

# Pro-Con Debate: Training the Right Number of Anesthesiologists

**Assertion: We should train  
fewer Anesthesiologists**

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# **WARNING**

**The views expressed in this lecture are intended for a mature audience. The expressed opinions will incite emotion possibly leading to unrestrained verbal outburst at the microphone and banging of shoes on tables. Sharing these opinions with others outside this room may lead to physical or verbal abuse. Any use without specific consent is encouraged. Enjoy.**

# Assertion: We should train fewer Anesthesiologists

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## Outlining the Argument

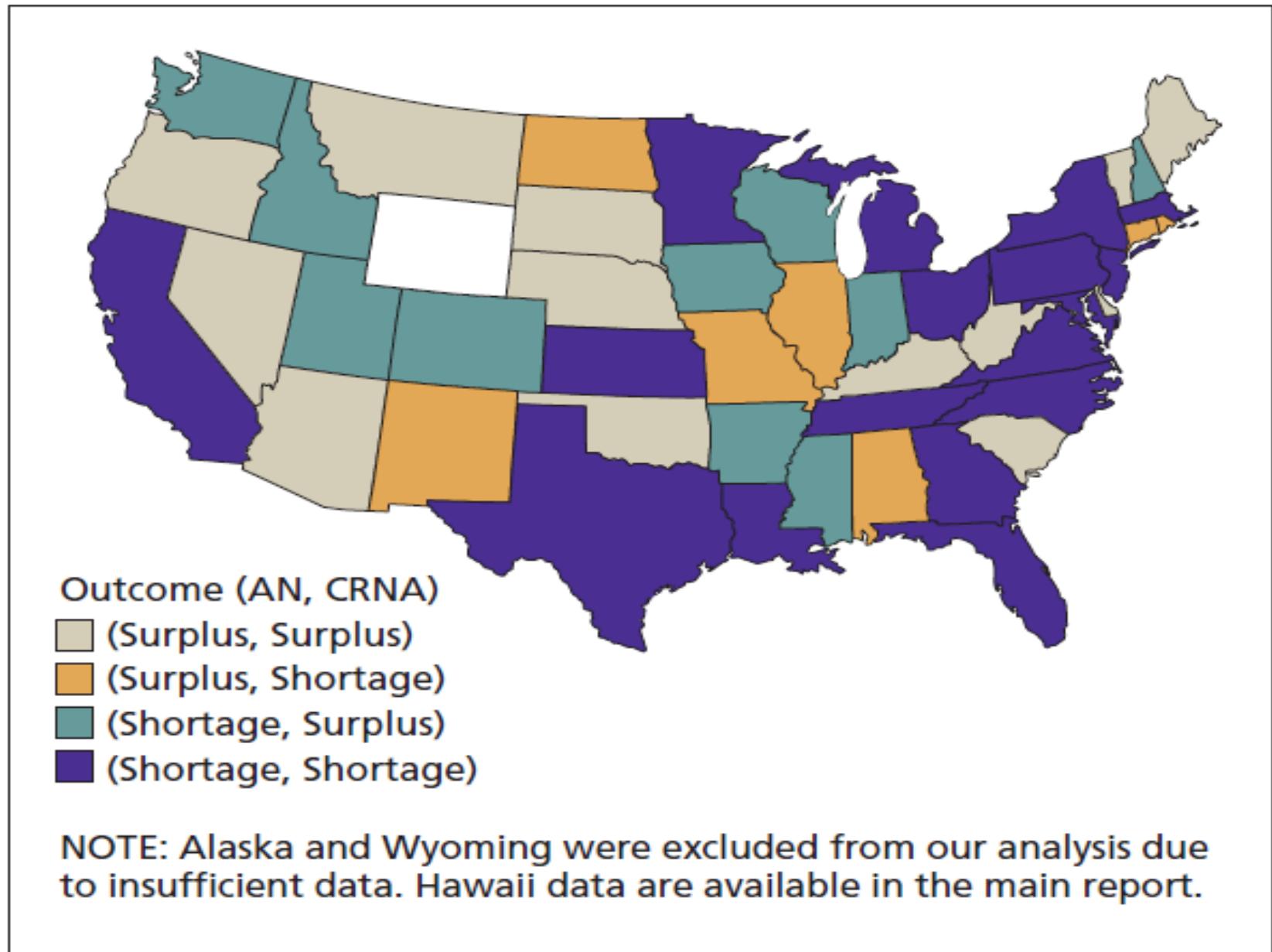
- Understand our current workforce
- Assess supply and (*the real*) demand
- The fallacy of predicting the future while looking backwards
- Recognize our new reality
- Radical proposal for change

# An Objective (?) Look at Workforce



- 2010 report using 2007 data
- Survey and economic and noneconomic modeling
- 40,000 & 39,000
- **Short: 3800 ANs**
- **Short: 1282 CRNAs**
- 2020 Deficit of ANs

**Figure 2**  
**Availability of Anesthesia Specialists, by State**



Easy, Right? We *feel* like we need more and we have objective data to prove it.



