



KEY INSIGHTS FROM VENTURE CAPITAL POINT
OF VIEW



Microbiomics Market

Words to Ponder



**IT IS NOT THE STRONGEST OF THE
SPECIES THAT SURVIVES, NOR THE
MOST INTELLIGENT, BUT THE ONE
MOST RESPONSIVE TO CHANGE.**

- Charles Darwin



Global Digital Health Market

\$200 B

In 2020

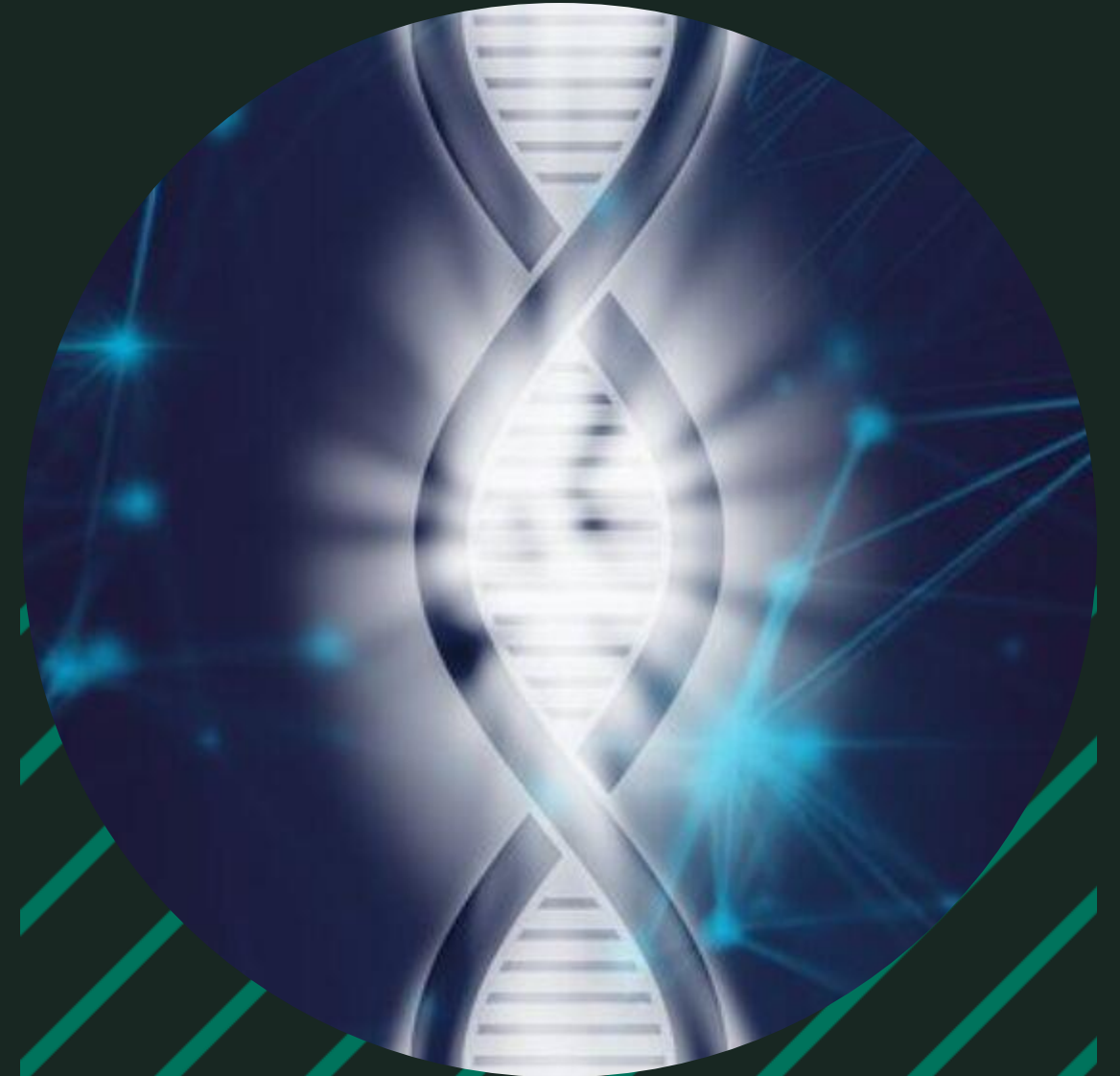


Genomics Market Size

\$27,6 B

By 2025

CAGR: 9.1%

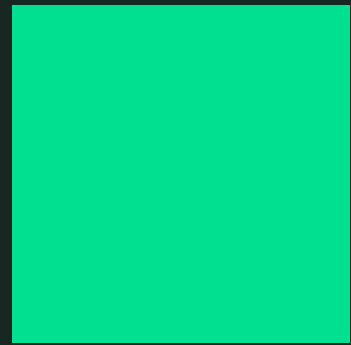


Major Companies in the Market

Who are the major players

Beijing Genomics Institute (BGI); Agilent Technologies; Thermo Fisher Scientific, Inc.; Bio-Rad Laboratories, Inc.; Foundation Medicine, Inc.; 23andMe, Inc.; Danaher, Illumina, Inc.; Pacific Biosciences; Oxford Nanopore Technologies; F. Hoffmann-La Roche Ltd.; and Myriad Genetics, Inc.

