areas of focus of MA biotech firms founded by immigrants and non-immigrants**



# Some findings from pilot interviews

- Why Massachusetts?
  - Hurdles to entrepreneurship
  - Immigrant experience of entrepreneurship
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# Key Findings for Competitiveness

- **25.7%** of New England biotechnology companies have at least one foreign-born founder
  - (if missing data resemble ours, **41.6%** have foreign-born founder)
- **14.6%** percent of all Massachusetts biotechnology firms have at least one woman founder
  - (if missing data resemble our data, **20.7%** have women founders)
- In 2006, immigrant entrepreneurs in New England biotech companies produced over \$7.6 billion in sales and employed 4,352 people