<http://eccentricroadside.blogspot.com/2009/12/your-witness-los-angeles-perry-mason.html>

- Here's the fallacy: *We can't base future needs on past models of delivery.*



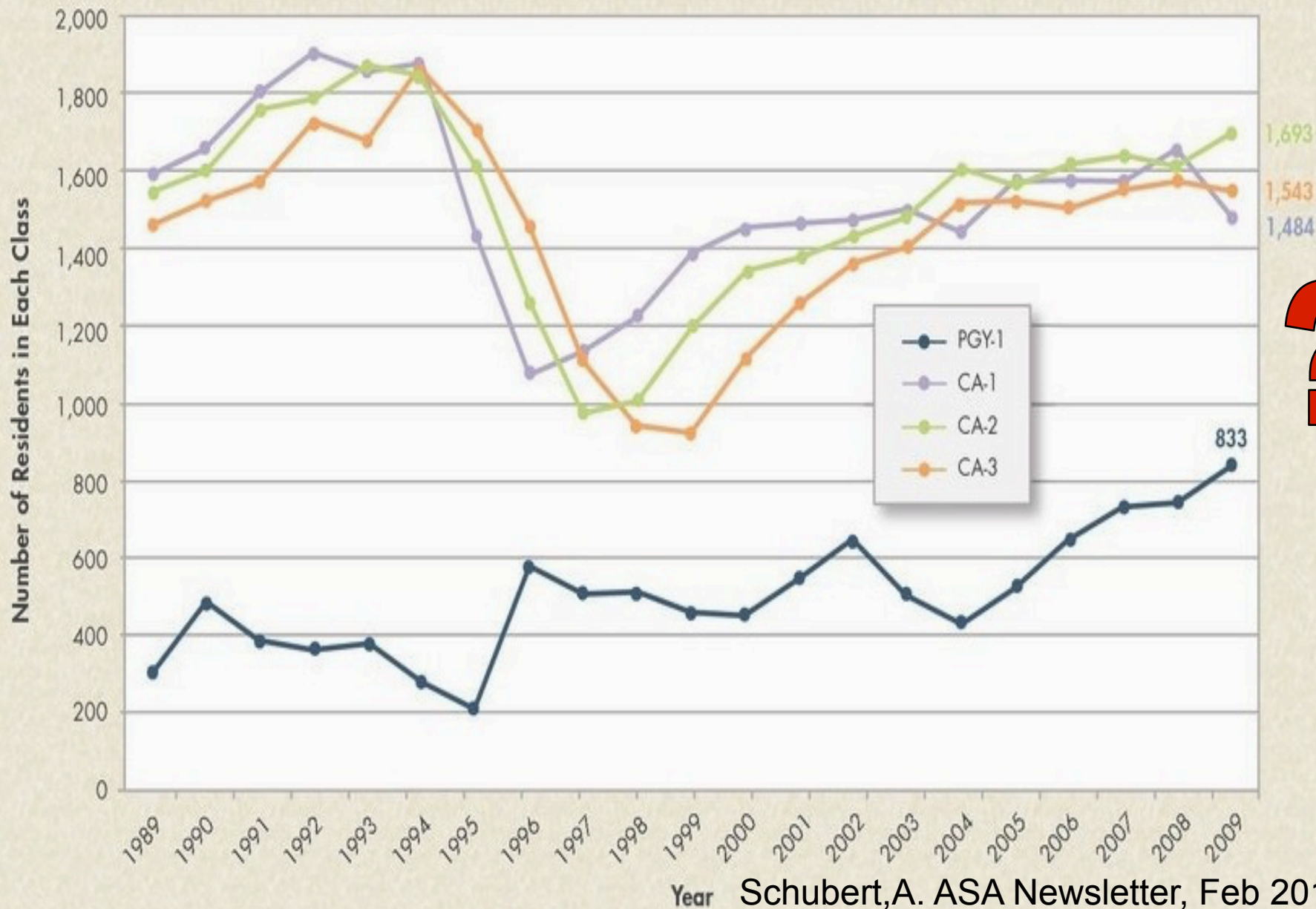
“It’s tough  
to make  
predictions.  
Especially  
about the  
future.”  
- *Yogi Berra*

# Who Really Decides Anesthesiologist Numbers?

- The American Board of Anesthesiology
- The Residency Review Committee
- Centers for Medicaid and Medicare Services
- Chairman and Hospital CFO/CEO
- *Market Forces*

