Building Bio-Businesses in South Africa

Michael Fichardt
Co-founder and
Managing Partner
OneBio Venture Studio
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Turning life science into business.

OneBio provides funding, networks and expertise to build commercially sustainable biotech businesses.


"I think the biggest innovations of the 21st century will be at the intersection of biology and technology. A new era is beginning."
Steve Jobs, 2011

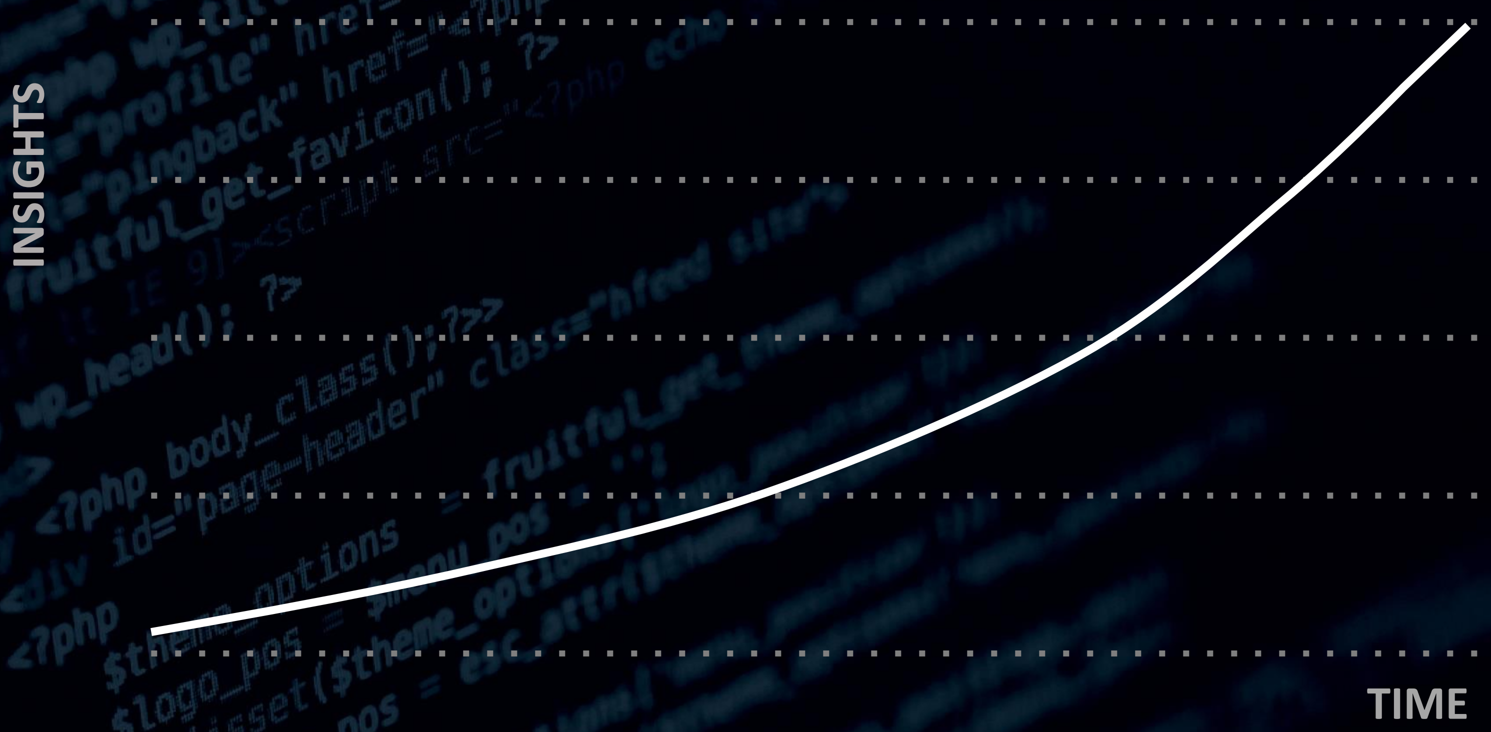
Biotechnology is an information technology.