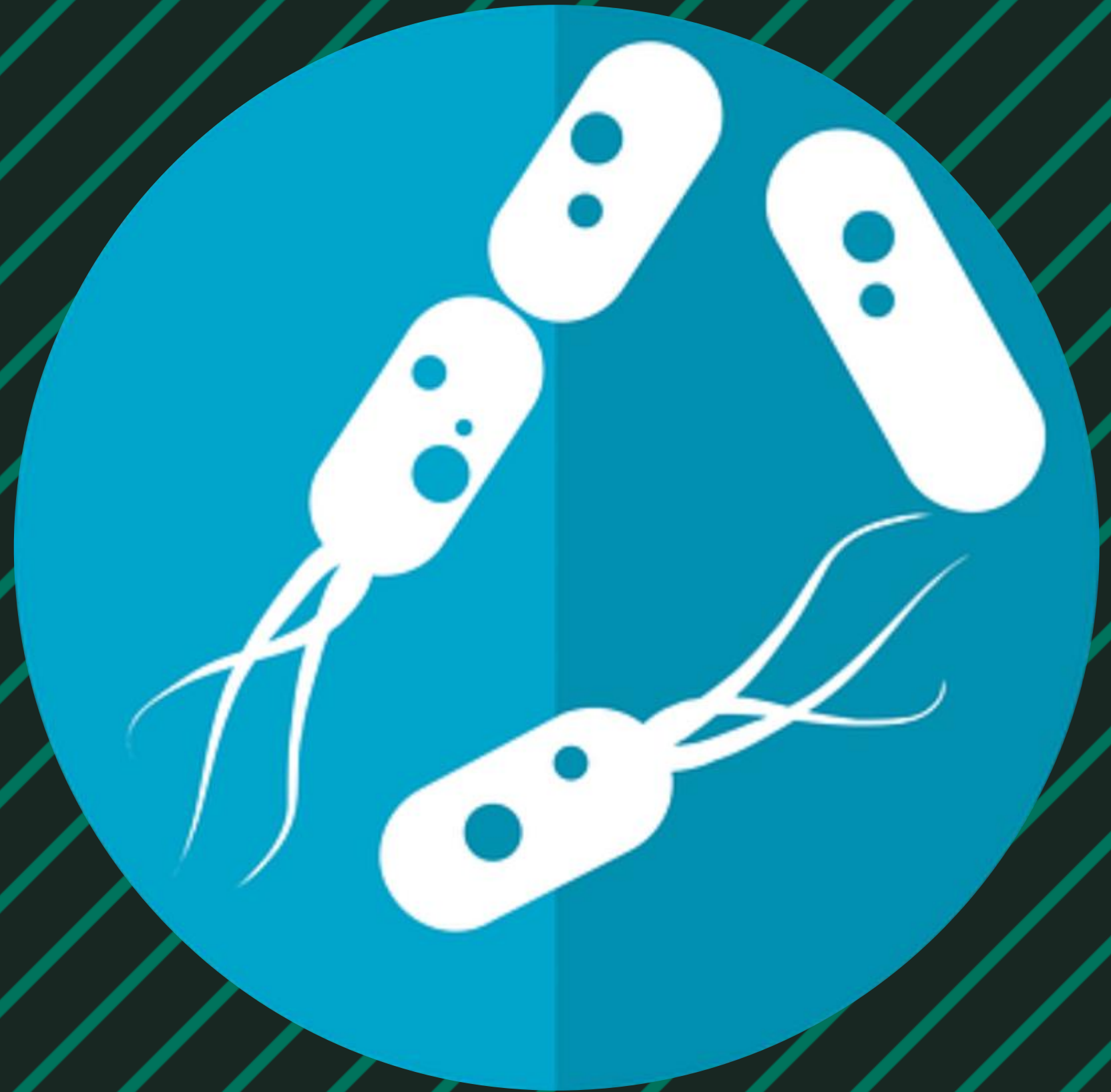




Microbiomics Market



In 2007, the US National Institutes of Health (NIH) funded USD 140 million to the Human Microbiome Project, which examines all the microorganisms in the human body. In 2008, the European Commission financed USD 29 million for Metagenomics of the Human Intestinal Tract project (MetaHIT).





2016



2011-2015

from 2011 to 2015, venture funding in microbiome firms climbed by 458.5% to USD114.5 million