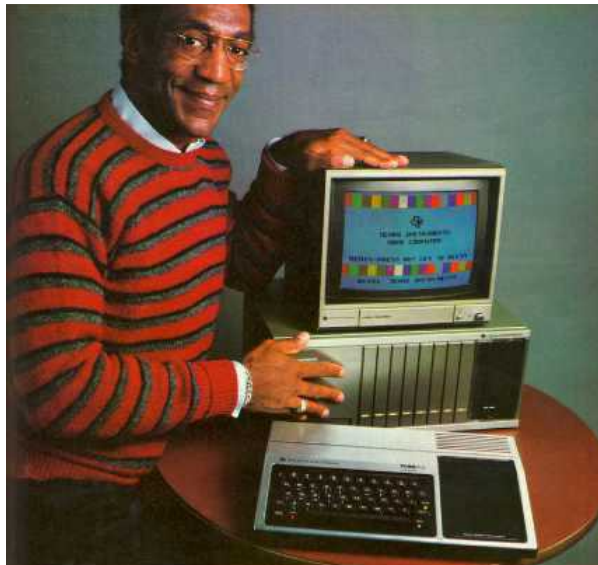


Figure 1. Numbers of Residents in PGY-1 Year and Each CA Year, 1989 - 2009



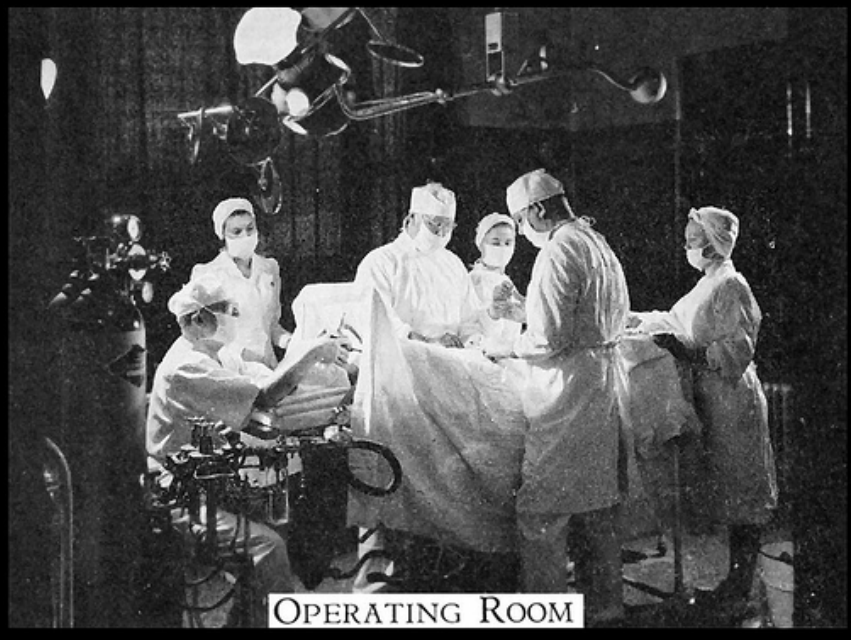
# Facing a New Reality

- Can we control the rate of change?
- Can we ever prove the margin of safety between Anesthesiologists and CRNAs?
- Can we legislate relevance and value?



"TI's Home Computer.  
This is the one."



