

# **Perfect Storm Follow-Up Survey (2000 – 2008/9)**

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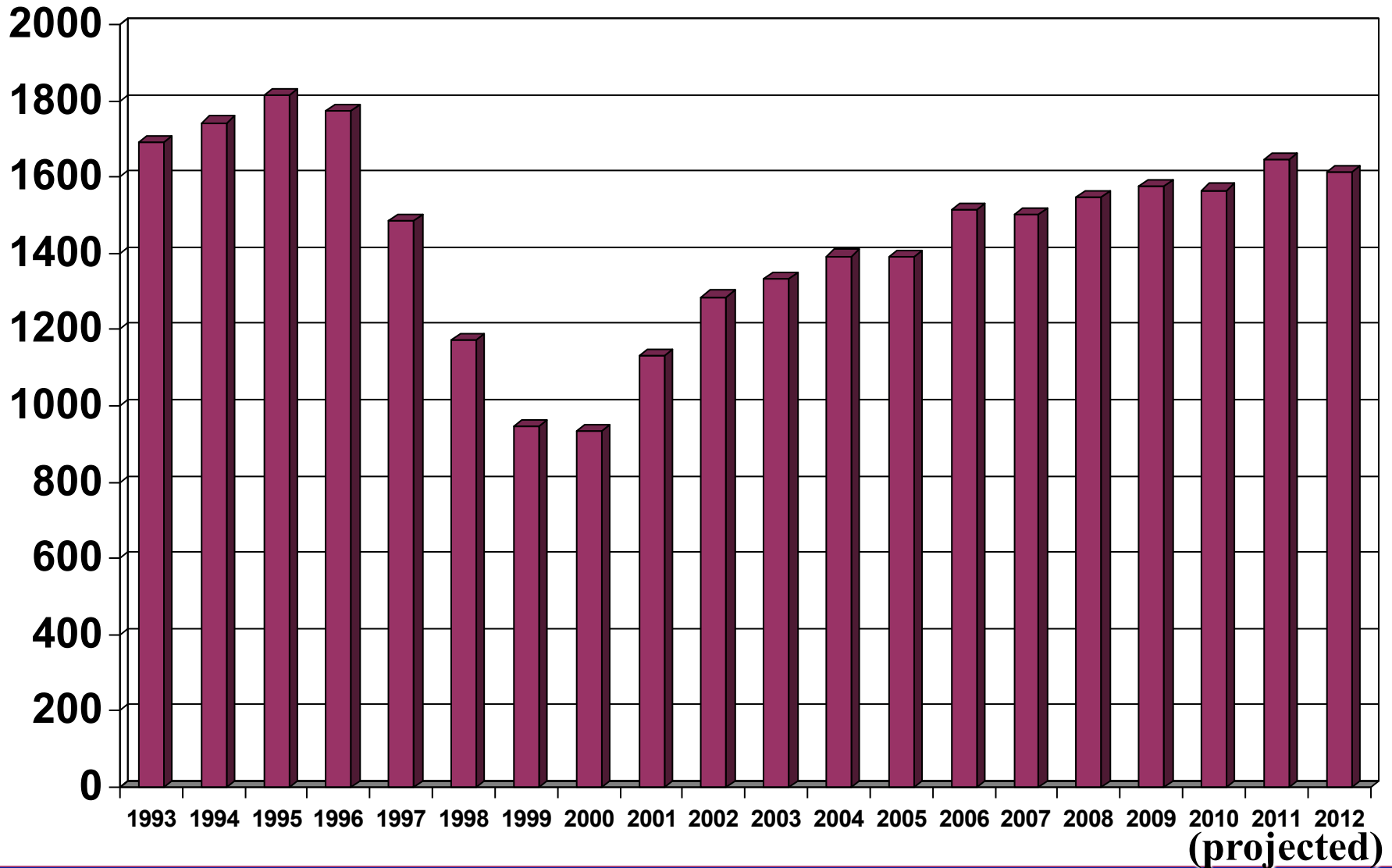


