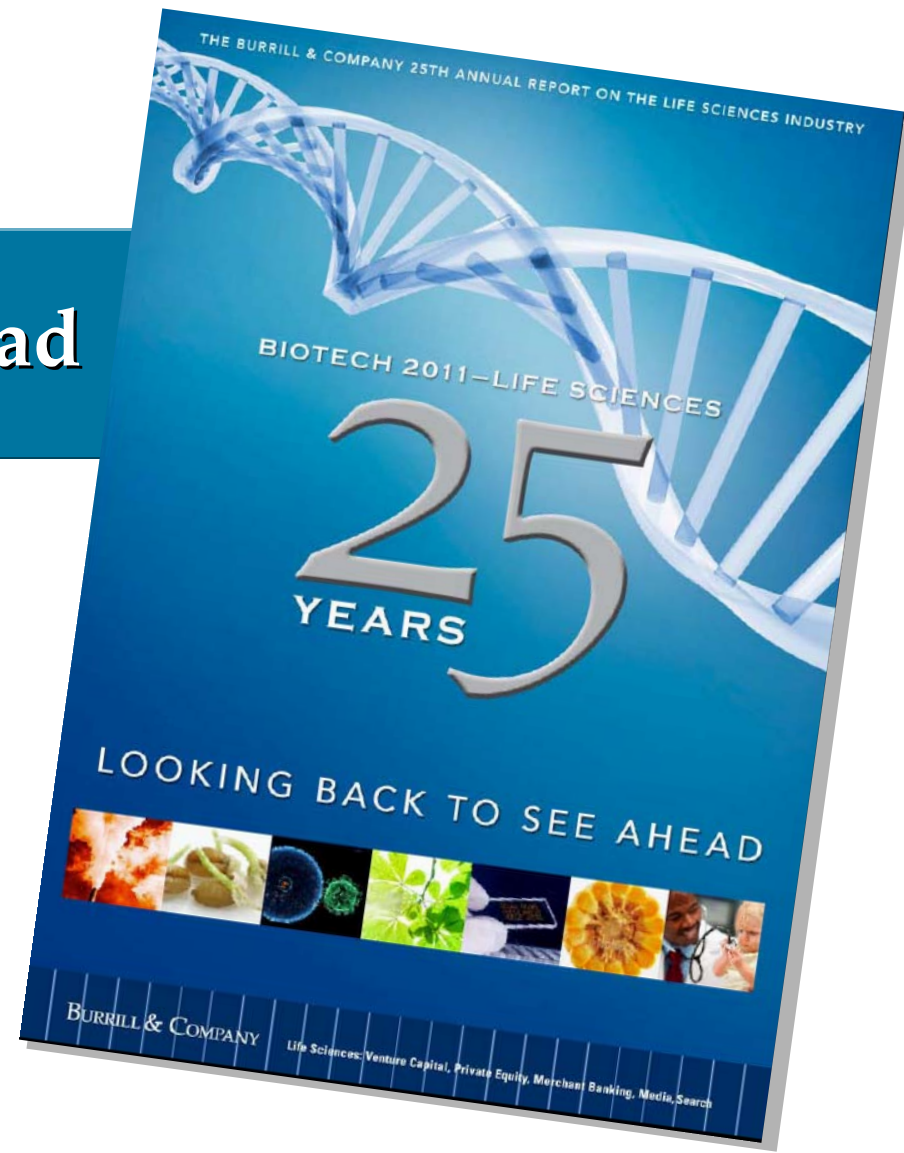


# Looking Back To See Ahead



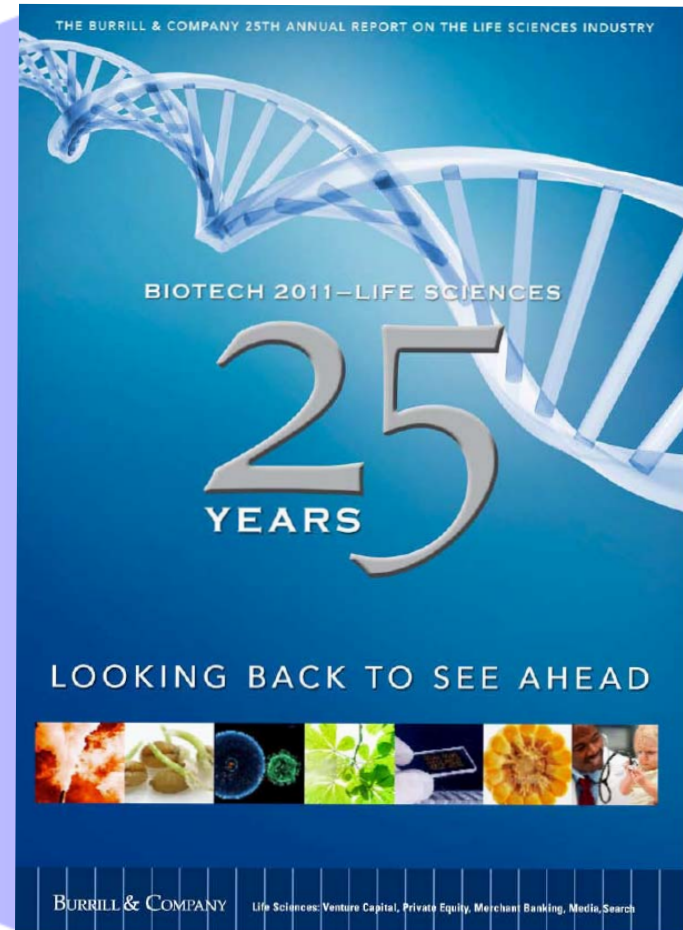
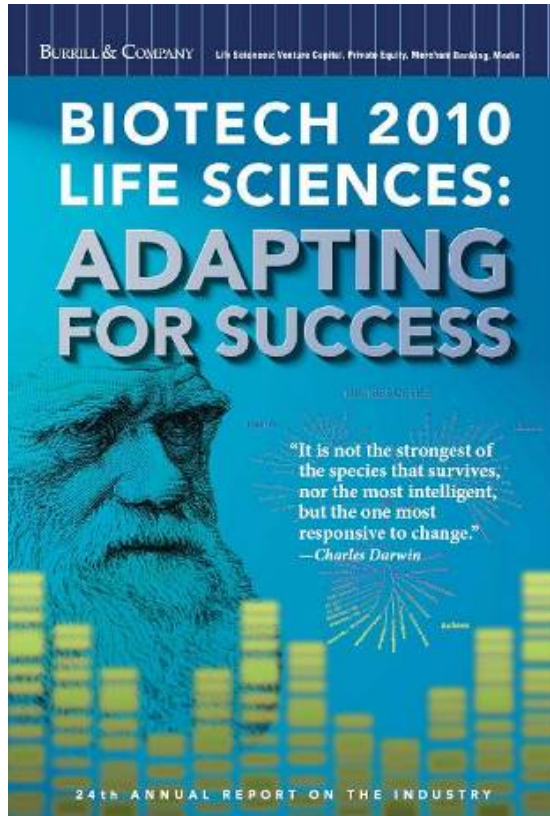
**G. Steven Burrill**  
Chief Executive Officer  
Burrill & Company

**4<sup>th</sup> Annual CDD Community Meeting  
For Catalyzing Drug Discovery Research  
October 21, 2010**



This Year's Book – Focuses on adapting...

Next Year's Book – Looking back to see ahead...



# What did the world look like a year ago?

---

- We were amid a global economic downturn
  - Dow at 9321; NASDAQ at 1986; S&P500 at 1004
- Capital markets essentially closed
- Concerns about H1N1 flu outbreak (possibility of a pandemic)
- Healthcare reform discussion ongoing/intensifying (Obama in office 7 months)
- New head of FDA/CMS appointed
- Cautious optimism for future...still strong pessimism

## ...and today

---

- Biotech's market cap is up since October 2009 (9%) (DJIA up 14%, NASDAQ up 14%)
- Investor confidence in biotechnology – IPO window opens slightly; 11 IPOs since last year
- US Health care reform finally passed, after a struggle...
- Gene patent issues (Myriad vs. The American Civil Liberties Union)
- Stem cell financing in question
- Biogreentech is hot
- A record \$62B raised by US biotech companies (capital & partnering)