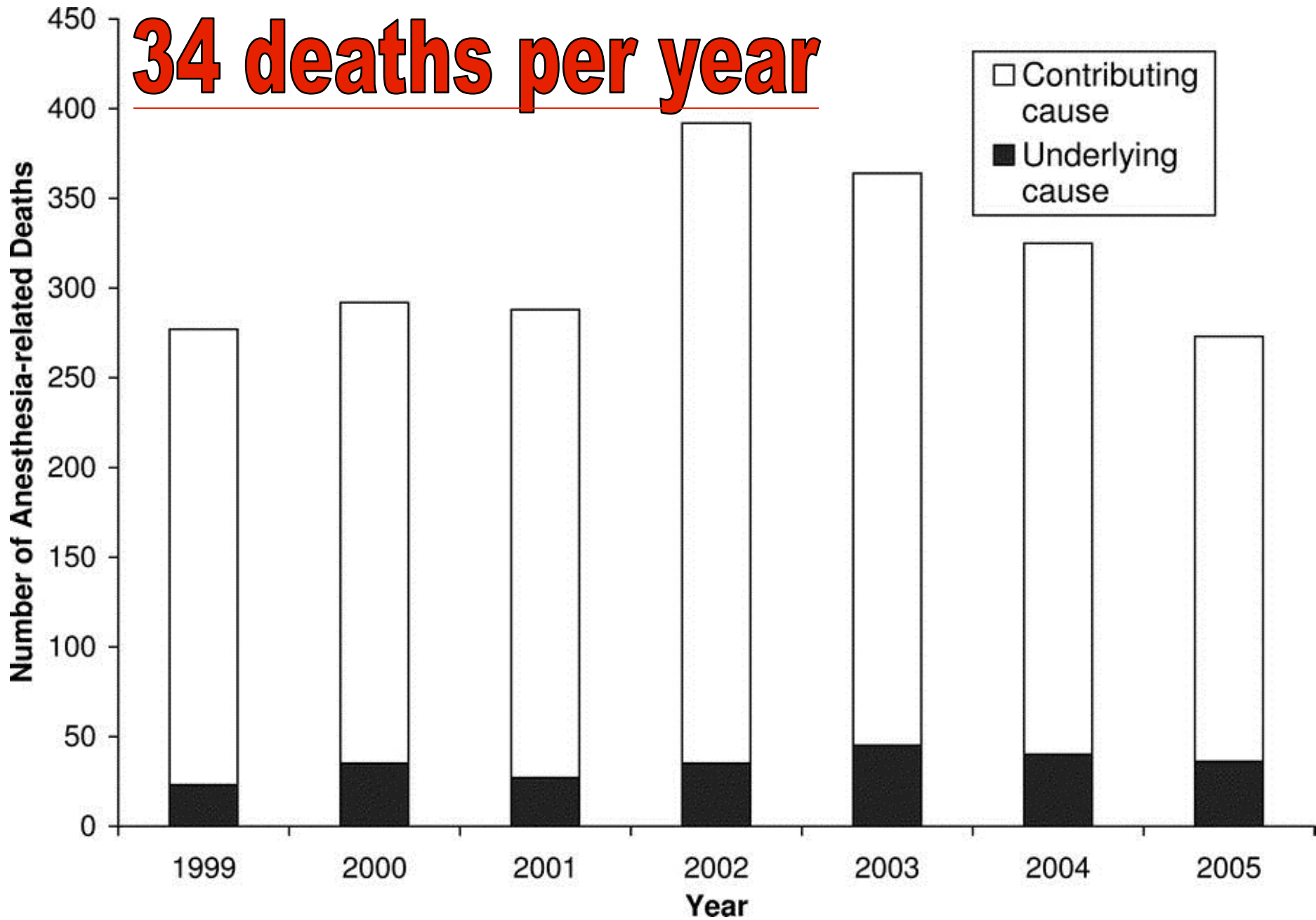


# The Harsh (and wonderful) Reality



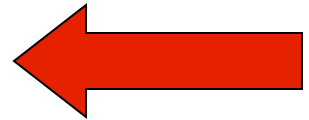
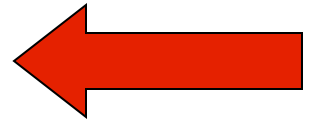
Anesthesia  
is safer.