# Match Day 1996



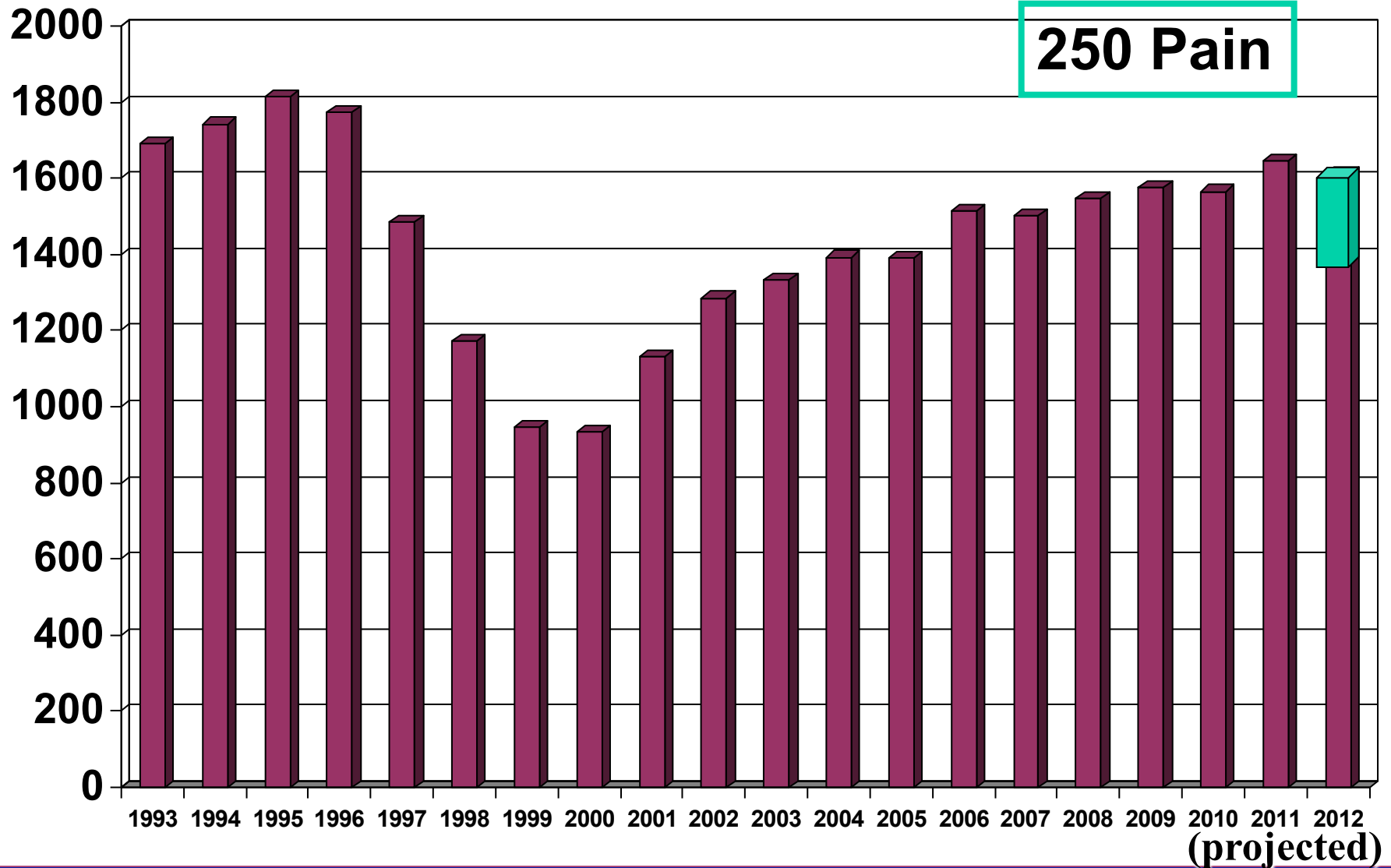
# Resident Graduates

## 1993 through 2012: AMG $\approx$ 78%



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# Survey Response Rate

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
58%	72%	64%	65%	73%	60%	61%	60%	59%	55%*

**\* Need More Respondents**

# **“Average” Department (2008/2009)**

<b>Faculty</b>	<b>52 FTE</b>
<b>Residents</b>	<b>14/Class</b>
<b>Interns</b>	<b>71% have 11 interns</b>
<b>CRNAs</b>	<b>96% have 30 CRNAs</b>

# “Average” Department Clinical Coverage

- ORs = 38

- Offsites = 8

- OB = 1.4

- ICU = 1.8

- APS = 1.1

- Pain = 2.2

- Preop = 0.9

53.4

$$\frac{\text{Faculty}}{\text{Sites}} = \frac{51.6}{53.4} = 0.97$$

$$\frac{\text{Res/CRNA}}{\text{Sites}} = \frac{71.7}{53.4} = 1.3$$

# Average Job Openings for Faculty/Department

Year	2000	2001	2002	2008	2009	2007	2008	2009
# Openings/ Department	3.8	3.9	3.4	<b>3.7</b>	<b>3.8</b>	3.7	3.7	<b>3.8</b>
% Faculty/ Department	9.7%	8.7%	6.8%	<b>7%</b>	<b>7%</b>	7%	7%	<b>7%</b>
Estimated Number of Faculty Openings	≈400	≈400	≈400	<b>≈350</b>	<b>≈350</b>	400	≈350	<b>≈350</b>

