Creating and Maintaining Sustainable Scientific Resources
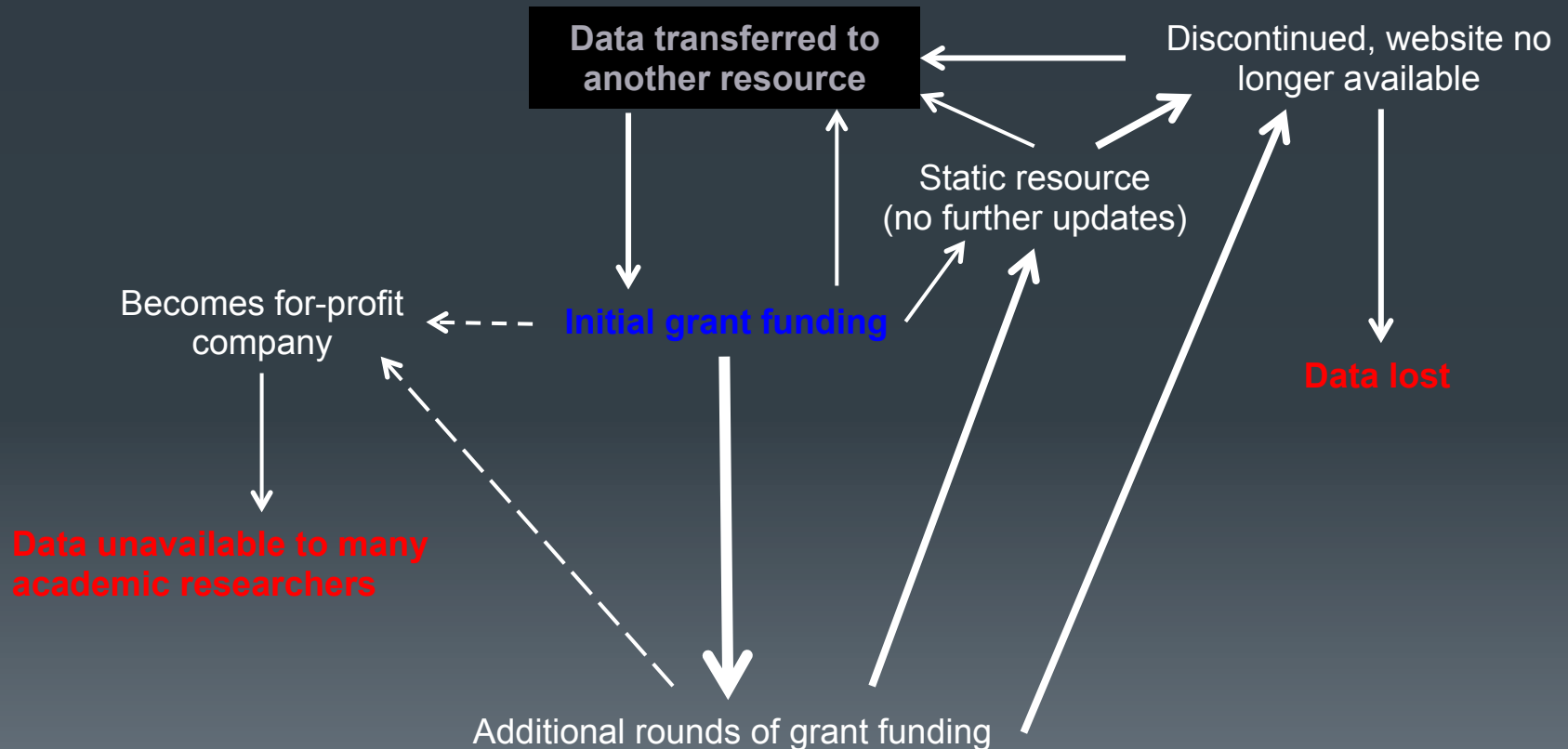
Bob Muller, CTO, CFO

Phoenix Bioinformatics Corporation (TAIR)

Research Database Lifecycle

TAIR Worldwide Usage

	Country / Territory	Visits	Visits
		2,257,524 % of Total: 100.00% (2,257,524)	2,257,524 % of Total: 100.00% (2,257,524)
1.	United States	517,964	22.94%
2.	China	394,727	17.48%
3.	Japan	196,765	8.72%
4.	Germany	155,797	6.90%
5.	United Kingdom	97,745	4.33%
6.	France	83,142	3.68%
7.	Canada	71,225	3.16%
8.	India	69,277	3.07%
9.	South Korea	67,564	2.99%
10.	Spain	57,850	2.56%