**34 deaths per year**

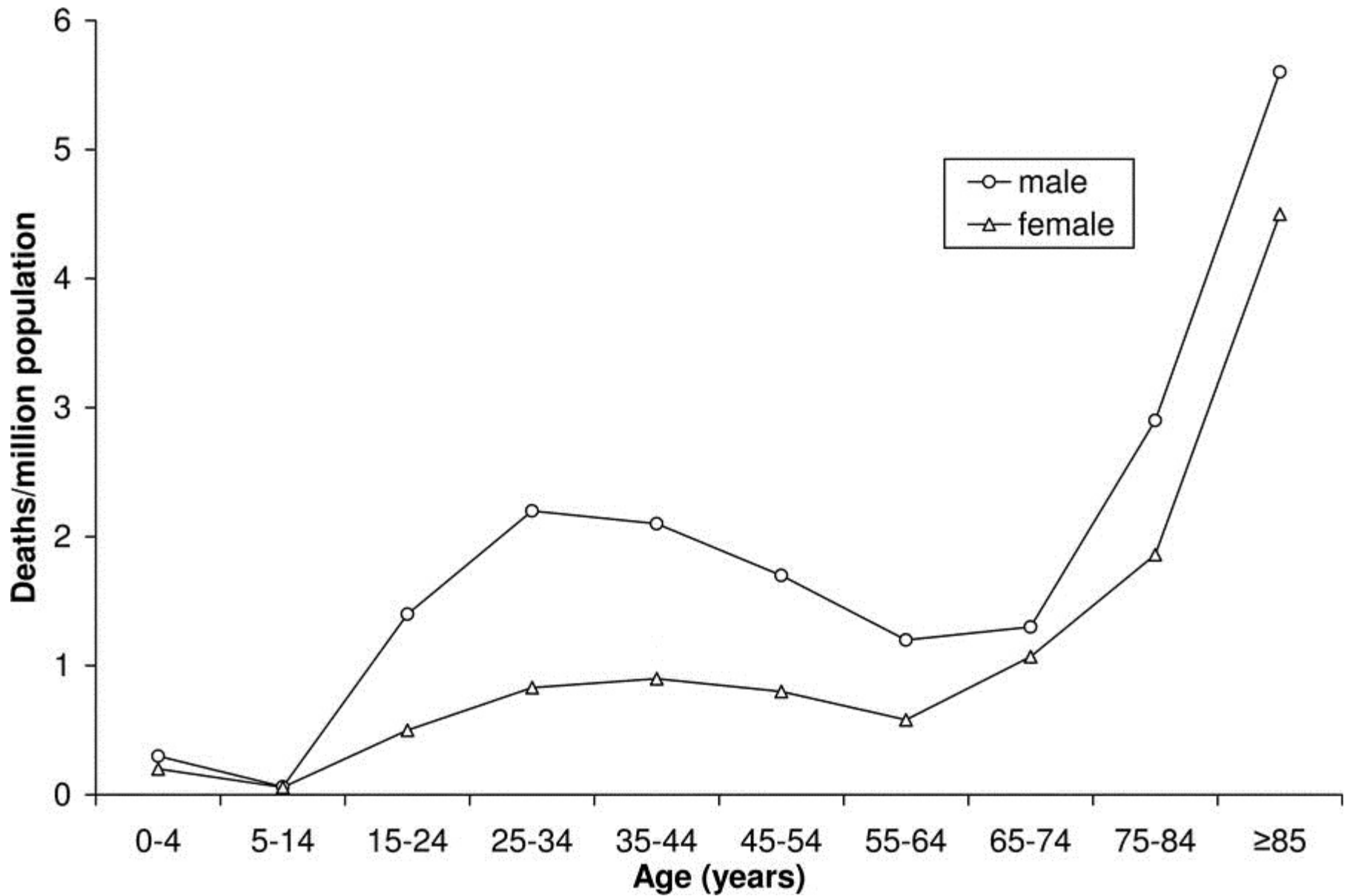


**Table 2. Anesthesia-related Deaths by Type of Complication, United States, 1999–2005**

Type of Complication	Number of Deaths	%
Complications of anesthesia during pregnancy, labor, and puerperium	79	3.6
Cardiac complications	60	2.7
Overdose of anesthetics	1,030	46.6
Inhaled anesthetics	233	10.5
Intravenous anesthetics	419	19.0
Other and unspecified general anesthetics	254	11.5
Local anesthetics	86	3.9
Unspecified anesthetics	38	1.7
Adverse effects of anesthetics in therapeutic use	940	42.5
Opioids and related analgesics	439	19.9
Benzodiazepines	42	1.9
Other and unspecified general anesthetics	40	1.8
Local anesthetics	137	6.2
Unspecified anesthetics	257	11.6
Other complications of anesthesia	162	7.3
Malignant hyperthermia	22	1.0
Failed or difficult intubation	50	2.3
Total	2,211	100.0



ICD-10 = *International Classification of Diseases*, 10th Revision.

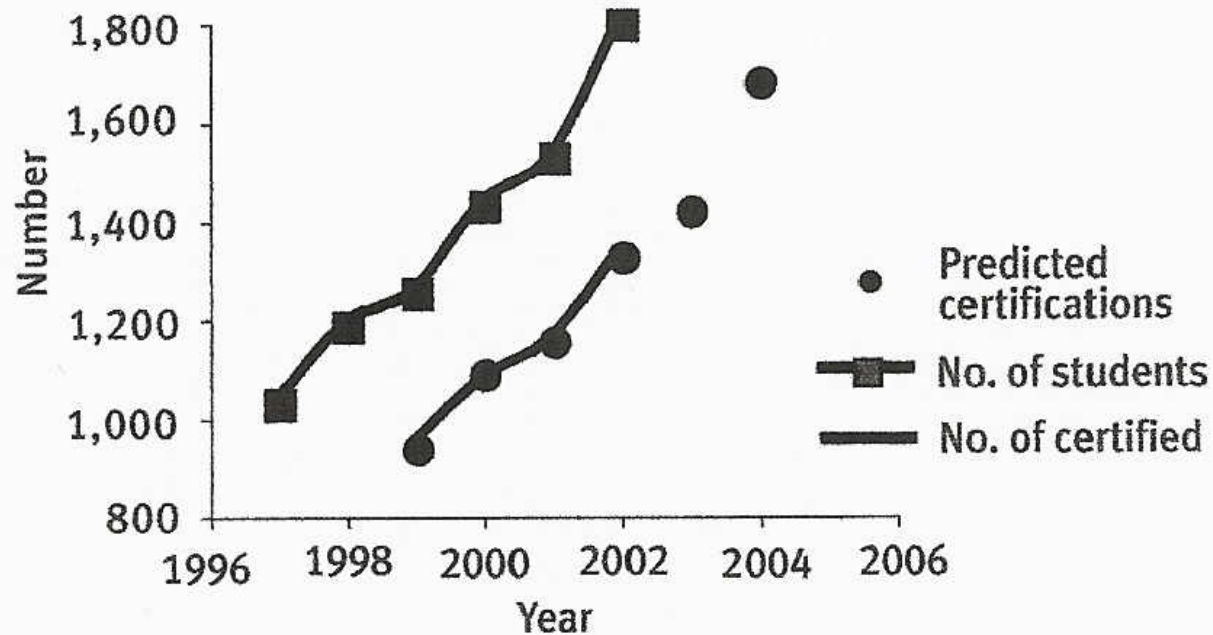


# How do we define our new role in the changing world of Anesthesia?

1. Hang on (for dear life) to current training and staffing models and hope that everything works out?
2. Modify our training to match the demands of the future *perioperative knowledge environment*?
3. Adapt to the fact that anesthesiology is safer and can be performed (with supervision) by others?