# Faculty Openings by Subspecialty

Average Dept. = 51.6 FTE

Average Dept has 3.8 open positions

	Mean	% of Openings
<b>Generalist</b>	<b>0.8</b>	<b>29%</b>
<b>Cardiac</b>	<b>0.3</b>	<b>11%</b>
<b>Peds</b>	<b>0.7</b>	<b>25%</b>
<b>ICU</b>	<b>0.5</b>	<b>18%</b>
<b>OB</b>	<b>0.1</b>	<b>3%</b>
<b>Neuro</b>	<b>0.2</b>	<b>7%</b>
<b>Regional</b>	<b>0.2</b>	<b>7%</b>
<b>Ambulatory</b>	<b>0.0</b>	<b>0%</b>

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<b>ICU</b>	0.5	<b>18%</b>
<b>OB</b>	0.1	<b>3%</b>
<b>Neuro</b>	0.2	<b>7%</b>
<b>Regional</b>	0.2	<b>7%</b>
<b>Ambulatory</b>	0.0	<b>0%</b>

# CRNAs

## CRNA Open Positions

	2000	2001	2002	2003	2008	2009	2009
Depts.%	66	75	67	69	69	66	66
# Needed	4.0	4.4	3.6	3.9	4.3	4.2	4.2

# Faculty Academic Time

2000	2003	2004	2005	2006	2007	2008	2009
31%	13.4%	16%	17%	17.5%	17.5%	17%	16%

Not an accurate measure

# Revenue

# al

2008	2009
<b>\$23,698,230</b> <b>\$443,392/FTE</b> <b>(n=70)</b>	<b>\$21,317,974</b> <b>\$418,736/FTE</b> <b>(n=57)</b>
<b>\$1,909,715</b> <b>\$27,869/FTE</b> <b>(n=70)</b>	<b>\$1,931,875</b> <b>\$27,193/FTE</b> <b>(n=57)</b>
<b>\$6,833,070</b> <b>\$146,465/FTE</b> <b>(n=69)</b>	<b>\$7,015,590</b> <b>\$160,381/FTE</b> <b>(n=56)</b>
<b>\$32,472,849</b> <b>\$616,477/FTE</b> <b>(n=69)</b>	<b>\$31,272,577</b> <b>\$624,067/FTE</b> <b>(n=57)</b>
<b>\$30,394,392</b> <b>\$562,980/FTE</b> <b>(n=70)</b>	<b>\$30,620,292</b> <b>\$610,450/FTE</b> <b>(n=57)</b>

	2000	*	2001
Clinical Revenue	\$11,718,925 \$340,404/FTE (n=78)	-	
Research Revenue	\$1,038,759 \$23,067/FTE (n=67)	-	
Institution Support	\$1,235,000 \$34,300/FTE (n=77)	-	\$2,335,000 \$60,000/FTE (n=77)
Total Revenue	\$14,682,989 \$424,300/FTE (n=79)	-	
Total Expenses	\$13,768,981 \$387,512/FTE (n=79)	-	

2008	2009
\$23,698,230 \$443,392/FTE (n=70)	\$21,317,974 \$418,736/FTE (n=57)
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\* 2001 or 2002

ta.

# Margin Analysis FY 2000 - 2009

Dept. Margin	2000	2001	2002	2003	2004
(+) Margin/ FTE	53% 50,500	53% 15,200	65% 28,400	54% 17,800	55% 27,400
(-) Margin/ FTE	44% 23,800	38% 21,500	33% 10,400	42% 12,700	42% 35,500

Dept. Margin	2005	2008	2009
(+) Margin/ FTE	50% 37,100	53% 29,961	53% 33,236
(-) Margin/ FTE	40% 49,900	29% 59,369	24% 26,017