# Several Key Points...

---

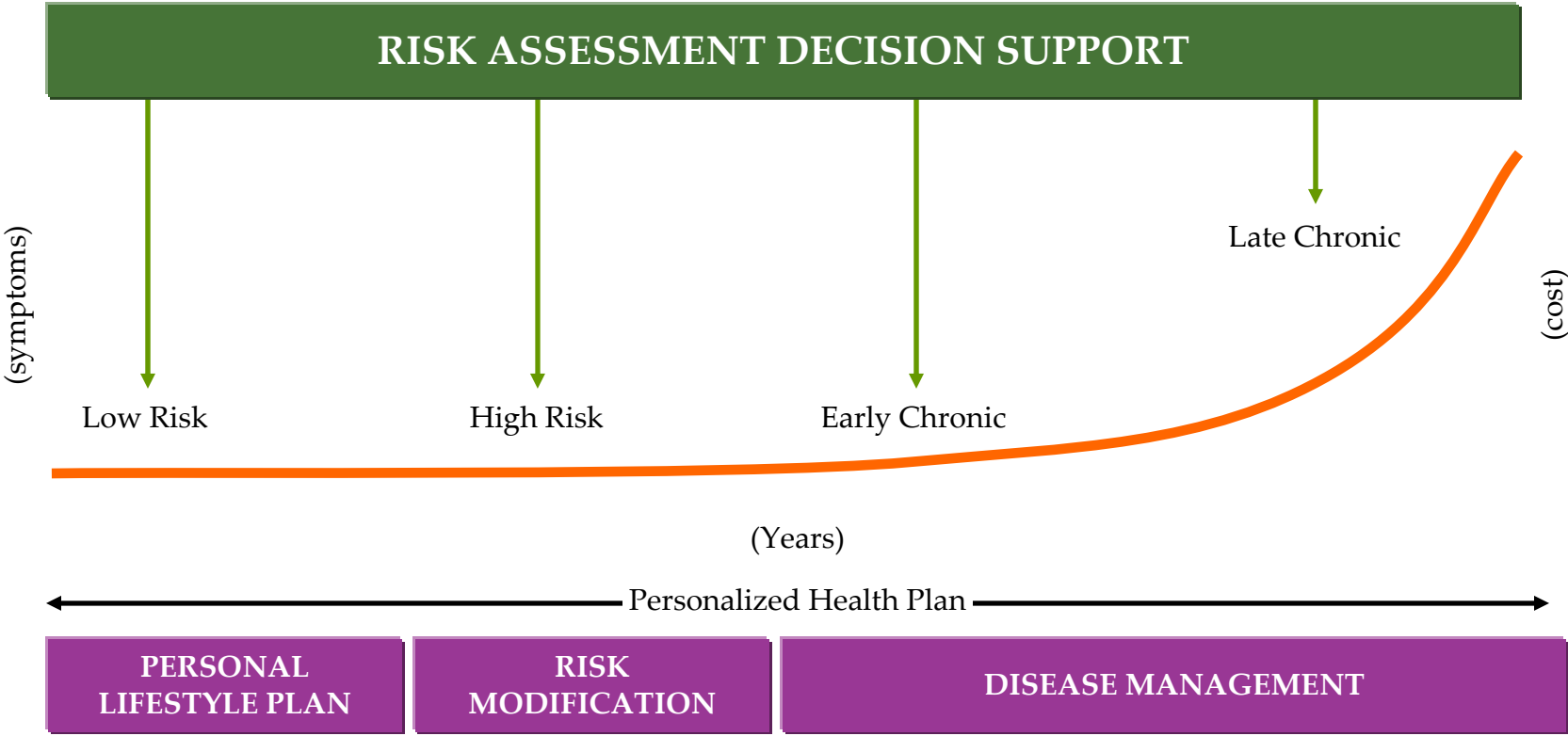
- Healthcare Reform – what it did to our world? / comparative effectiveness
- Population growth / Globalization / Opportunities
- Where technology is taking us? and how fast? / Wireless Health
- Value Capture – are we/how do we do it?
- Capital Markets – what is happening...
- Several personal reflections

# Innovation makes a difference

---

- Changes in healthcare solutions
  - Reduces cost dramatically
- ...and it creates value:**
- From 1970-2000, increase in life expectancy produced 50 percent of the growth in America's gross domestic product
  - Genentech \$100B when acquired by Roche (Pfizer \$91B at that time)