# The Market is speaking

**Figure 2. Trends in the number of certifications and enrolled students from 1996 to 2006**

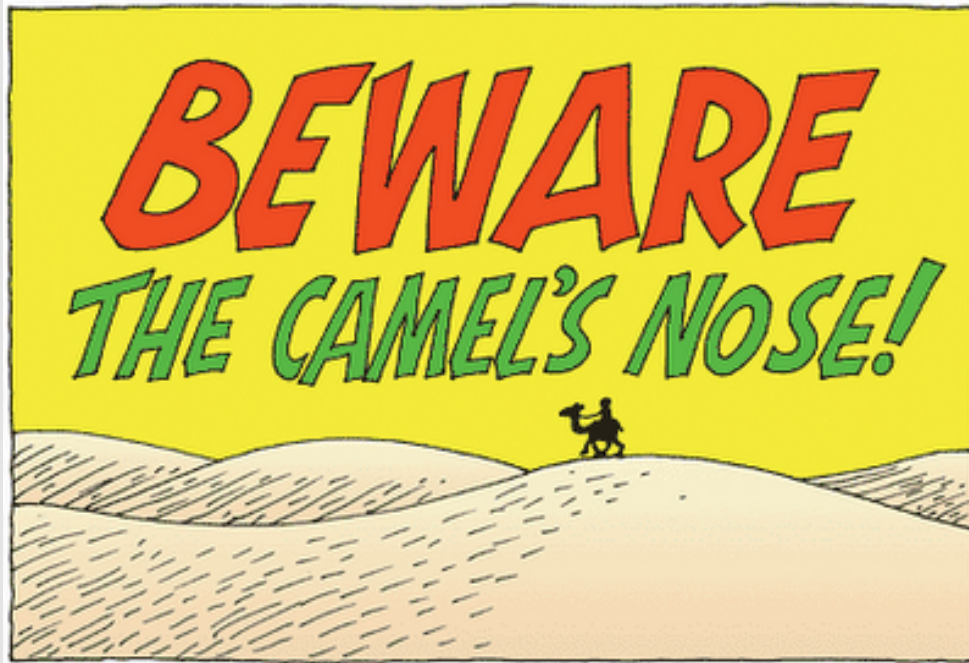


# Physician Supervision Opt Out

- Iowa
- Nebraska
- Idaho
- Minnesota
- New Hampshire
- New Mexico
- Kansas
- North Dakota
- Washington
- Alaska
- Oregon
- South Dakota
- Wisconsin
- Montana
- California
- Colorado



“All those op-out States...  
and so few dead bodies.”



What do we really fear?

The “Camel’s nose” of independent CRNA practice.



<http://stoneofwitness.blogspot.com/2009/10/camels-nose-is-under-tent-benny>

<http://theendsofar.wordpress.com/2011/07/25/tolerance-civility-and-the-camel/>

# 1

To be clear: Our future  
does not include  
independent CRNA  
practice.

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3

We must re-imagine  
our future and work to  
construct our new  
reality.

Who: The Chairs.

When: Now.

# A Radical Proposal

- Structure extended care team models
- Limit *relative* growth in Anesthesiologists
- Focus on *who* and *what* rather than *how many*.
- Extend our residency to five years
- Extend our fellowships to three years.

# What have we done at UNC?

- Since 2008, we have expanded clinical sites by 20%; we have held our resident numbers the same.
- More 1:3 (CRNA coverage)
- Academic Medicine Rotation
- Physician Scholar Fellowship
- Expanded NP' s in Pediatric Sedation
- Added NP in PreCare\*
- Added two RNs to Acute Pain team.

# Two Highlights at UNC

- Academic Medicine Rotation
  - 4 week course
  - Conjunction with School of Public Health
  - Learning to manage in information era
  - Advocacy, Communication, Leadership
- Physician Scholar
  - 80% unfunded protective time
  - A physician “Post-doc”
  - 5-7 year investment.

# In Your Academic Practice:

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- Really think about *who* you want to train and for *what* purpose.
- Put financial resources in professional development
- Case aside fears of market share and competition with CRNAs. We have nothing to fear....*if we choose to lead.*
- In closing...

Luther in 1533 by Lucas Cranach the Elder



Adapted (big time) from  
Martin Luther, On the day of  
the Feast of St. Peter the  
Apostle, 1521

“If you are a physician and educator, do not cling to false belief. If this message is true, you must ready the consequence. Be a leader, sin boldly, and let your message be strong, but let your trust in truth be stronger and your guide.”