# Total Department Support (Hospital, Med School and Other)

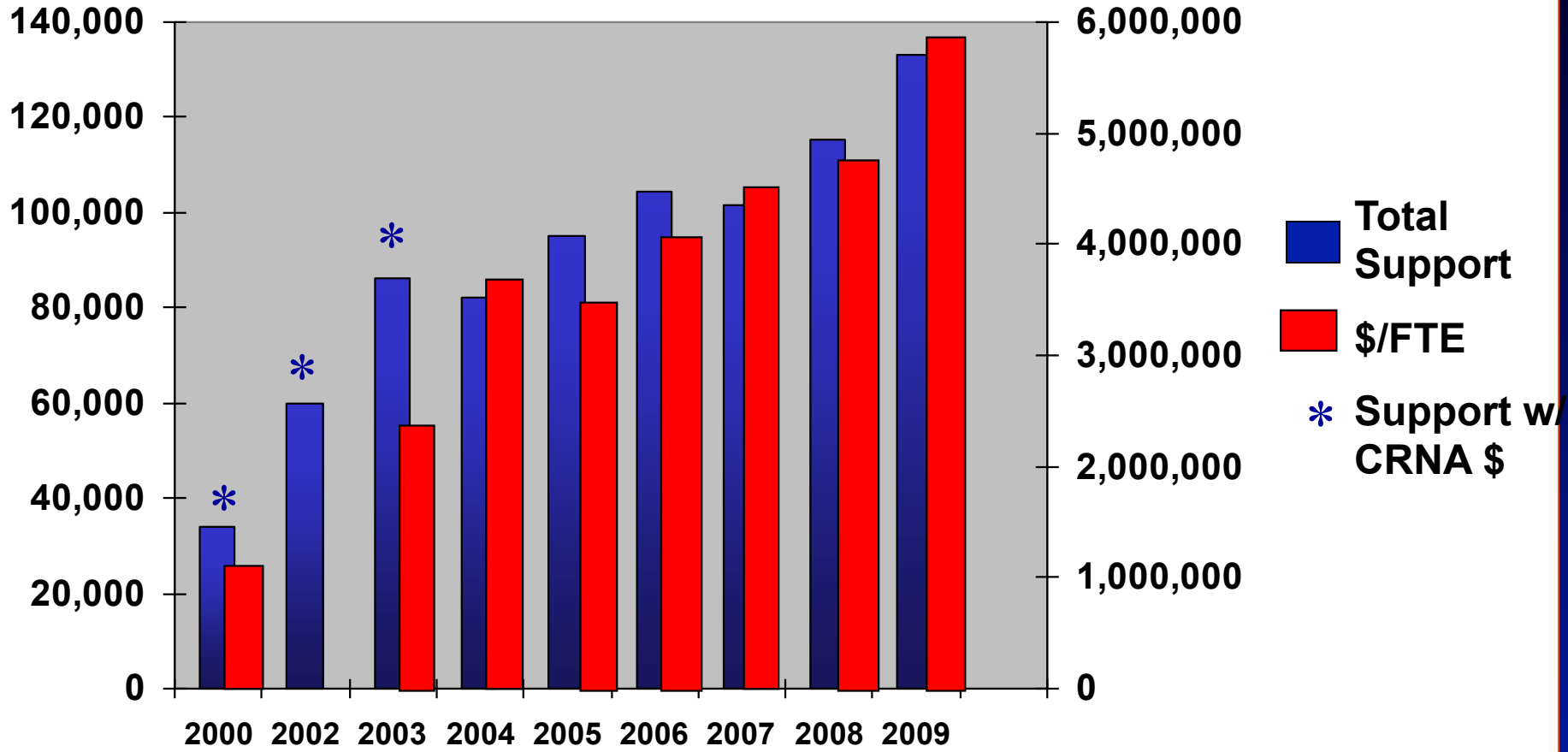
Year	2000	2002	2003	2004
Total Support	1,230,000	<b>2008</b>		3,788,000
\$/FTE	34,000	<b>2009</b>		98,000

Year	2005	2008	2009	2009
Total Support	4,900,000	<b>6,833,070</b>	<b>7,015,590</b>	7,015,590
\$/FTE	116,000	120,100	112,962	146,465
			146,465	160,381

# Total Department Support Without CRNA Support

		Total Support	Per FTE
	<b>2007</b>	<b>\$4,207,000</b>	<b>\$101,500</b>
20	<b>2008</b>	<b>\$5,183,302</b>	<b>\$115,343</b>
20			
20	<b>2009</b>	<b>\$5,630,386</b>	<b>\$133,196</b>
20			
<b>2008</b>	<b>\$6,833,070</b>	<b>\$5,183,302</b>	<b>\$115,343</b>
<b>2009</b>	<b>\$7,015,590</b>	<b>\$5,630,386</b>	<b>\$133,196</b>