Increasing Usage Since 1999
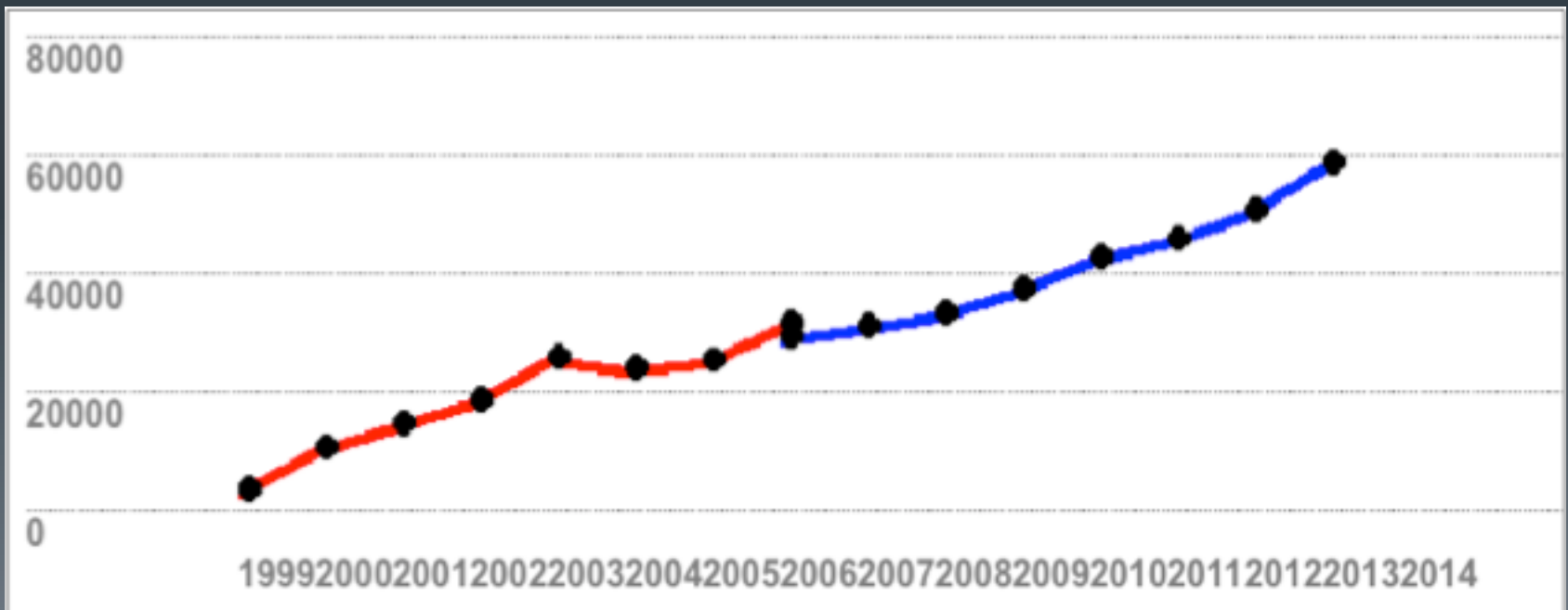
Researchers, Labs, Institutions

- 25,000 registered individual researchers
- 9,900 registered research labs
- 680 universities, nonprofit research organizations, and government labs
- 10 Ag-biotech companies

A Fair Approach to Subscription

Fair Subscriptions

- Most labs will share 1-2 individual subscriptions rather than buying one for each researcher
- If the price is over $95 many labs won't subscribe
- Institution-wide subscriptions preferred
  - Cover all faculty, staff, students
  - Allow access based on IP address
  - Provide access to casual users
  - Shifts cost from grants to university library budget
- Lab subscription
  - Requires individual login and password
  - PI signs up multiple individuals with discount

The Bottom Line

- Company subscriptions $5K-$25K based on usage/size
- Institutional Subscriptions 4 tiers $500-$7,500 based on usage
- Lab Subscriptions $85 for 2 or more subscriptions
- Individual Subscriptions $95
- Free Subscriptions for high school, college courses, others
- Metered content up to 10 accesses before requiring subscription
- Crowdfunding, donations, foundation grants, subcontracts

Phoenix Vision

We envision the global community using all relevant knowledge gained from previous research to accelerate scientific discovery. The body of scientific knowledge is integrated, computable, evolving, sustainable, and available to all researchers. Scientists use this body of integrated knowledge to find novel connections and to make revolutionary breakthroughs.

Phoenix Mission

- Develop an economically and technologically sustainable business model and platform that provides the resources to allow scientific databases to persist, grow, and prosper.

- Integrate and systematically organize trusted data into knowledge bases and develop tools that enable reuse of and create knowledge from data.

- Build an interactive, computable learning environment where researchers explore relevant knowledge and build testable hypotheses.

Phoenix Bioinformatics: Who We Are

- Eva Huala, Executive Director
- Bob Muller, CFO/CTO
- Tanya Berardini, Director of Curation
- Donghui Li, Director of Product Marketing
- David Huang, Senior Software Developer
- www.phoenixbioinformatics.org
- www.arabidopsis.org