



BLOOM WHERE YOU'RE PLANTED

Julie Ann Freischlag

The William Stewart Halsted Professor

Chair, Department of Surgery

The Johns Hopkins Hospital

Surgeon-in-Chief

The Advancement of Women in Academic Medicine

1. “Bias against women and minorities remain. They are simply not expected to be as competent or effective as their male counterparts. By exerting leadership, women leaders violate societal expectations and these violations generate discomfort and negative impressions.”

JAMA 264:1854-5, 1990

The Advancement of Women in Academic Medicine

1. “Professional women are faced with the joys and burdens of childbearing, child raising and family organizing and nurturing. These tasks all too often clash with the intellectual and professional potentials of women.”

JAMA 264:1854-5, 1990

The Advancement of Women in Academic Medicine

1. “Sexual stereotypes are still getting in the way. Women too often face a burden of professional loneliness rather than the comfort of supportive collegial relationships that bolster the careers of men”

JAMA 264:1854-5, 1990

Influence of Spousal Opinions on Residency Selections

- 69 spouses of 4th year medical students were sent questionnaires
- 56 (81%) were returned – 16 women and 40 men
- Mean age 27 years
- No difference between male and female responses

Am J Surg 163:596-98, 1992

Influence of Spousal Opinions on Residency Selections

- 98 % said there had been discussions on residency choice
- 73% thought they had significant input
- Rank Order – career goals (68%), lifestyle (21%), prestige, earning capacity and program length were ranked lowest

Am J Surg 163:596-98, 1992

Influence of Spousal Opinions on Residency Selections

Specific Concerns:

Time Commitment	79%
Fatigue	48%
Program Length	35%

A statistically significant correlation existed between discouraging the choice of general surgery and those objecting to the time commitment during residency

$p < 0.05$

Am J Surg 163:596-98, 1992

The Impact of Gender on the Choice of Surgery as A Career

- Questionnaire distributed to 245 4th year students at the University of Toronto
- 69% return rate
- Fewer females than males were found to consider or choose a surgical career, possibly due to differences in qualities of importance in specialties, availability of role models and exposure through electives

Am J Surg 172:373-76, 1996

The Impact of Gender on the Choice of Surgery as a Career

- Males:
1. More likely to choose a surgical career (30/111 vs 6/59 female $p<0.01$)
 2. Considered a surgical career during medical school (42/111 vs 9/59 female $p<0.01$)
 3. 17% males went into surgery; 7% female ($p<0.09$)

The Impact of Gender on the Choice of Surgery as a Career

- Females did fewer surgical electives during the first 3 years of medical school ($p < 0.001$)
- Male and female students rated their surgery rotation as good or very good in learning experience (84% vs 81%) and overall enjoyment (66% vs 66%)
- Somewhat lower than non-surgical clerkship 91% for learning and 79% for enjoyment

Am J Surg 172:373-76, 1996

The Impact of Gender on the Choice of Surgery as a Career

- 50% students had a male surgical role model
- 23% students had a female surgical role model
- More male medical students were likely to feel that role models, influenced their attitude towards choosing a career in surgery than female students ($P < 0.02$)

Am J Surg 172:373-76, 1996

The Impact of Gender on the Choice of Surgery as a Career

- Surgery is a rewarding career 79%
- Earned more 64%
- Were aggressive 74%
- Worked harder during residency 79%
- and afterwards 61%

Am J Surg 172:373-76, 1996

Table III. **Importance of Certain Qualities of Specialties**

	Importance		P Value for Quality of Specialty Difference
	Females	Males	
Intellectual challenge	86%	84%	0.6
Talent for specific skill	59%	64%	0.9
Technical challenge	27%	51%	0.005
Emotional challenge	47%	47%	0.4
Patient contact	90%	79%	0.03
Ability to cure disease	44%	55%	0.1
Residency condition	94%	70%	0.002
Working conditions	85%	86%	0.08
Residency hours	81%	66%	0.02
Working hours	93%	81%	0.05
Residency length	49%	38%	0.3
Earning potential	20%	38%	0.01