# Total Department Support (without CRNA Support )



# **Institutional Support 2009**

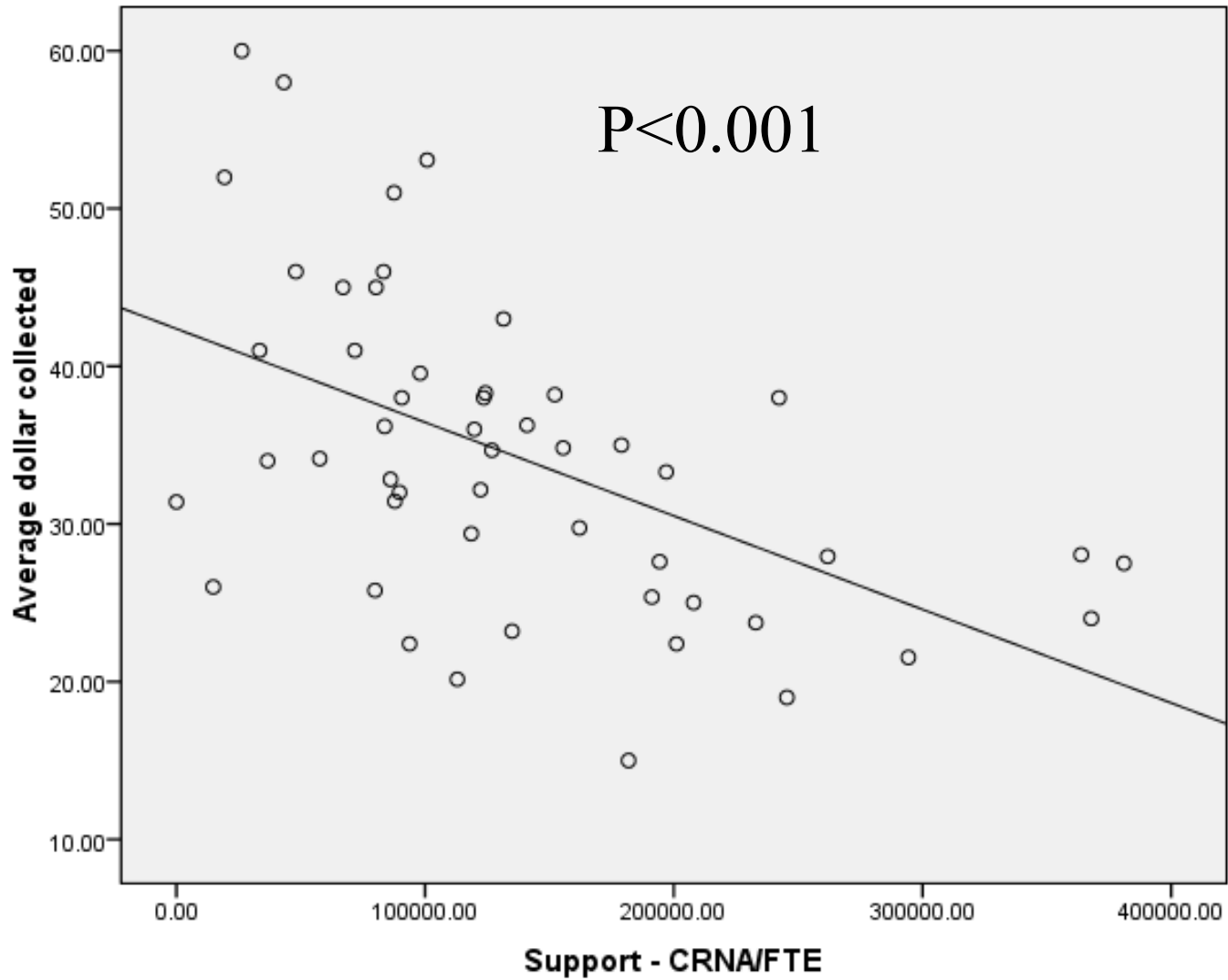
**Total support / FTE = \$160,381**

**(Support – CRNA)/FTE = \$133,196**

**Support/site = \$131,378**

**Average Margin = \$656,231 or  
\$13,562/faculty**