COST TO SEQUENCE A HUMAN GENOME

Source: Human Genome Research Institute

MACRO TRENDS: UNDERSTANDING, major advances being made in AI and machine learning

COMPUTATIONAL INSIGHTS



Improved hardware
Improved data science techniques
Larger data sets

Source: www.codesoffinteres.com, www.blogs.invidia.com, www.nextplatform.com and OneBio

MACRO TRENDS: EDITING, tech able to accurately edit DNA

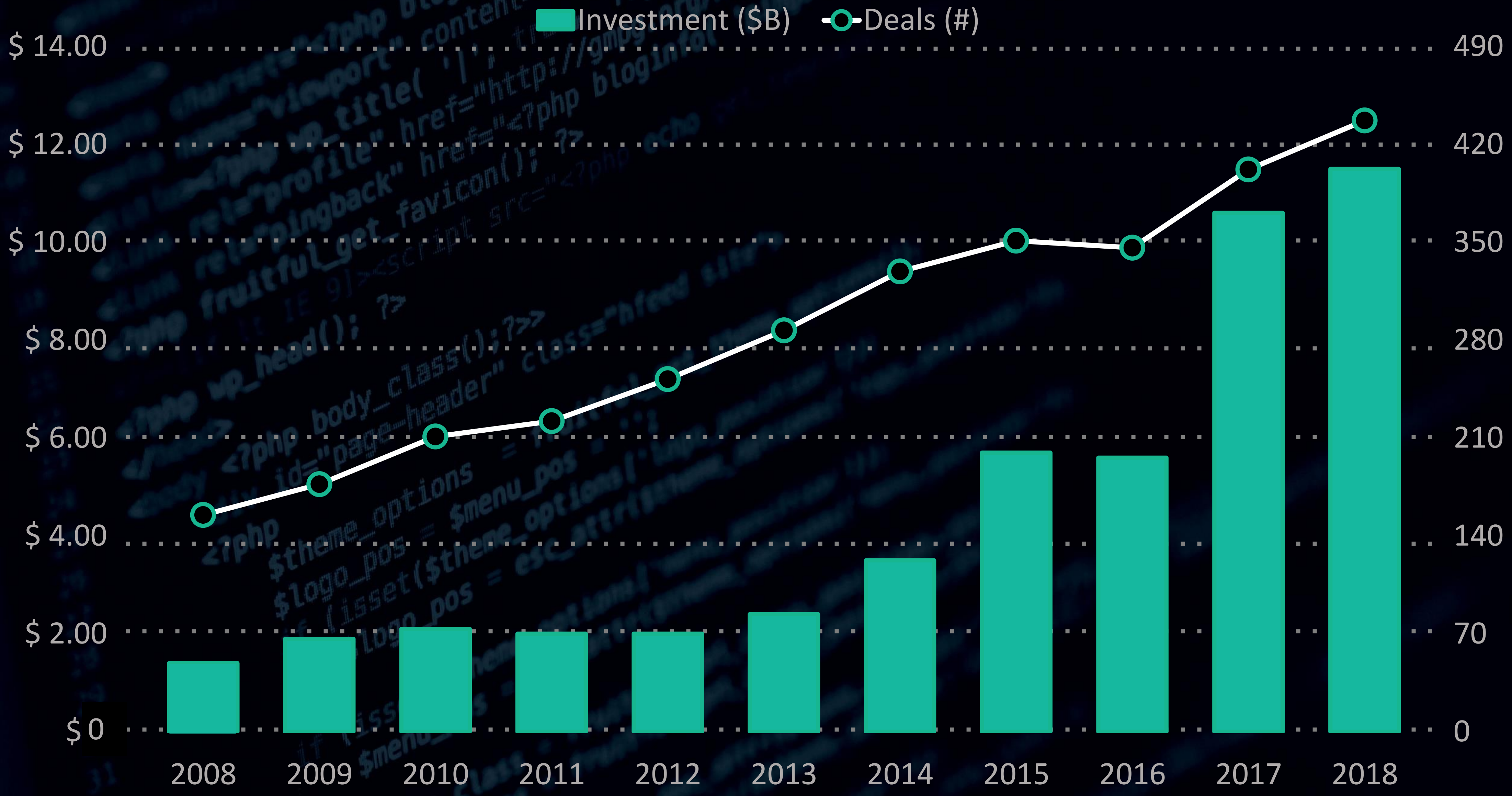
PUBLICATIONS MENTIONING CRISPR

Source: SCOPUS

These trends mirror the software landscape of the 1980’s.

Opportunity.

MACRO TRENDS: Investments in biotech startups



Source: https://pitchbook.com/news/articles/is-vcs-insatiable-appetite-for-biotech-sustainable

Past: Biotech was the domain of large pharma and agricultural companies due large costs involved.

Present and Future: Advancements in technology mean that it is now possible to build a biotech company at an investment level that's competitive with software start-ups.

MEMPHIS MEATS

TWIST BIOSCIENCE

UBABIOLOGIX biotransforming markets

Bolt Threads

GINKGO BIOWORKS™ THE ORGANISM COMPANY

AzarGen Biotechnologies

Is it possible to create a successful biotech company in South Africa?