**Thank you. Now back to you, JB.**



**Adapt.**

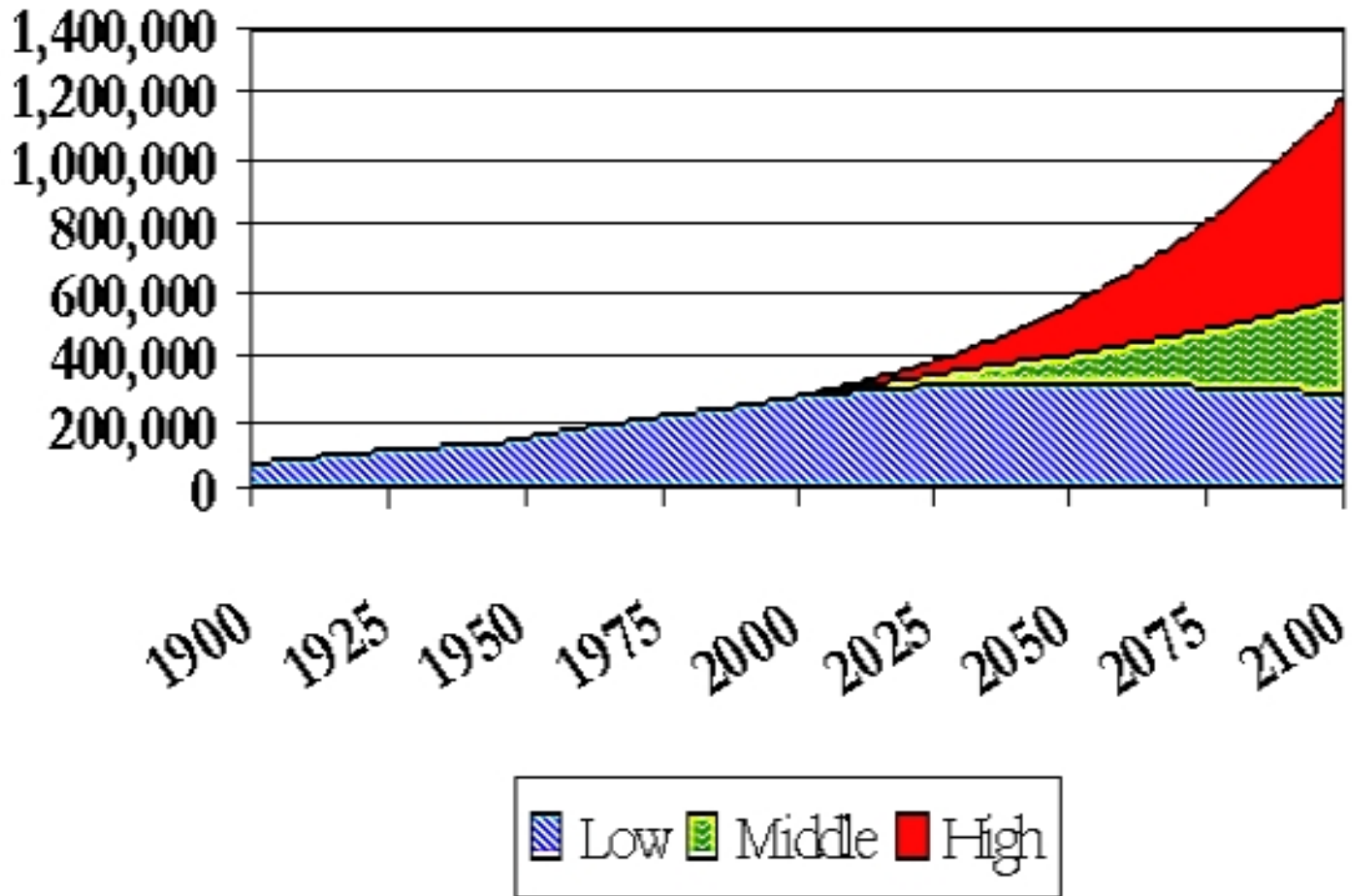
**Innovate.**

**Lead.**

<http://retrofizz.com/index.php?vars=portfolio/17>



# U.S. Population 1900 - 2100







[http://www.google.com/imgres?q=predicting+the+future&hl=en&sa=X&rlz=1R2GGLL\\_en&biw=1440&bih=699&tbm=isch&prmd=imvns&tbnid=TN5o\\_jqsvxJInM:&imgrefurl=http://www.pubsub.com/Dead-Space-2-endelig-annonsert-Dead-Space-bllXfnwbru8S&docid=v4q0\\_9zU4FU29M&imgurl=http://htcexperiments.files.wordpress.com/2008/12/fortune-teller2.jpg&w=635&h=480&ei=cv6iTv\\_MBcW3twfDt6ipBQ&zoom=1&iact=rc&dur=79&sig=117849895822463138216&page=3&tbnh=150&tbnw=198&start=41&ndsp=18&ved=1t:429,r:9,s:41&tx=107&ty=86](http://www.google.com/imgres?q=predicting+the+future&hl=en&sa=X&rlz=1R2GGLL_en&biw=1440&bih=699&tbm=isch&prmd=imvns&tbnid=TN5o_jqsvxJInM:&imgrefurl=http://www.pubsub.com/Dead-Space-2-endelig-annonsert-Dead-Space-bllXfnwbru8S&docid=v4q0_9zU4FU29M&imgurl=http://htcexperiments.files.wordpress.com/2008/12/fortune-teller2.jpg&w=635&h=480&ei=cv6iTv_MBcW3twfDt6ipBQ&zoom=1&iact=rc&dur=79&sig=117849895822463138216&page=3&tbnh=150&tbnw=198&start=41&ndsp=18&ved=1t:429,r:9,s:41&tx=107&ty=86)