# Support/faculty vs \$/unit

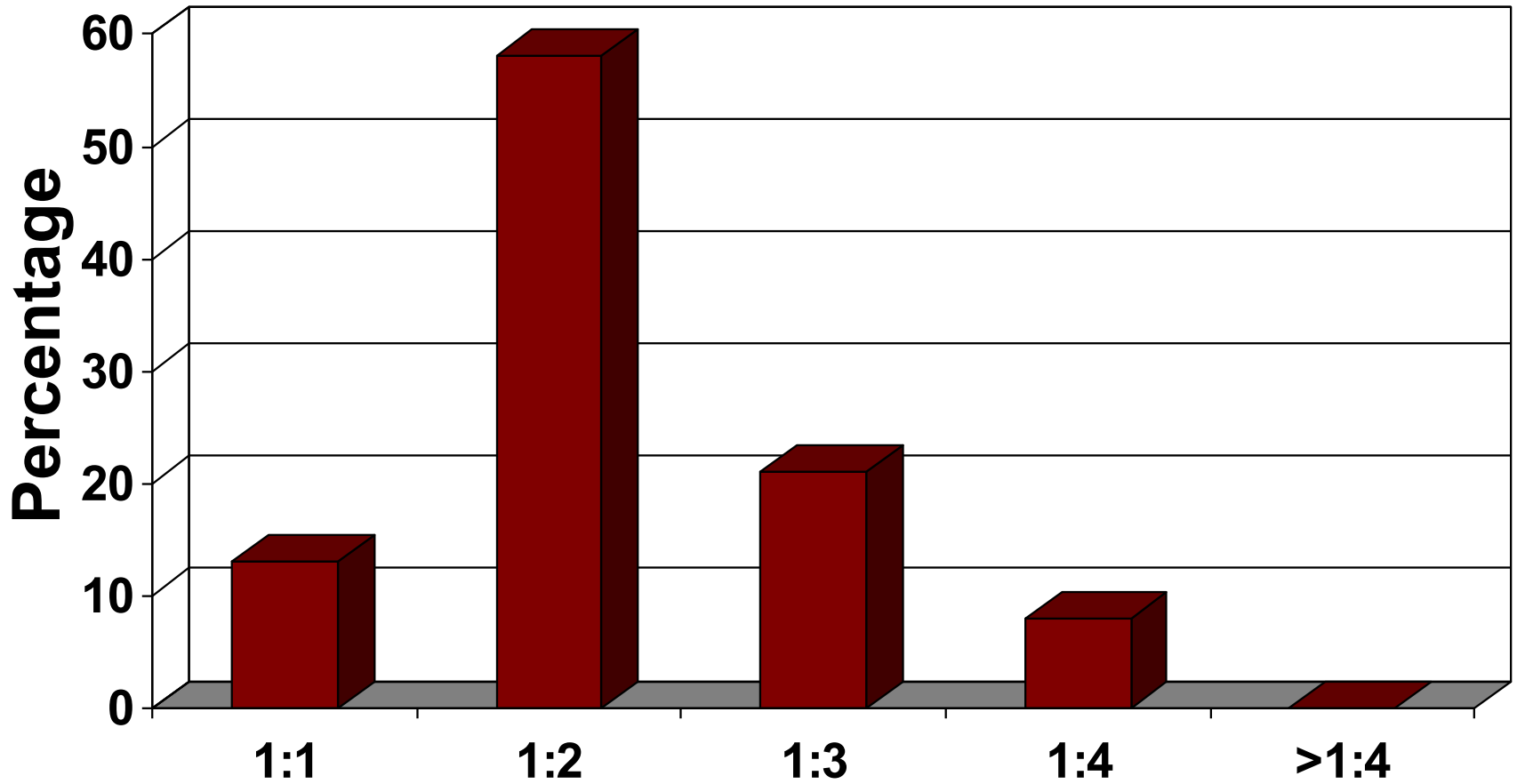


# Clinical Sites and Faculty Assigned

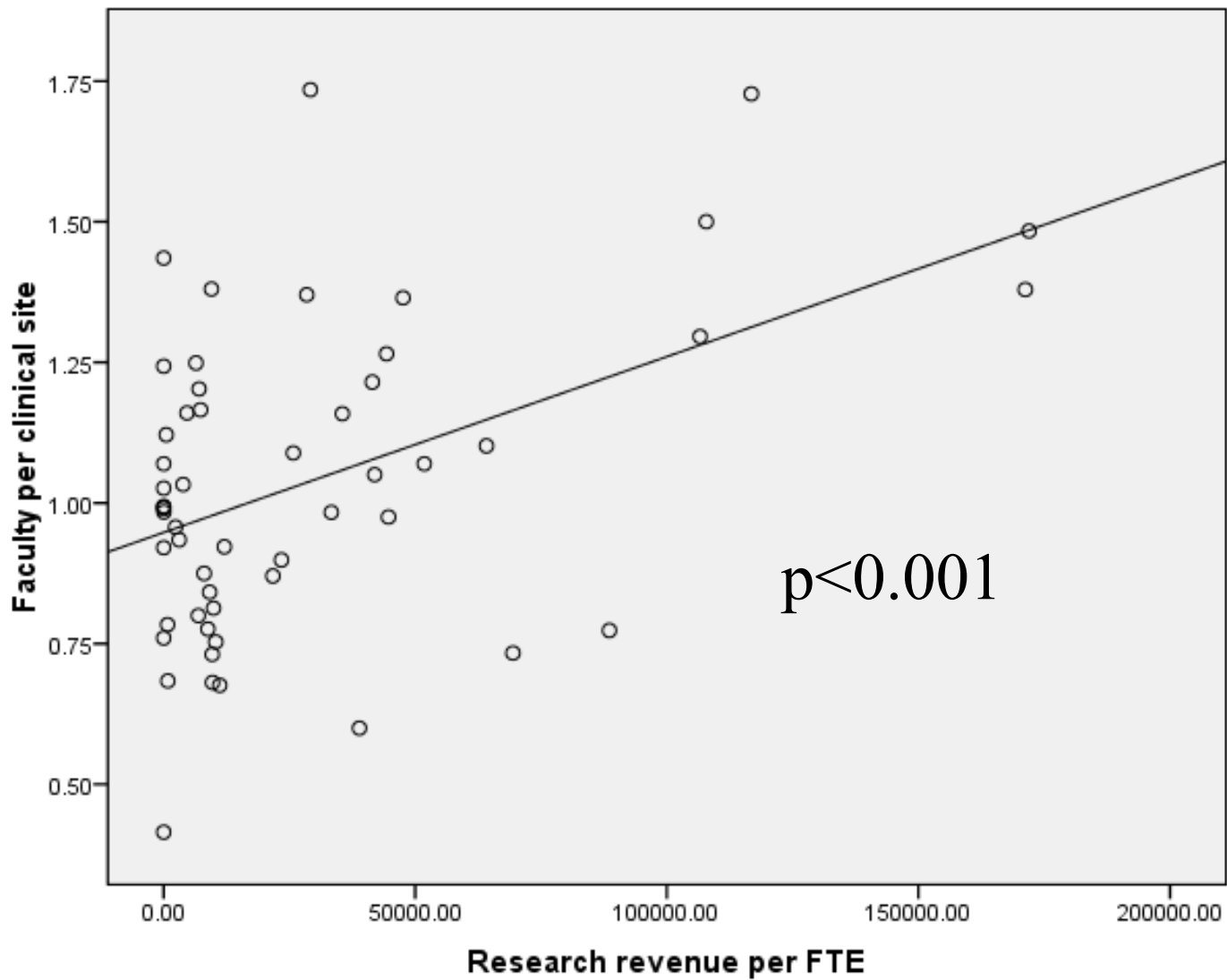
Clinical Anesthetizing Locations	MEAN	MAX	MIN	SD
<b>ORs</b>	<b>38</b>	<b>144</b>	<b>7</b>	<b>23.0</b>
<b>Non OR Sites</b>	<b>8</b>	<b>80</b>	<b>0</b>	<b>11.0</b>
Faculty Assigned/Day				