KAPABIOSYSTEMS

Kapa History:

- Founded in Cape Town 2006 by Trey Foskett, Paul McEwan, Ron McEwan and Chris McGuinness

- Cape Biotech Trust (TIA) – R24m

- 2015 Kapa sold to Roche for R6.3B ($445M)

- They created enzymes and tools used in the lab to sequence DNA.

Why only one big
South African Biotech exit?

PROBLEM : In Africa, Science, business skills and investment exist in silos that don’t overlap

NO CONVERGENCE

SCIENCE

RESEARCH
DATA SCIENCE
IP

PROBLEM

BUILDING COMMERCIALLY SUSTAINABLE BUSINESSES

BUSINESS SKILLS

PRODUCT
MARKET FIT
ACUMEN

PROBLEM

SCIENTISTS NOT TAUGHT BUSINESS SKILLS

INVESTMENT

CAPITAL
NETWORKS

PROBLEM

IDENTIFYING A VIABLE BUSINESS SOLUTION & MARKET OPPORTUNITY

SOLUTION: OneBio, a platform connecting the dots…

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ONEBIO

A PLATFORM CONNECTING THE DOTS

SOLUTION: Training/entrepreneur support, Lab and Funding

ONEBIO

A PLATFORM CONNECTING THE DOTS

INCUBATION PROGRAMME

TRAINING AND SUPPORT

LAB

BSL2 CO-WORKING LAB

FUNDING

GRANT FUND
INVESTMENT CAPITAL

ONEBIO SEED INVESTMENT FUND: Early stage biotech investment fund

ONE BIO SEED INVEST FUND

R83.5m INVESTMENT FUND

FUND MANDATE :
SEED investments in South African and African biotech startups solving problems in healthcare, agriculture, materials, industrial, food and consumer biology

Areas of particular interest:

- **African genomics** – focus on building data and value pertaining to unique African genetic populations
- **Industrial biotech** – engineering biology to produce materials, proteins, biological tools
- **Microbiome** – soil, gut, skin, ENT microbiome related solutions
- **Future of Food** – cell based agriculture or plant based proteins
- **Bioinformatics / data science / AI / ML** – using data and ML to solve hard life sciences data problems

SWEET SPOT: Convergence of work done in the wet lab and data

STRATEGY: Direct venture investment and venture building…

STRATEGY: Direct venture investment

STARTUP INVESTMENT

FUNDING

VENTURE INVESTMENT:
SEED investments in South African and African biotech startups

Typical investment:

- **Minority stake investments**
- **R500k to R16m ticket size**
- **Investment done in tranches based on defined milestones**
- **Board seats in most instances**
- **Work intimately with entrepreneurs to build the startups**

STRATEGY: EXAMPLE, Direct venture investment

STARTUP INVESTMENT

FUNDING

PROJECT A:

Creating alternative form of leather using mycelium

Typical investment:

- **IP developed whilst at university/or post university**
- **Have negotiated an assignment of the IP from the university**
- **Have an early prototype**
- **Require funding to take the product to market**
- **R1 to R2m for between 10 to 20% equity (valuation will be different for each company)**
- **Follow-on funding milestone based**

STRATEGY: Direct venture investment

VENTURE BUILD

IP OR NOVEL IDEA

VENTURE BUILD:
Work with researchers to commercialise IP or build a company around a novel idea

Typical venture build:

- **Work with a research group to commercialise IP**
- **Sit with research group to build a business and investment case**
- **Negotiate assignment/licensing with research counsel/TTO**
- **Take a large to majority stake**
- **Match researchers with entrepreneurs**
- **Fund the startup via investment from OneBio Seed investment Fund**
- **Take the product/service to market**

STRATEGY: EXAMPLE, Direct venture investment

VENTURE BUILD

IP OR NOVEL IDEA

PROJECT B:

Creating alternative form of leather using mycelium

Typical venture build:

- **Work with a research group to commercialise IP**
- **Build a business and investment case**
- **Negotiate assignment/licensing with research counsel/TTO**
- **Take a large to majority stake**
- **Build a research and entrepreneurial around the IP**
- **Fund the startup via investment from OneBio Seed investment Fund**
- **Take the product/service to market**

Factors considered in selecting investees:

- Aptitudes of founders
- Involve biology at its core
- Solving hard problems
- Audacious, world changing and scalable
- Competitive advantage by being based in South Africa
- Uses data in its underlying architecture

Join us as we build Africa’s biotech future together

E: michael@onebio.africa
C: 0761880519