**NOT  
HIRING  
AT  
THIS TIME**



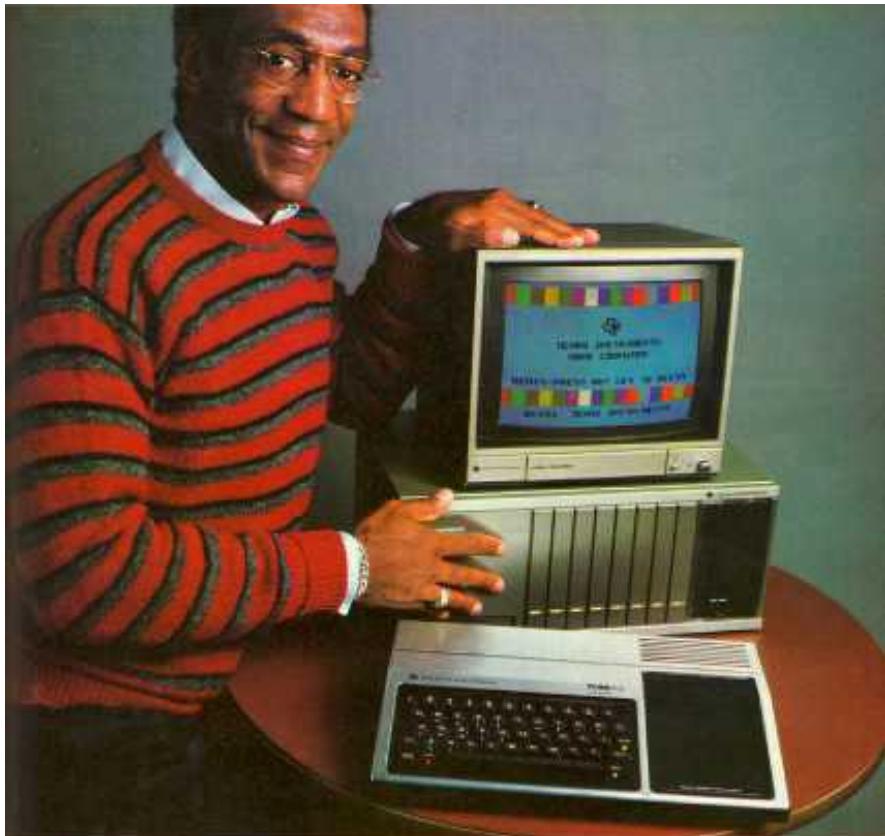


*Thank  
you for  
always  
making me  
feel special*

We should focus less on how *many* Anesthesiologists we train and focus rather on *who* we train and *how* we train them.

**Table 1. Anesthesiology Residents in Training and Graduates in the United States, 1989 - 2009**

<b>YEAR</b>	<b>PGY-1</b>	<b>CA-1</b>	<b>CA-2</b>	<b>CA-3</b>	<b>Total</b>	<b>Graduates<sup>1</sup></b>
1989	293	1,592	1,541	1,450	4,876	-
1990	479	1,656	1,593	1,518	5,246	1,433
1991	387	1,801	1,753	1,565	5,506	1,469
1992	360	1,904	1,781	1,720	5,765	1,552
1993	380	1,853	1,864	1,675	5,772	1,692
1994	281	1,873	1,843	1,871	5,868	1,743
1995	207	1,436	1,607	1,701	4,951	1,814
1996	580	1,073	1,259	1,454	4,366	1,775
1997	507	1,132	972	1,107	3,718	1,487
1998	507	1,225	1,001	939	3,672	1,173
1999	463	1,387	1,194	919	3,963	947
2000	446	1,453	1,339	1,105	4,343	934
2001	543	1,466	1,374	1,253	4,636	1,133
2002	638	1,471	1,420	1,357	4,886	1,286
2003	510	1,496	1,473	1,399	4,878	1,333
2004	431	1,439	1,608	1,511	4,989	1,393
2005	514	1,572	1,557	1,513	5,156	1,390
2006	644	1,576	1,615	1,502	5,337	1,395
2007	729	1,566	1,631	1,546	5,472	1,530 <sup>2</sup>
2008	739	1,646	1,612	1,574	5,571	1,524
2009	833	1,484	1,693	1,543	5,553	1,557



"TI's Home Computer.  
This is the one."



**What's next?**

# In Your Academic Practice:

- Embrace new compensation models that value education, research and administrative leadership
- Create an Academic Medicine track
- Establish a Research Scholar Fellowship
- Support scholarship with financial resources
- Encourage care team solutions

**Control the outcome**