Table III. **Importance of Certain Qualities of Specialties**

Importance Females	Males	P Value	Quality of Specialty	Difference
Prestige		12%	29%	0.009
Community-based practice	63%		52%	0.2
Academic opportunity	49%		48%	0.9
Research opportunity	41%		42%	0.6
Part-time residencies	8%		5%	0.01
Part-time work	36%		15%	0.0001
Parental leave, residency	39%		9%	0.0001
Parental leave, working	49%		12%	0.0001

The Impact of Gender on the Choice of Surgery as a Career

- Surgeons have a rewarding family life 5%
- Surgeons enjoy spending time with their patients 10%
- Surgeons are competitive (men were less likely to agree with this statement) 76%
- Discrimination in surgery based on gender 36%
- Discrimination in surgery based on race 12%

Am J Surg 172:373-76, 1996

Table I

Surgery Match Results

Surgical Specialty	Female Match Number (%)	Male Match Number (%)
Neurosurgery	1/57 (2%)	2/109 (2%)
Orthopaedics	0/57 (0%)	4/109 (4%)
Plastic Surgery	1/57 (2%)	1/109 (1%)
Urology	0/57 (0%)	4/109 (4%)
General Surgery	2/57 (4%)	7/109 (6%)
Total	4/57 (7%)	18/109 (17%)

Table II

Surgical and Non-surgical Match Results

Specialty	Female Match Number (%)	Male Match Number (%)	Probability of Difference
Surgery	4/57 (7%)	18/109 (17%)	P < 0.09
Obstetrics	3/57 (5%)	0/109 (0%)	P < 0.04
Pediatrics	3/57 (5%)	1/109 (1%)	P < 0.1
Family Medicine	29/57 (51%)	39/109 (36%)	P < 0.06
Internal Medicine	9/57 (16%)	18/109 (17%)	P < 0.9
Radiology	1/57 (2%)	6/109 (6%)	P < 0.4
Anesthesia	1/57 (2%)	9/109 (8%)	P < 0.2

“There are risks and costs to a program of action but they are far less than the long – range risks and costs of comfortable inaction.”

John F. Kennedy



<u>Society</u> <u>Officers</u>	<u>Total</u>	<u>#Women</u>	
American College of Surgeons	54,761	2431(4.4)	4
American Surgical Association	1093	25(2.2)	0
Society of University Surgeons	1388	46(3.3)	0
(2000 – 01)			

Jonasson Surg 131:672-5,



- **Are there women
in the pipeline?**



Women Enrollment and Graduates U.S. Medical Schools

	<u>Enrollment</u>		<u>Graduates</u>	
	<u>Total</u>	<u>Women</u>	<u>Total</u>	<u>Women</u>
1961 – 62	31,078	1970 (6.3%)	7168	391 (5.5%)
1971 – 72	43,650	4755 (10.9%)	9558	861 (9.0%)
1981 – 82	66,298	18505 (27.9%)	16012	3991 (24.9%)
1991 – 92	65,602	24962 (38.1%)	15356	5543 (36.1%)
2001 – 02	65,626	29969 (45.7%)	15648	6911 (44.1%)



U.S. Seniors Matched to PGY1 by Specialty

General Surgery

2002

782(5.8%)

2003

867(6.5%)

2004

885(6.5%)

2005

845(6.1%)



Specialty Certification Plans of Graduating Medical Students

	<u>1985</u>	<u>2000</u>	<u>2004</u>
Neurologic Surgery	1.0	1.0	1.1
Ophthalmology	3.6	3.0	3.0
Orthopedic/Hand	5.7	4.5	5.4
Otolaryngology	2.4	1.9	2.0
Plastic Surgery	1.4	1.0	1.4
General Surgery	6.2	5.7	6.1
Thoracic Surgery	0.9	0.3	0.3
Urology	2.0	1.6	1.6
Surgical Specialties	30.6	26.3	27.9

Women Residents_

2002 – 03

2003 – 04

Total

Women

Total

Women

Neuro Surgery	778	77 (9.9%)	775	93 (12%)
Ophthalmology	1290	434 (33.6%)	1260	424 (33.7%)
Orthopedic	3002	271 (9.0%)	3024	285 (9.4%)
Otolaryngology	1093	218 (19.9%)	1071	229 (21.4%)
Plastic Surgery	531	139 (26.2%)	556	117 (21.%)
General Surgery	7412	1853 (25%)	7623	1939 (25.4%)
Thoracic Surgery	310	25 (8.1%)	303	31 (10.2%)
Urology	1009	140 (13.9%)	1038	158 (15.2%)