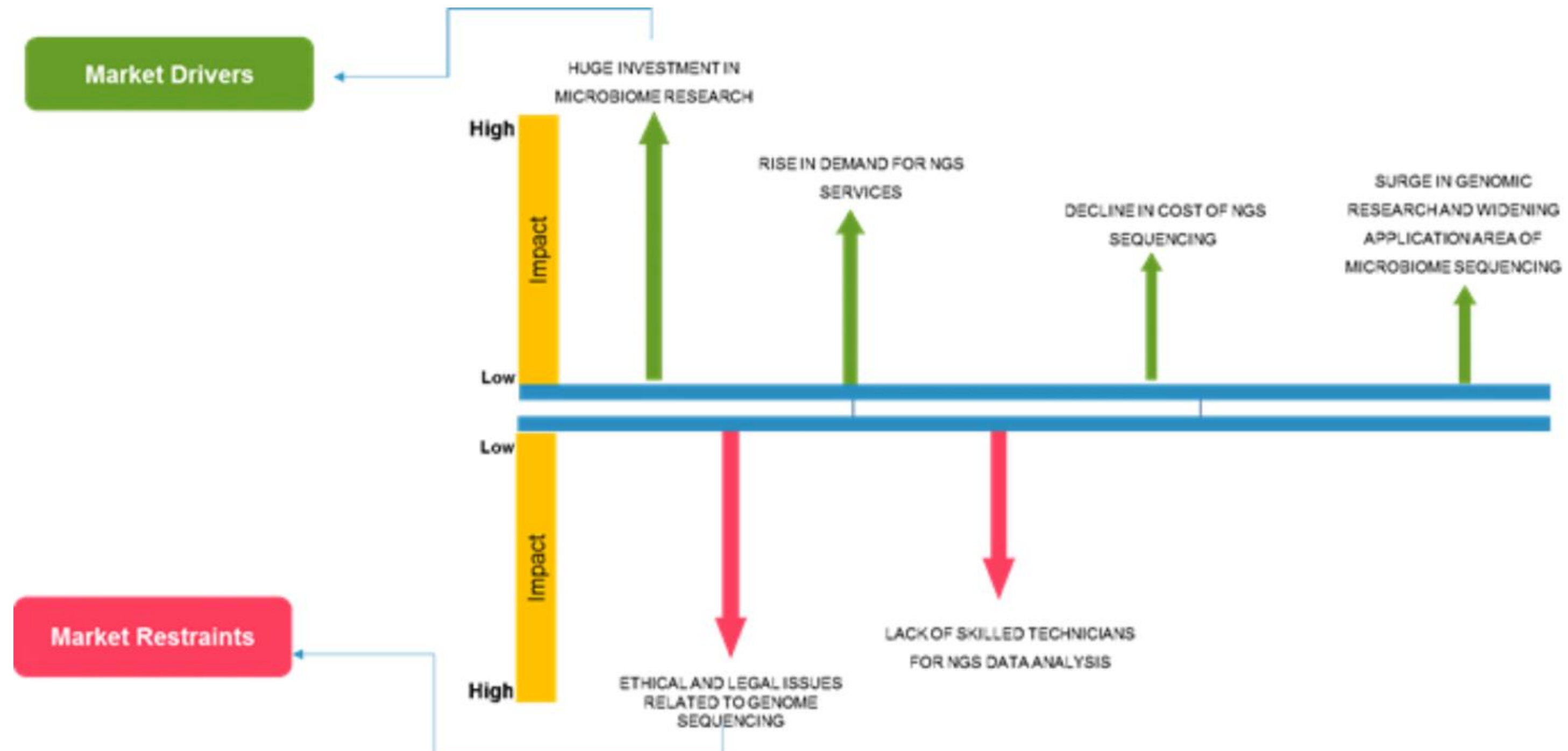
2016-Now

USD 616.9 million was raised for microbiome companies in 2016, which is more than all of the venture investment in the microbiome space between 2011 to 2015 period.