Faculty/ Clinical Sites	<b>1.0</b>	<b>1.7</b>	<b>0.42</b>
Research Revenue/ Faculty	<b>\$27,193</b>	<b>\$171,982</b>	<b>\$0</b>

# Faculty/CRNA Supervision Ratios (n = 50, for institutions with > 20 CRNAs)



# Faculty/Sites vs Research \$/FTE



# Unit Value Charge (\$)

2000	2001	2002	2003	2004	2005	2008	2009	2009
62.60	65.90	--	74.48	75.96	81.10	95.95	97.80	97.80
Collection \$/unit					31.10	34.74	34.90	34.90

# Units Billed per Faculty

2004	2005	2006	2007	2008	2009
11,954	11,320	12,193	12,124	11,179	10,720

# Medicaid Reimbursement/ Unit

	2005	2006	2007	2008	2009
Max	\$30.00	\$32.00	\$37.00	\$31.50	\$38.00
Min	\$ 5.00	\$ 8.00	\$ 8.00	\$ 8.00	\$6.00
Mean	\$14.98	\$16.67	\$16.07	\$16.21	\$17.17

# New Calculation

**Sites Covered = OR Covered (38) + Non ORs (8) +**

**# of Faculty/day:**

**OR = 38.0**

**OB = 1.4**

**ICU = 1.8**

**Acute pain = 1.1**

**Pain clinic = 2.2**

**Preop clinic = 0.9**

**Other faculty = 1.0**

**46.4**

**“Sites Covered” = 46**  
**Faculty = 46.4**

# Determining Support Required

$$\frac{\text{Expenses/yr.}}{\text{Units Billed/yr.}} = \$ \quad X \quad \text{Exps/Unit}$$