GENERAL SURGERY COHORT GROUPS by GENDER 1977 - 2002

CERTIFICATION

RECERTIFICATION

<u>Year</u>	<u>Total # of Diplomates</u>	<u># Male</u>	<u># Female</u>	<u># Male Recertified</u>	<u># Female Recertified</u>
1977	921	908 (98.6%)	13 (1.4%)	554 (61.0%)	7 (53.8%)
1978	1168	1141 (97.7%)	27 (2.3%)	742 (65.0%)	13 (48.1%)
1979	1025	999 (97.5%)	26 (2.5%)	694 (69.5%)	17 (65.4%)
1980	968	936 (96.7%)	32 (3.3%)	682 (72.9%)	24 (75.0%)
1981	1047	1003 (95.8%)	44 (4.2%)	738 (73.6%)	37 (84.1%)
1982	965	922 (95.5%)	43 (4.5%)	709 (76.9%)	31
1983	856	795 (92.9%)	61 (7.1%)	(72.1%)	
1984	921	841 (91.3%)	80 (8.7%)	617 (77.6%)	50 (82.0%)
1985	926	858 (92.7%)	68 (7.3%)	635 (75.5%)	55 (68.8%)
1986	858	775 (90.3%)	83 (9.7%)	655 (76.3%)	51 (75.0%)
1987	957	885 (92.5%)	72 (7.5%)	611 (78.8%)	62 (74.7%)
1988	1007	923 (91.7%)	84 (8.3%)	715 (80.8%)	58 (80.6%)

GENERAL SURGERY COHORT GROUPS by GENDER 1977-1998

<u>Year*</u>	<u>CERTIFICATION</u>			<u>RECERTIFICATION</u>	
	<u>Total # of</u> <u>Diplomates</u>	<u>#</u> <u>Male</u>	<u>#</u> <u>Female</u>	<u># Male</u> <u>Recertified</u>	<u># Female</u> <u>Recertified</u>
5	970	880 (90.7%)	90 (9.3%)	706 (80.2%)	71 (78.9%)
6	981	881 (89.8%)	100 (10.2%)	693 (78.7%)	80 (80.0%)
7	991	885 (89.3%)	106 (10.7%)	661 (74.7%)	85 (80.2%)
8	997	884 (88.7%)	113 (11.3%)	573 (64.8%)	81 (71.7%)
9	1006	888 (88.3%)	118 (11.7%)	334 (37.6%)	49 (41.5%)
10	966	849 (87.9%)	117 (12.1%)	72 (8.5%)	14 (12.0%)
11	971	828 (85.3%)	143 (14.7%)	(%)	(%)
12	1019	871 (85.5%)	148 (14.5%)	(%)	(%)
13	987	848 (85.9%)	139 (14.1%)	(%)	(%)
14	957	807 (84.3%)	150 (15.7%)	(%)	(%)

GENERAL SURGERY COHORT GROUPS by GENDER 1999 - 2004

	<u>CERTIFICATION</u>			<u>RECERTIFICATION</u>	
	Total #	#	#	#	#
	Diplomates	Males	Females	Males	
	<u>Females</u>				
1999	1004	856 (85.3%)	148 (14.7%)	(%)	(%)
7	1043	836 (80.2%)	207 (19.8%)	(%)	(%)
8	994	823 (82.8%)	171 (17.2%)	(%)	(%)
2002	995	810 (81.4%)	185 (18.6%)	(%)	(%)
10	920	755 (82.1%)	165 (17.9%)	(%)	(%)
2004	1068	834 (78.1%)	234 (21.9%)	(%)	(%)