Market Insights

Drivers vs Restrains



555M

Microbiome Sequencing Services in 2017

CAGR 19,21%

1,4B

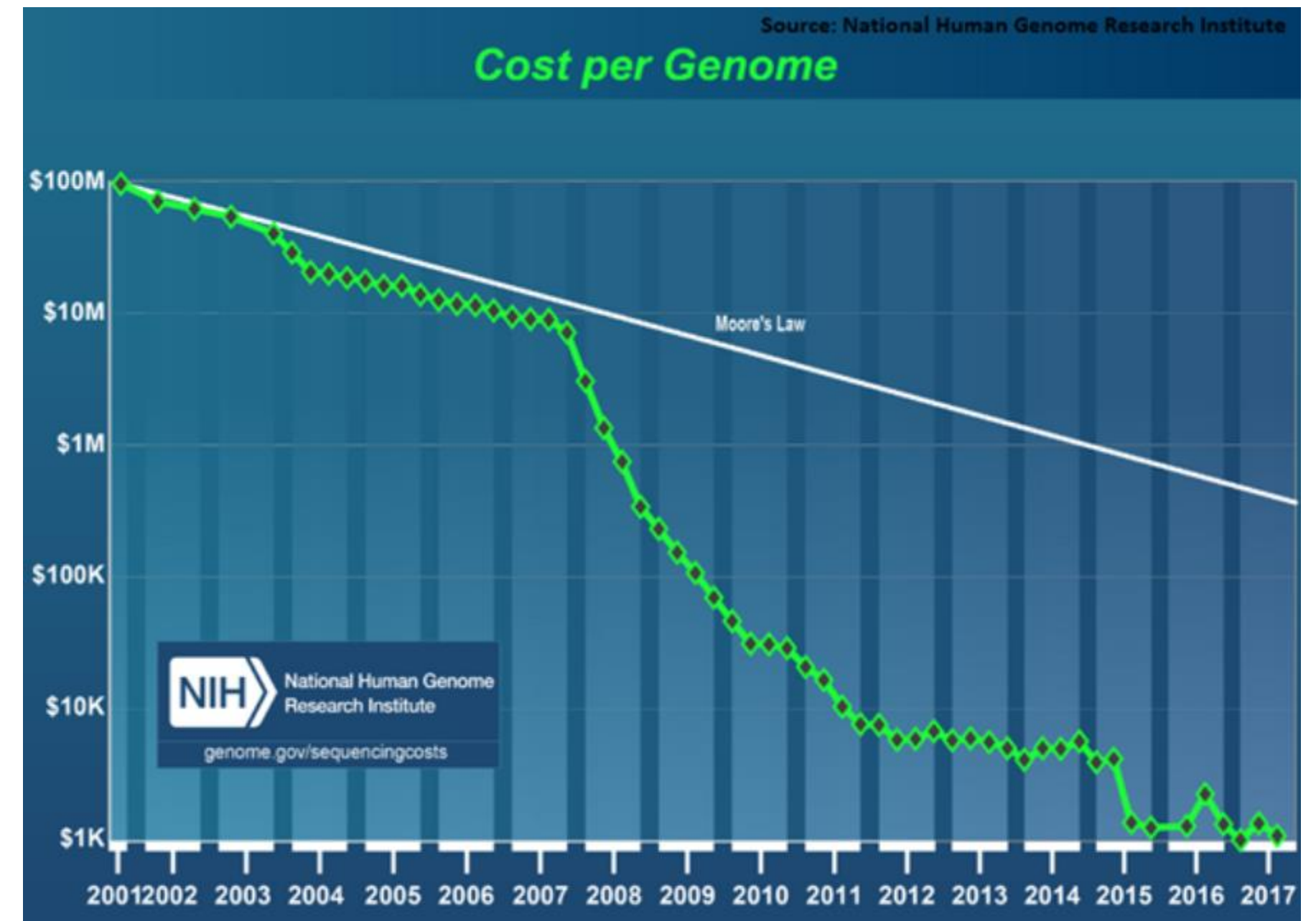
Microbiome Sequencing Services in 2023



Cost of Sequencing

A comparison over time

rising demand for NGS, surge in genomic research, and widening application area of microbiome sequencing, and a decline in the cost of sequencing are the major factors driving the growth of the market.



>Microbiome Sequencing Services Market - Segments

TECHNOLOGY

Sequencing by Litigation (SBL), Sequencing by Synthesis (SBS): 47%, Short Gun Sequencing, Targeted Gene Sequencing, *RNA Sequencing: CAGR...*

END-USER

Research and Academic Institutes, Pharmaceutical and Biotechnology Companies: 45%...

APPLICATION

Gastro-Intestinal Diseases: 35%, Infectious Diseases, CNS Diseases, Oncology,...

CLOUD STORAGE

Whole body microbiome
Nephela



Major Companies

Drivers for the Change

Clinical Microbiomics A/S, Baseclear B.V., EPIBIOME, Microbiome Insights Inc., Microbiome Therapeutics, LLC., MR DNA, Merieux Nutrisciences Corporation, Ubiome, Inc., Zymo Research Corp., and Second Genome, among others



