

From Academia to Industry: Insights from Identifai-Genetics

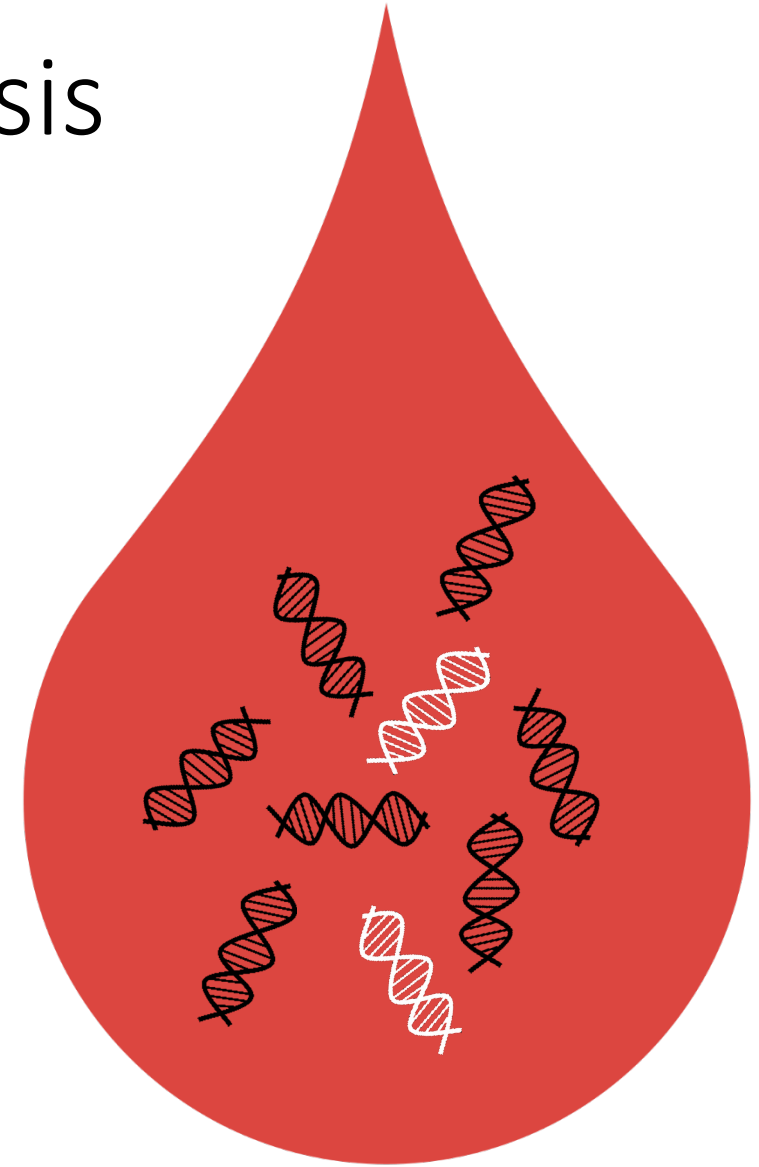
Tom Rabinowitz, MD, PhD
Co-founder & CTO

identifai 

Ben's Story

Noninvasive Prenatal Diagnosis

- Circulating DNA in our blood
- Fetal DNA in maternal blood
- Risk-free genetic tests
- Problem: signal to noise
- Solution: algorithms



Identifai Genetics

- Dr. Tom Rabinowitz and Prof. Noam Shomron, Tel Aviv University
- Founded in 2021
- Total funding to date: \$6.5M
- 15 employees
- Partnerships with Columbia University, Clalit HMO, Ultima Genomics



Academia to Industry?

1. Can curiosity-oriented research also be profit-oriented?
2. Commercialization: science meets the outside world
3. HealthTech is not HiTech
4. The Computational Physician Scientist

1. Can curiosity-oriented research also be profit-oriented?

- Research aspects:
 - Advantages: small teams, patience
 - Translational research
 - Computational research
- Technical aspects:
 - Awareness
 - IP
 - Cautiousness

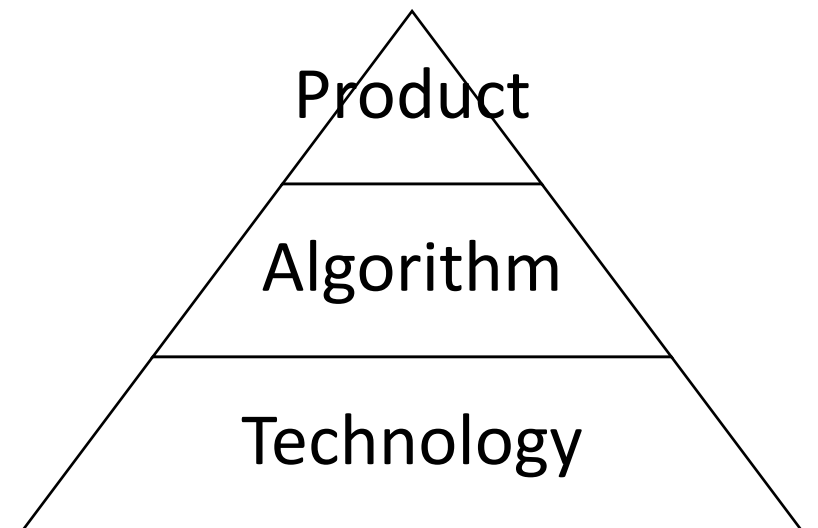
2. Commercialization: science meets the outside world

- Scientists are not businessmen (and vice versa)
- Cross-talk, learn from each other
- Tech-transfer



3. HealthTech is not HiTech

- HiTech: Human Centered Design
 - find the right nail
- HealthTech = what can I do with this hammer I built?
 - The nails are pretty much known
- Narrow down the problem
 - Market \approx Clinical World
- Bioinformatics as a Service (Baas)



4 The Computational Physician Scientist

- What is a physician scientist?
- Data revolution → a new scientific field: bioinformatics
 - Data science, statistics, AI
- AI → technical skills are less required
- New avenues for physicians:
 - WLB
 - Less burnout
 - Income

4. A new creature: Computational Physician Scientist

- Great potential for health systems and for the medical profession:
 - Attract GenZ's: happy doctors = better doctors
 - Cutting edge research (e.g., LLMs)
 - Large scale problems
 - Scalable, flexible, low-maintenance labs
 - Commercializing potential
- 2 in 1?

Take home message

- Academia and tech synergy boosts medicine
- Multidisciplinarity maximizes these advancements
- Big data, AI algorithms & utilities, cloud – enable a new generation of physician scientists