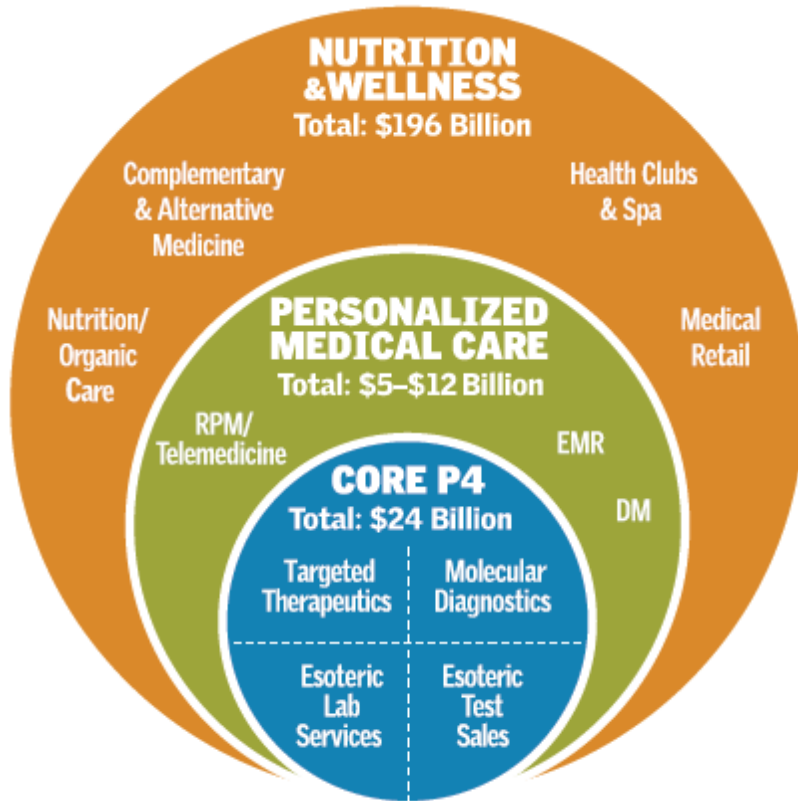
# The Changing Focus of Healthcare



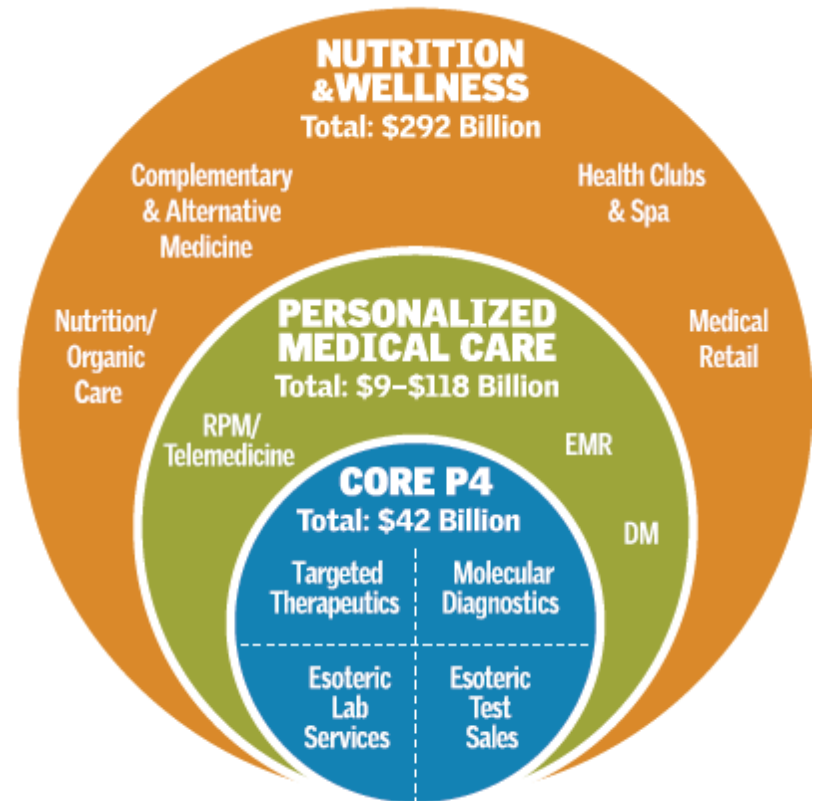
Source: Ralph Snyderman

# Personalized Medicine Market Size, 2009 and 2015

**2009 TOTAL MARKET:  
\$225-\$232 Billion**



**2015 TOTAL MARKET:  
\$344-\$452 Billion**

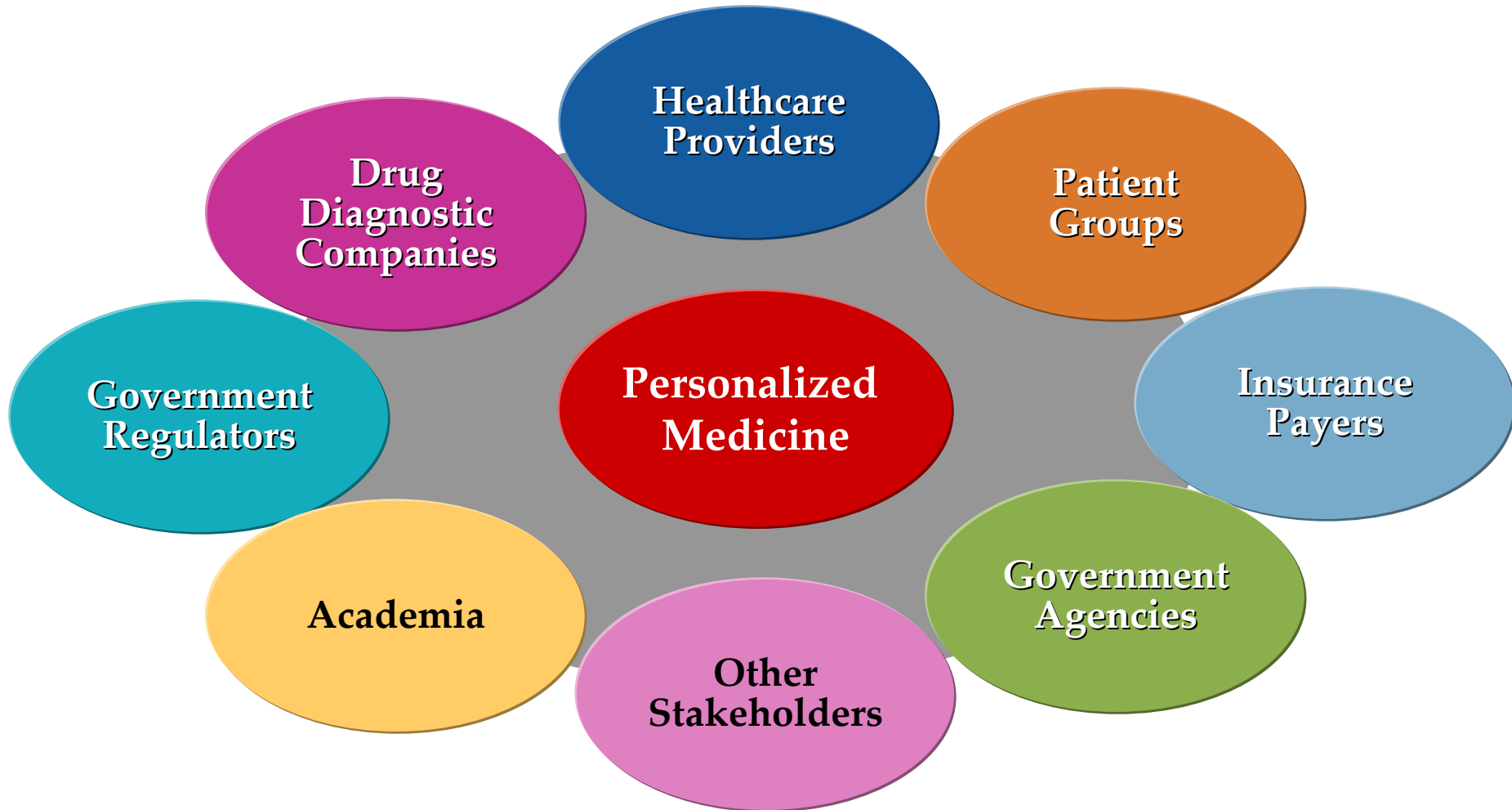


Total may differ due to rounding.  
Source: PricewaterhouseCoopers