Human Microbiome Market Size

\$658M

By 2023

CAGR: 22%



HUMAN MICROBIOME MARKET SEGMENTATION: BY PRODUCT

Probiotics

Prebiotics

Foods

Medical Food

**Other
Supplements**

Devices

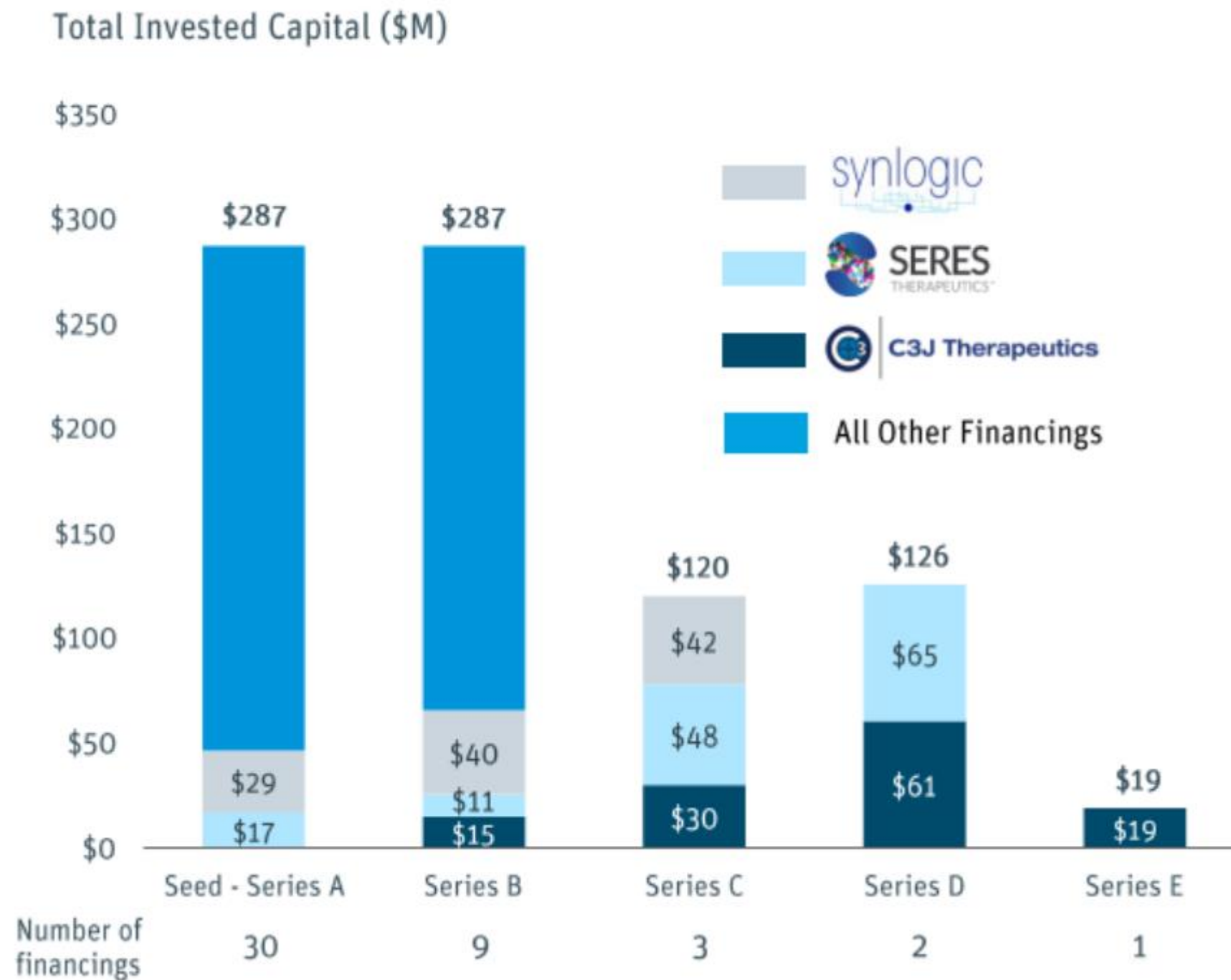
Drugs

MICROBIOME THERAPEUTICS MARKET LANDSCAPE

	Pre-clinical	Phase I	Phase II
Multiple Therapeutic Areas ⁽²⁾	      	 	
Gastrointestinal and Infectious Disease	      	  	  
Dermatology	     		
Cancer and Autoimmune	   		
Central Nervous System	  		