$$\text{Avg \$ collected/unit} = \$ \underline{\quad Y \quad}$$

$$\text{\$ needed \$/unit} = \$ \underline{\hspace{2cm}}$$

$$\text{\$ needed/FTE} = \$ \underline{\hspace{2cm}}$$

# “Average” Department

51.6 Faculty

10,720 units/faculty

Total Expense	<u>\$30,620,292</u>	= \$56.01/unit (needed)
Total Units	546,651	

\$/unit needed

\$56.01

\$/unit collected

\$34.90

\$/unit support

\$21.11/unit

Support  $\$21.11 \times 546,651 = \$11,539,802$   
or \$223,640/faculty

# Anesthesiology Department Involvement in Critical Care

**Average Number  
of ICUs per  
Department**

**2.2  $\pm$  1.5**

# ICU Models

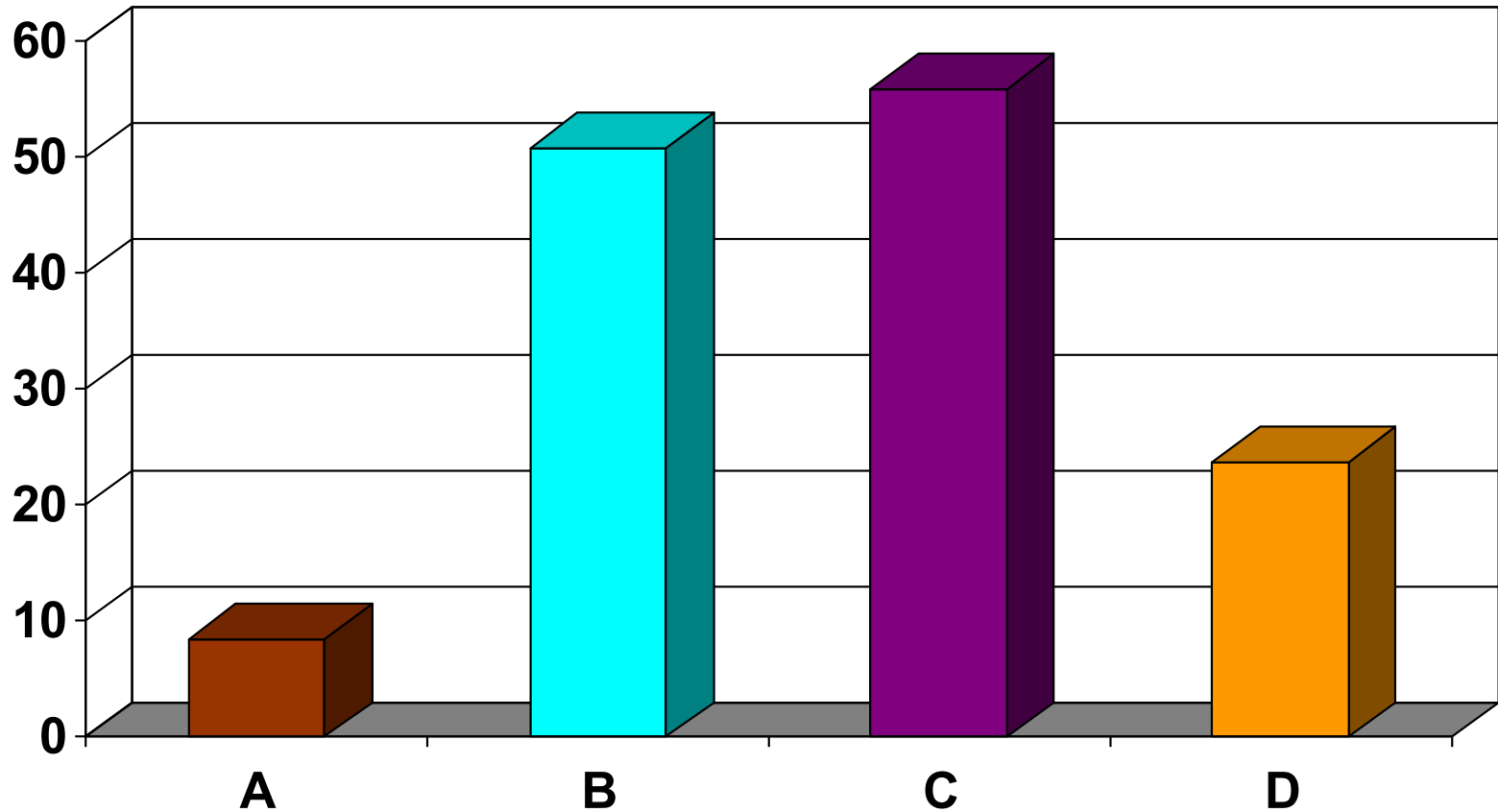
**A = Open**

**B = “Hybrid” ICU Consult**

**C = “Hybrid” ICU Orders**

**D = Closed**

# ICU Management Model: A,B,C,D



# Late Pay

No	32.8%
Yes	67.2%
<i>If yes,</i>	
How much \$/hr.	<b>\$143.00/hr</b> $\pm$ \$52.00
How much Time	<b>4:50 pm</b> $\pm$ 64 min.

# Conclusions:

1. Faculty openings the same ?
2. Department finances are not improving!
3. Faculty salaries are increasing.
4. Departments' institutional support is still increasing.
5. Support is due to poor collection rate ... Not academic time or site/faculty utilization.

# Conclusions:

6. More faculty/site associated with Increased Research \$\$
7. Overtime pay average \$143/hr starting at 5:00 pm.
8. The average department covers 2 ICUs with hybrid models.

# Publications

- 1. *Financial Environment of Academic Anesthesia. Advances in Anesthesia, Mosby, Inc., Chapter 1, vol 19, pp. 1-35, 2001.***
- 2. *A Demographic, Service, and Financial Survey of Anesthesia Training Programs in the United States. Anesth Analg 2003; 96:1432-46.***
- 3. *Faculty and Finances of United States Anesthesiology Training Programs: 2002-2003. Anesth Analg 2004; 99:1185-92.***
- 4. *Trends in Financial Status of United States Anesthesiology Training Programs: 2000 to 2004. Anesth Analg 2006; 102:517-23.***
- 5. *Five-Year Follow-Up on the Work Force and Finances of United States Anesthesiology Training Programs: 2000 to 2005. Anesth Analg 2007; 104:863-68.***
- 6. *Six-Year Follow-Up on Work Force and Finances of the United States Anesthesiology Training Programs: 2000 to 2006. Anesth Analg, 2009; 108:263-272.***
- 7. *Seventh and Eighth Year Follow-Up on Workforce and Finances of the United States Anesthesiology Training Programs: 2007 and 2008. Anesth Analg, 2009; 109:897-899.***