Vascular Surgery Cohort Groups by Gender 1982 - 1994

<u>Year</u>	<u>Total # Diplomates</u>	<u>#Male</u>	<u># Female</u>
1982	14	14 (100.0%)	0 (0.0%)
1983	388	387 (99.7%)	1 (0.3%)
1984	143	142 (99.3%)	1 (0.7%)
1986	75	73 (97.3%)	2 (2.7%)
1987	79	77 (97.5%)	2 (2.5%)
7	96	92 (95.8%)	4 (4.2%)
1989	124	119 (96.0%)	5 (4.0%)
1990	125	122 (97.6%)	3 (2.4%)
1991	102	98 (96.1%)	4 (3.9%)
1992	103	99 (96.1%)	4 (3.9%)
1993	89	86 (96.6%)	3 (3.4%)
1994	79	76 (96.2%)	3 (3.8%)



Vascular Surgery Cohort Groups by Gender 1995 - 2005

<u>Year</u>	<u>Total # Diplomates</u>	<u># Male</u>	<u># Female</u>
1995	110	104 (94.5%)	6 (5.5%)
1996	83	79 (95.2%)	4 (4.8%)
1997	96	89 (92.7%)	7 (7.3%)
1998	79	72 (91.1%)	7 (8.9%)
1999	94	85 (90.4%)	9 (9.6%)
2000	106	96 (90.6%)	10 (9.4%)
2001	70	59 (84.3%)	11 (15.7%)
9	99	84 (84.8%)	15 (15.2%)
10	105	88 (89.8%)	8 (7.6%)
2004	106	93 (87.7%)	3(12.3%)
2005	98	97(89.8%)	10(10.2%)

Pediatric Surgery Cohort Groups by Gender 1974 - 1988

<u>Year</u>	<u>Total # of Diplomates</u>	<u># Male</u>	<u># Female</u>
1974	3	3 (100.0%)	0 (0.0%)
1975	226	219 (96.9%)	7 (3.1%)
1976	70	65 (92.9%)	5 (7.1%)
1977	24	22 (91.7%)	2 (8.3%)
1978	17	17 (100.0%)	0 (0.0%)
1980	43	40 (93.0%)	3 (7.0%)
1982	38	38 (100.0%)	0 (0.0%)
1984	33	29 (87.9%)	4 (12.1%)
10	30	28 (93.3%)	2 (6.7%)
1988	37	31 (83.8%)	6 (16.2%)

Pediatric Surgery Cohort Groups by Gender 1990 - 2002

<u>Year</u>	<u>Total # of Diplomates</u>	<u># Male</u>	<u># Female</u>
1990	35	27 (77.1%)	8 (22.9%)
1992	39	30 (76.9%)	9 (23.1%)
4	49	43 (87.8%)	6 (12.2%)
1996	57	51 (89.5%)	6 (10.5%)
1998	63	56 (88.9%)	7 (11.1%)
2000	53	44 (83.0%)	9 (17.0%)
2002	60	47 (78.3%)	13 (21.7%)



Surgical Critical Care Cohort Groups by Gender 1986 - 1994

<u>Year</u>	<u>Total # of Diplomates</u>	<u># Male</u>	<u># Female</u>
1986	15	15 (100.0%)	0 (0.0%)
1987	81	77 (95.1%)	4 (4.9%)
1987	172	157 (91.3%)	15 (8.7%)
1988	108	95 (88.0%)	13 (12.0%)
1989	132	118 (89.4%)	14 (10.6%)
1990	166	148 (89.2%)	18 (10.8%)
1991	208	192 (92.3%)	16 (7.7%)
1992	193	171 (88.6%)	22 (11.4%)
1993	259	235 (90.7%)	24 (9.3%)
1994	79	64 (81.0%)	15 (19.0%)

Surgical Critical Care Cohort

Groups by Gender 1995 - 2001

<u>Year</u>	<u>Total # of Diplomates</u>	<u># Male</u>	<u># Female</u>
1995	77	63 (81.8%)	14 (18.2%)
1996	83	70 (84.3%)	13 (15.7%)
1997	74	64 (86.5%)	10 (13.5%)
1998	62	47 (75.8%)	15 (24.2%)
1999	73	61 (83.6%)	12 (16.4%)
2000	78	65 (83.3%)	13 (16.7%)
8	79	64 (81.0%)	15 (19.0%)



- **“You can let the women into the specialty of surgery, but if you do not let them lead, they will leave.”**

Haile Debas, M.D.