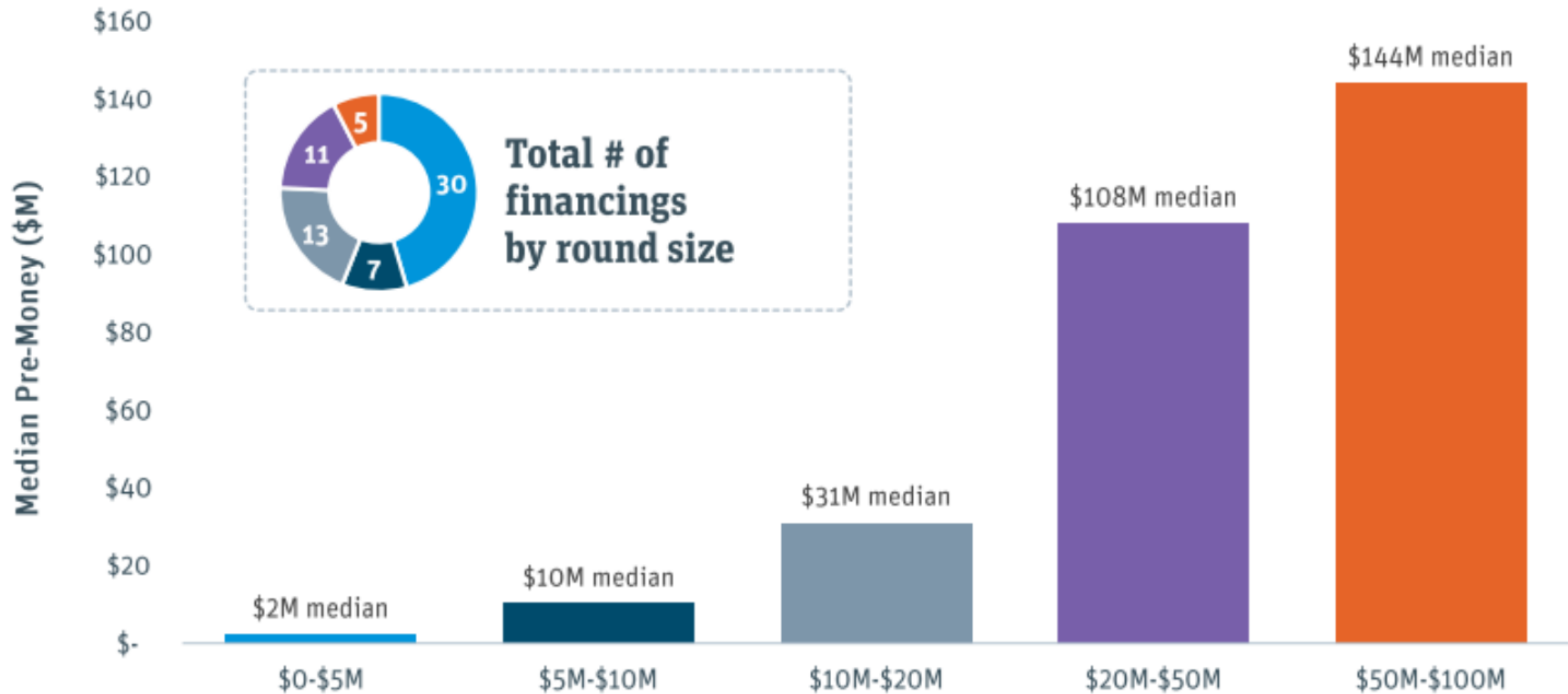
TOTAL INVESTED CAPITAL



- Since 2010, microbiome companies have attracted \$840M in 45 disclosed equity investments.
- Just four microbiome therapeutic companies have gone public: Synthetic Biologics (IPO July 2007), Assembly Biosciences (reverse merger March 2015), Seres Therapeutics (IPO June 2015), and Synlogic (reverse merger May 2017).
- The median round size of Seed-Series A was \$6M and of Series B was \$30M.
- GI and infectious disease accounted for 47% of investments, followed by cancer and autoimmune combined at 13%, CNS at 6% and Dermatology at 4%.