# Convening Stakeholders and Aligning Objectives

---



Source: PWC

**So what will healthcare  
look like in 2020?**

# Healthcare 2000 Years Ago vs. Today

---

**2000 Years Ago**

**Today**

Episodic

Episodic

Local healers / midwives

Doctors / nurses / hospitals

Medicine "Man"

Pharmacists / pharmacies

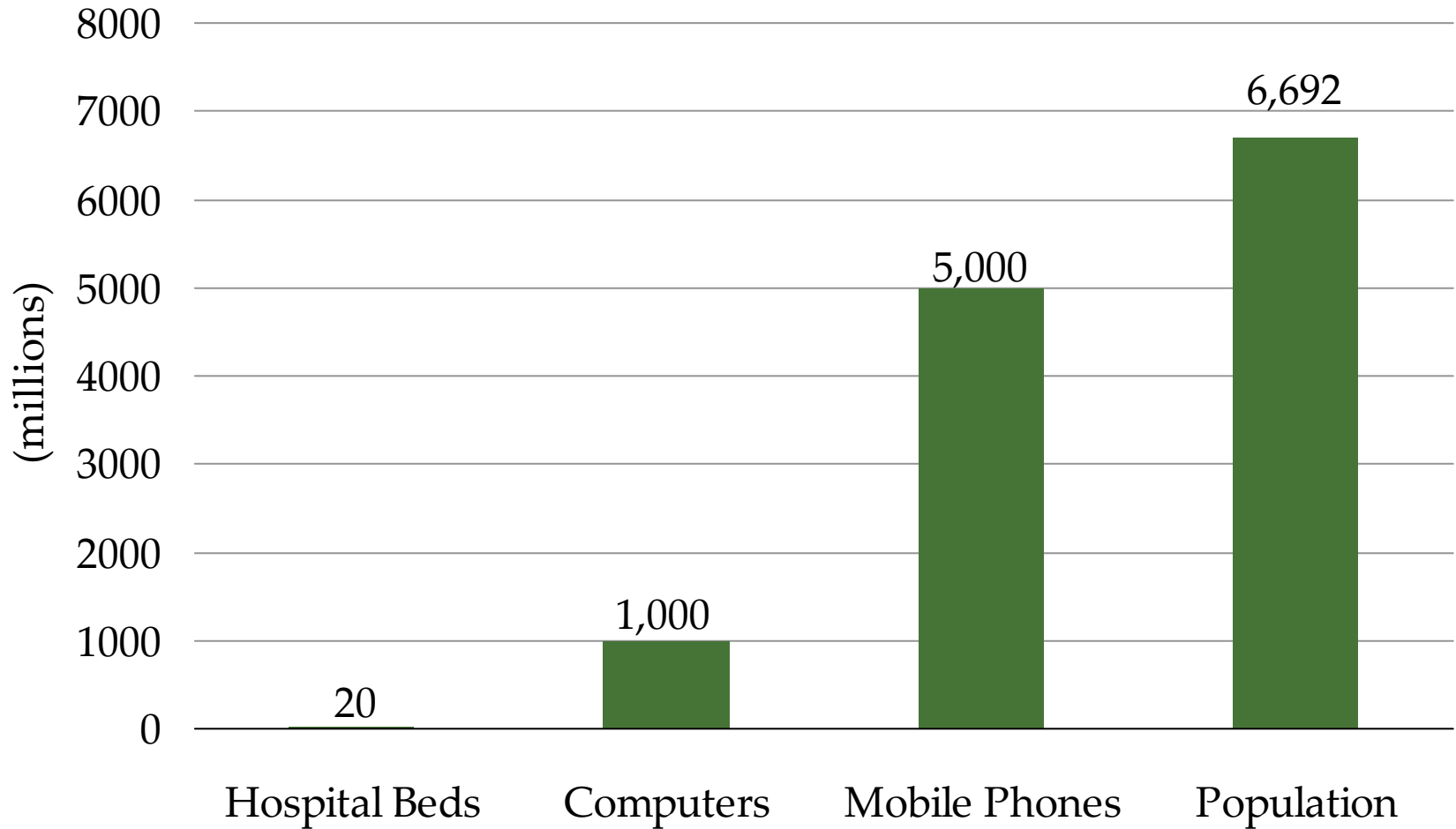
Evidence in Ancient Egypt,  
publicly provided health  
care system with healers  
paid by the community