President, American Surgical Association 2002



Top 5 Reasons Surgery is Ready for Women in Charge

1. Future Oriented Department Chair

- Emotional Competence
- Develops others
- Able to build and lead a team
- Resilience
- Strong Communication Skills

Grigsby et al
Acad Med 2004;79:571-77



Core Values – Department of Surgery Johns Hopkins Medical Institutions_

- Integrity *
- Teamwork*
- Communication
- Trust*
- Respect*

* of the top 6 leadership
skills rated by Deans

Souba et al Acad Med 2006 81:20 - 26



2. “Lucy – I’m home!”

Ricky Ricardo

There are women in the pipeline to be available for leadership positions and women are needed in leadership positions to mentor those in the pipeline.... And so on....



3. Lessons Learned from Business

We have moved from the “clan” – (parent figure, loyalty #1, internal flexibility) to “the market” – (competitive marketplace, measurements of success). To do that we need a diverse leadership -

Schuck AJS 2002:18:345-348



4. The Daughter Theory_

There is nothing more powerful than powerful men surgeons raising brilliant and motivated daughters – who are out in the workplace – and experiencing the good, the bad and the ugly.

My professors look at me and understand my issues, my style and my talents because they look at their daughters and see the same.

Thank you to all the daughters in the world!



5. Diversity Can be Spoken Aloud

We now have retreats, mission statements, search committees and recognition of our diversity – can be gender, race, where one is born, where one went to school, height, weight, etc – even though we all have prejudices – by verbalizing them they become less critical for exclusion and more critical for inclusion.



5 Reasons Women are not ready to be in charge

1. Perception and reality that women surgeons remain single and childless as compared to men in surgery and other women in medicine. To get to the top, one has to give up too much personally.



2. Perception and reality
that women surgeons (other
women physicians as
well) get paid less. It is
better to “count your money
while sitting at the table.”



1. Perception and reality that women are

discriminated against and are harassed in surgery.

- To get to the top, you will have to put up with too much hostility (?clan)**
- There are not enough women in leadership positions.**



4. Perception and reality that the job is not ok – requirements to succeed are too demanding, the rules are wrong, the time spent is not rewarding and it is not “fun.”



5. Perception and reality that the Deans, Presidents and CEO's have not "bought in" – that they really don't want a woman in charge; but they have to.



Solutions_

- **Be flexible with job descriptions**
- **Pay them correctly**
- **Do not tolerate discrimination or harassment in the workplace.**
- **Change the job from the top**
- **Choose the boss... or better yet become the boss.**



We need to recognize that diversity – managing and leading across differences – is not an initiative or a program; it should be a competency that anyone who manages people must learn if he or she is to be an effective leader.



My Surgical Career

- **3 grade schools; 3 high schools**
- **U of Illinois 72-76 BS Biology**
- **Rush Medical School 76-80**
- **UCLA General Surgery 80-86**
- **UCLA Vascular Surgery 86-87**

My Surgical Career

- **UCSD 1987-89** **Asst Prof**
- **UCLA 1989-92** **Asst Prof**
- **Chief of Vascular Surgery** **GLAVA**

My Surgical Career

- **Med College of Wisconsin 1992-1998**
Associate Professor
- **Vice Chair Division of Vascular Surgery**
- **Chief of Surgery, Zablocki VA 1996-98**
- **Professor - 1996**

My Surgical Career

- **Chief, Division of Vascular Surgery
UCLA 1998-2003**
- **Chair, Johns Hopkins 2003**

Women in Medicine Careers

- Tend to be reactive not proactive
- No long term plan
- Day to day damage control
- Lack of thought to the BIG positions

Lessons Learned_

- Need a flexible pace
- Need to admit you're wrong
- Never can listen too much
- *Be yourself ASAP
- Keep your sense of humor
- Enjoy it along the way – (Wilson)
- 50% of the day is fine – (Stabile)
- Those complaining - that's your job - (Youkey)
- Keep your family in the loop
- Respond to crisis with your heart and mind – (Passaro)







IF YOU PRAY FOR RAIN,
BE PREPARED TO DEAL WITH
SOME MUD.