MICROBIOME PRE-MONEY VALUATIONS

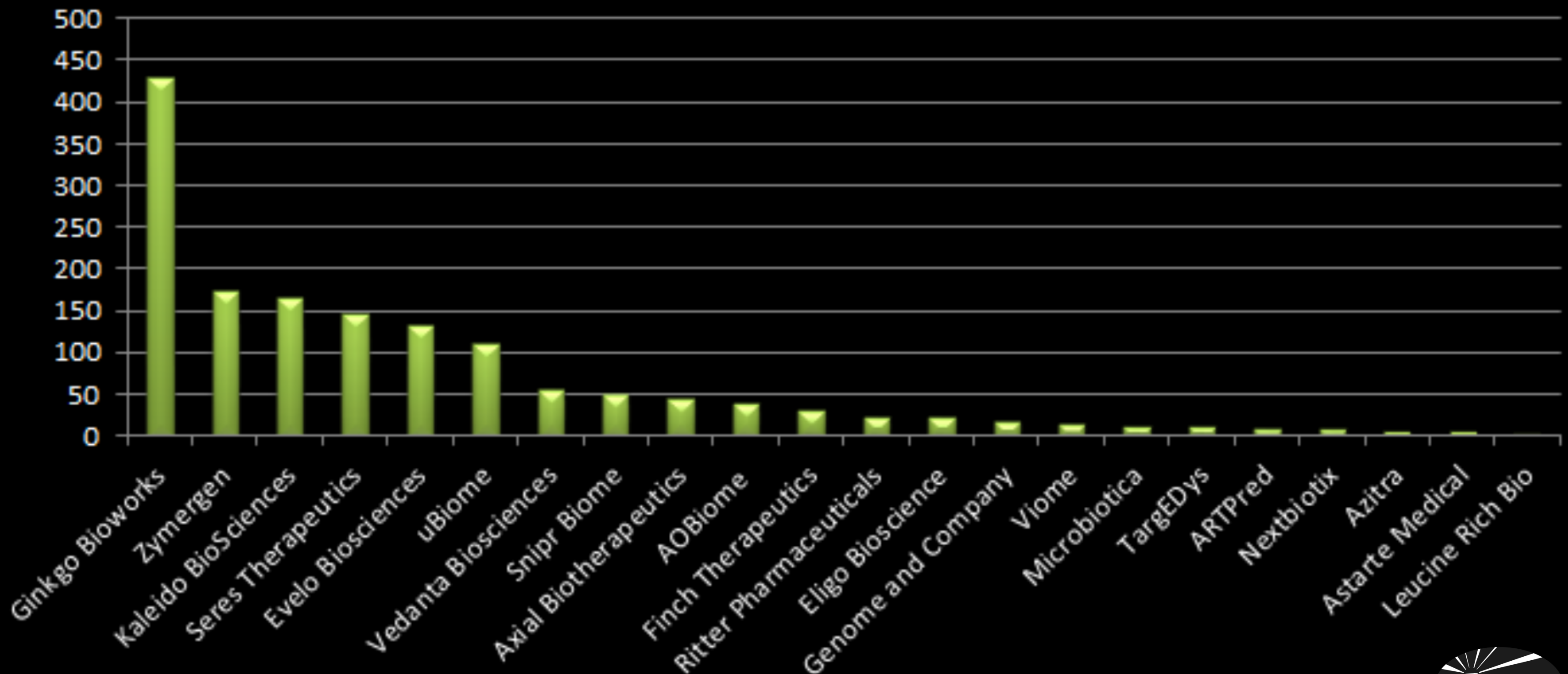


MICROBIOME STARTUPS

Startup	Backed By	Targeting
C3J Therapeutics	Renaissance Holding Company, Delta Dental	Oral Health
Naked Biome	Illumina Ventures, Undisclosed Angel Investors	Skin Disease
Azitra	Breakout Labs	Skin Disease
Xycrobe Therapeutics	Undisclosed Investors	Skin Disease
Symbiotic Health	Long Island Emerging Technologies Fund, Jove Equity Partners	Intestinal Health
Eligo Bioscience	Seventure Partners	Intestinal Health
Rebiotix	Quatris Fund, Michael Berman	Intestinal Health
Enterome	Janssen Pharmaceuticals, Nestle Health Science, Seventure Partners, Lundbeckfond Ventures	Intestinal Health
Vedanta Biosciences	Seventure Partners, Rock Springs Capital	Intestinal Health
MaaT Pharma	Biocodex	Intestinal Health
Second Genome	Digitalis Ventures, Pfizer Venture Investments, Roche Venture Fund, Mayo Clinic, Morgenthaler Ventures	Intestinal Health
Blue Turtle Bio	Indie.Bio	Drug Delivery
TargEDys	Pontifax, NCI, Seventure Partners	Dietary Supplements
ISOThrive	Undisclosed Investors	Genomics
MicroBiome Therapeutics	NO/LA Angel Network	Genomics
Evolve Biosystems	Horizons Ventures, Tate & Lyle Ventures	Genomics
uBiome	500 Accelerator, 8VC, Andreessen Horowitz, Slow Ventures, Y Combinator	Genomics
Epibiome	Silicon Valley Bank, Illumina Accelerator	Genomics
Realbio Technology	Bioclub, Green Pine Capital Partners, Tianheyongxin Investment	Genomics
Shoreline Biome	Undisclosed Investors	Genomics
CosmosID	Applied Value Group	Genomics
MicroBiome Insights	Undisclosed Investors	Genomics
Metabogen	BioGaia	Genomics
ARTPred	Technology Foundation STW	Clinical Diagnostics



MICROBIOME STARTUPS BY INVESTMENT SIZE



We'd love
your feedback!



BRIDGEWAY

*innovation * venture builder * accelerator*