Governments  
provide and pay

Most people died of disease

Most things don't work  
and people die

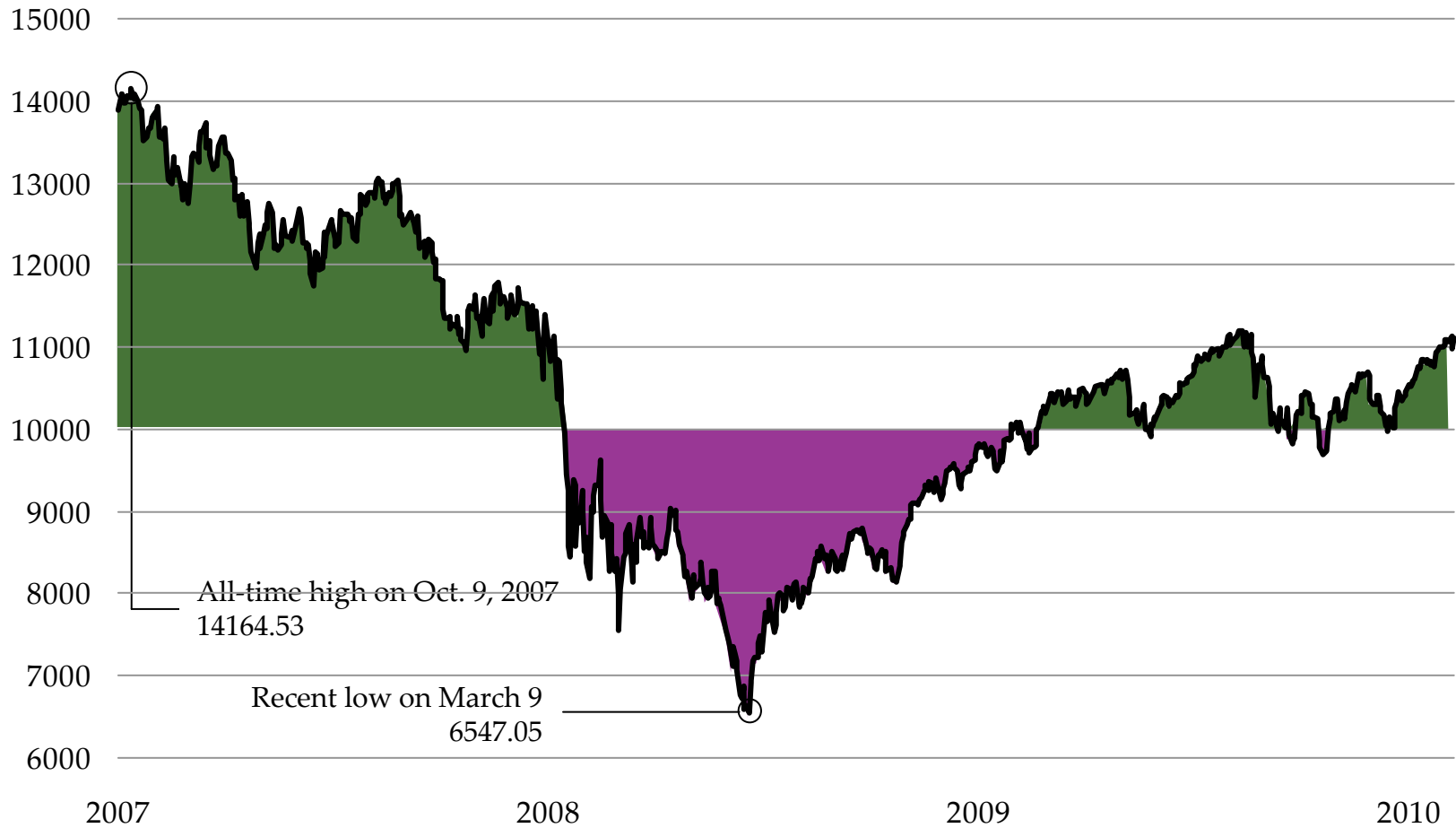
# Big Trends: The Promise of Mobile Technologies for Health



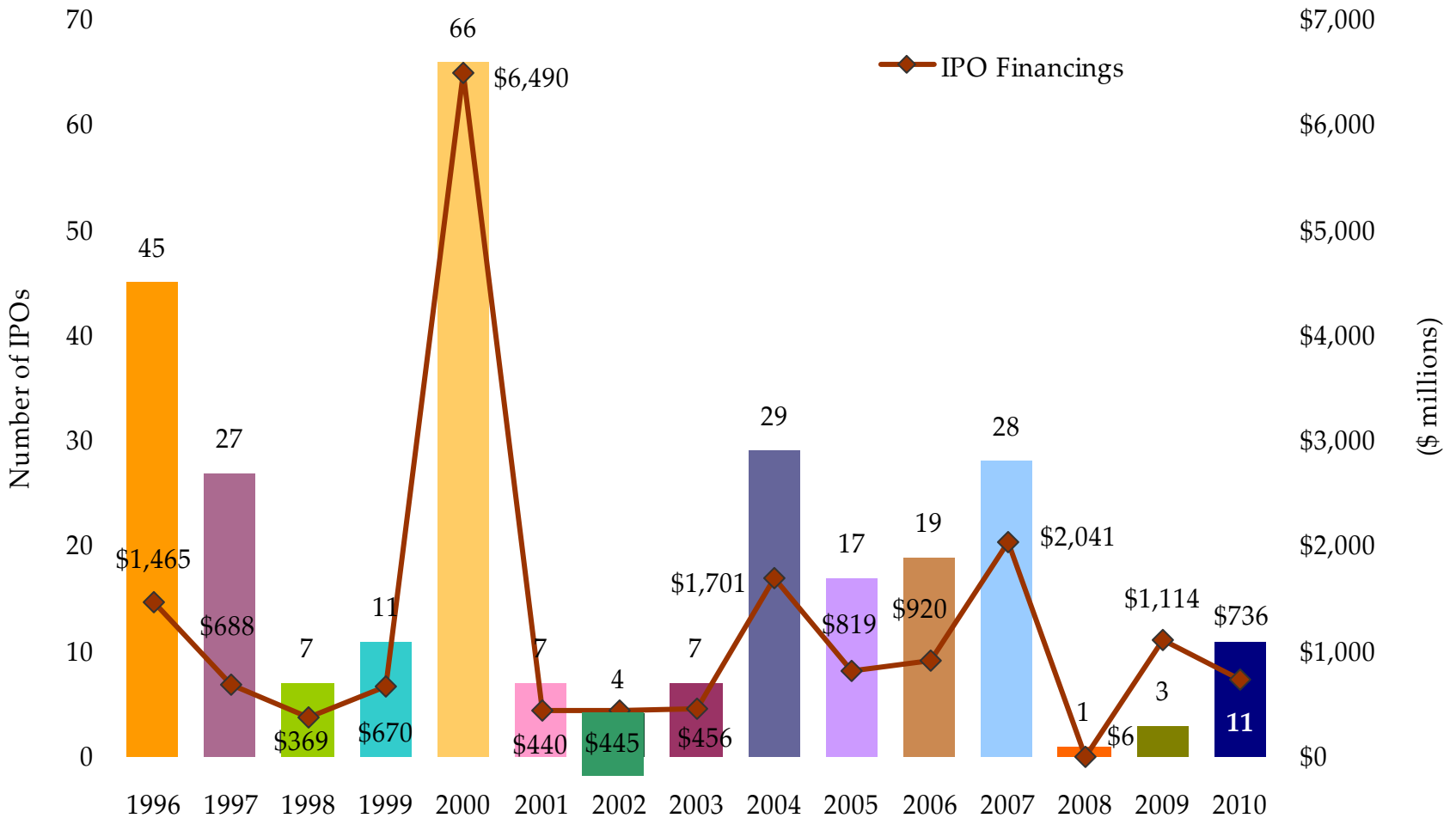
# Healthcare – Spit on your BlackBerry/cellphone






# The Market's Comeback



# IPOs – window is opening?



# IPO deals in the current window (2010 YTD)

Company	Filing Date	Expected to Raise (\$M)	Amount Raised (\$M)	Filing Range	Offering Price	Price as of 10/20/2010	% Δ Price
 Ironwood	2/2/10	266	215.6	\$14-\$16	11.25	11.00	↓ 2.2%
 Anthera PHARMACEUTICALS, INC.	3/1/10	70	42.0	\$13-\$15	7	6.44	↓ 8.0%
 AVEO PHARMACEUTICALS, INC.	3/12/10	105	89.7	\$13-\$15	9	15.16	↑ 68.4%
 CorMedix	3/22/10	12.5	12.5	\$6-\$8	6.5	1.38	↓ 78.8%
 tengion <small>regenerative medicine brought to life.</small>	4/9/10	46	30.0	\$8-\$10	6	2.95	↓ 50.8%
 CODEXIS <sup>®</sup>	4/21/10	84	78.0	\$13-\$15	13	10.06	↓ 22.6%
 ALIMERA SCIENCES	4/21/10	86	72.0	\$15-\$17	11	10.48	↓ 4.7%
 GenMark Dx <sup>®</sup>	5/28/10	45	28.0	\$8-\$10	6	3.43	↓ 42.8%
 Trius Therapeutics	8/2/10	78	50.0	\$12-\$14	5	3.89	↓ 22.2%
 NuPathe <sup>®</sup> <small>New Pathways in Neuroscience</small>	8/6/10	75	50.0	\$14-\$16	10	6.71	↓ 32.9%
 AMYRIS	9/28/10	101	85.0	\$18-\$20	16	17.11	↑ 6.9%



# IPO Queue

---

## Alternative fuels

- PetroAlgae: produces biocrude from duckweed, \$200 million.
- Gevo: produces isobutanol from biomass \$150 million.

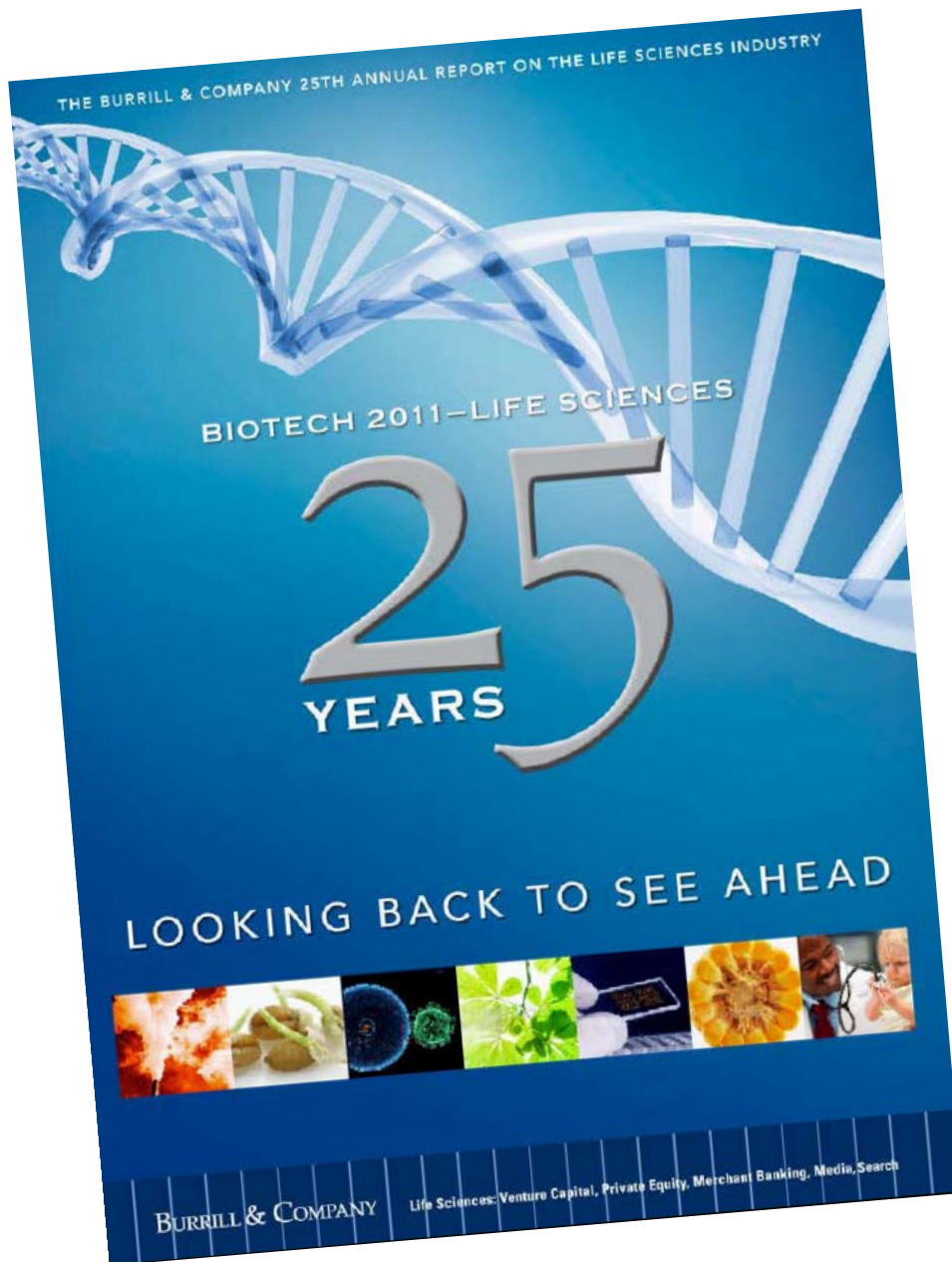
## Tools/Technology

- Pacific Biosciences –Next generation DNA sequencing – \$200 million
- Complete Genomics –DNA sequencing – \$86M

## Therapeutics

- Aegerion Pharma – Cardiovascular metabolic diseases – \$86M
- Endocyte – Cancer-fighting drugs – \$86M
- Horizon Pharma – Arthritis, pain and inflammatory diseases – \$86M
- Ventrus Biosciences – GI disorders – \$20M
- Ikaria – Respiratory diseases – \$200M

*Adapt = Success*



# Our Special 25<sup>th</sup> Anniversary Edition Available Early 2011

Visit our website  
[www.burrillandco.com](http://www.burrillandco.com)  
for more information

# Looking Back To See Ahead



**G. Steven Burrill**  
Chief Executive Officer  
Burrill & Company

**4<sup>th</sup> Annual CDD Community Meeting  
For Catalyzing Drug Discovery Research**  
October 21, 2010

