

PACIFIC COAST SURGICAL ASSOCIATION

*79th Annual Meeting*

*Scientific Program*

*Hotel Del Coronado*  *San Diego, CA*  *February 15–18, 2008*

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# Arrangements Committee

<i>President &amp; Spouse</i>	Bruce and Caroline Stabile
<i>Arrangements Chairpersons</i>	Frederic and Deborah Bongard
<i>Vice-President</i>	Christian de Virgilio
<i>Program Committee Chair</i>	Fred Weaver
<i>Industry Support/Fund Raising</i>	Stanley Klein
<i>Welcome/New Members' Dinner</i>	J. Craig Collins
<i>Tennis</i>	Timothy Canty
<i>Golf</i>	Robert Hye
<i>Spouse/Hospitality</i>	Caroline Stabile

# Program Committee

Fred A. Weaver, *Chairman (2009)*

Steven Stanten (2010)

James W. Holcroft (2010)

Robert S. Sawin (2009)

Geoffrey M. Stiles (2008)

Bruce Stabile (2008)

John Vetto (2010)

## *Officers*

<i>Bruce Stabile, President (2009)</i>	<i>Torrance, CA</i>
<i>Orlo Clark, President-Elect (2010)</i>	<i>San Francisco, CA</i>
<i>James Peck, President-Elect (2011)</i>	<i>Portland, OR</i>
<i>Christian de Virgilio, Vice-President (2008)</i>	<i>Torrance, CA</i>
<i>Roger Alberty, Historian (2007)</i>	<i>Portland, OR</i>
<i>Fred A. Weaver, Recorder (2009)</i>	<i>Los Angeles, CA</i>
<i>James W. Holcroft, Secretary-Treasurer (2010)</i>	<i>Sacramento, CA</i>

## *Council*

<i>President, Presidents-Elect, Vice-President, Historian, Recorder, Secretary-Treasurer</i>	
<i>Stephen N. Etheredge, Councilor (2009)</i> <i>Oakland, CA</i>	<i>Northern California</i>
<i>James B. Atkinson, Councilor (2008)</i> <i>Los Angeles, CA</i>	<i>Southern California</i>
<i>James Peck, Councilor (2007)</i> <i>Portland, OR</i>	<i>Oregon/Hawaii</i>
<i>Mika Sinanan, Councilor (2008)</i> <i>Seattle, WA</i>	<i>Washington/British Columbia/Alaska</i>
<i>Michael J. Hart, Immediate Past President (2008)</i>	<i>Seattle, WA</i>

## *Representatives*

<i>Quan-Yang Duh,</i> <i>San Francisco, CA</i> <i>(10/2008)</i>	<i>Board of Governors</i> <i>American College of Surgeons</i>
<i>William P. Schecter,</i> <i>San Francisco, CA</i> <i>(6/30/2010)</i>	<i>American Board of Surgery</i>
<i>Michael J. Hart,</i> <i>Seattle, WA</i> <i>(12/31/2008)</i>	<i>Advisory Council for General Surgery</i> <i>American College of Surgeons</i>

# *General Information*

## REGISTRATION

Registration is open to all PCSA members and invited guests of PCSA.

Member	\$615	Resident Fellow	\$425
Retired Member	\$490	Guest or Family Member	\$425
Guest Physician	\$685	(nonphysician)	

Additional tickets for the evening dinner functions may be purchased at cost if a member and spouse/guest registration has been purchased.

### **Welcome Reception/New Members' Dinner at SeaWorld:**

Adult, 13 and over	\$130
Child (6–12)	\$105
Child (5 and under)	\$0

**Golf Tournament** \$130

**Tennis Tournament** \$70

**President's Reception and Banquet for Additional Guest(s) or Family Members(s)** \$195

## REGISTRATION FEES INCLUDE:

### **Member and Retired Member**

- ▶ All scientific sessions and panels, President's Address, Residents' Forum, and E-Poster Presentations & Reception
- ▶ Industry Support Displays
- ▶ Welcome & New Members' Reception & Dinner, and President's Reception and Banquet
- ▶ All continental breakfasts and refreshment breaks
- ▶ Monday's Membership Business Meeting

### **Guest Physician and Resident Fellow**

- ▶ All scientific sessions and panels, President's Address, Residents' Forum, and E-Poster Presentations Reception
- ▶ Industry Support Displays
- ▶ Welcome & New Members' Reception & Dinner, and President's Reception and Banquet
- ▶ All continental breakfasts and refreshment breaks

### **Spouse or Guest**

- ▶ President's Address
- ▶ Welcome & New Members' Reception & Dinner, and President's Reception and Banquet
- ▶ All Continental Breakfasts and Industry Support Displays

# Program Information

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## OVERALL GOAL OF THE PROGRAM

The goal of the program is to provide an educational program for members of the PCSA. Members are academic and community surgeons from the western part of the United States and Canada. Attendees represent the leaders of their medical communities.

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## LEARNING OBJECTIVES

The objectives are to provide the attendees with up-to-date information regarding clinical practice and research in the field of surgery.

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## LEARNING OUTCOMES

This meeting will provide high-quality, up-to-date information in the fields of general surgery, trauma, oncologic surgery, vascular surgery, plastic surgery, cardiothoracic surgery, transplant surgery and surgical education. Attendees will learn, from leaders in their field, the most recent developments in the field of surgery. After each presentation, time will be provided for questioning of the speakers by the audience in order to clarify specific points of the presentation.

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## CME ACCREDITATION

The activity has been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint sponsorship of the American College of Surgeons and the Pacific Coast Surgical Association. The American College of Surgeons is accredited by the ACCME to provide continuing medical education for physicians.

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## CME CREDIT

The American College of Surgeons designates this educational activity for a maximum of 16 *AMA PRA Category 1 Credits*<sup>™</sup>. Physicians should only claim credit commensurate with the extent of their participation in the activity.

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## DISCLAIMER

Attendees voluntarily assume all risks involved in travel to and from the Annual Meeting and in attendance of and participation in the program. PCSA and ACS Association Management Services shall not be liable for any loss, injury, or damage to person or property resulting directly or indirectly from any acts of nature, acts of government or other authorities, civil disturbances, acts of terrorism, riots, thefts, or from any other similar causes.

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## DISCLOSURE

All individuals who are in a position to control the content of the educational activity must disclose all relevant financial relationships with any commercial interests. Therefore, we require that all planning committee members complete a disclosure form on an annual basis. Abstract submissions are also required to be accompanied by a signed disclosure form from all speakers.

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# Scientific Program

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## SCIENTIFIC PANEL

The Scientific Panel is a selected group of participants who will focus on a scientific topic that is determined by the PCSA Program Committee and chaired by a PCSA member expert.

**Saturday, February 16 1:30–2:30 pm**

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## E-POSTER SESSION

The e-poster presentations will be held in conjunction with a wine reception and presented as a group. Each presenter will give a 3-minute oral presentation of his or her poster followed by a 2-minute question-and-answer session. Poster presentations will include completed research, research in progress, and case reviews. Innovative surgical practices and techniques will also be presented.

**Saturday, February 16 4:20–6:00 pm**

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## PRESIDENT'S FORUM

This year's President's Forum "*The Future of Surgery in the Health Care Revolution*" will feature a panel of experts who will discuss issues facing practicing surgeons. The distinguished list of participants are Dr. Tom Russell, Executive Director of the American College of Surgeons, Dr. Bill Plested, President of the American Medical Association, Dr. Frank Lewis, Executive Director of the American Board of Surgery, and Dr. Haile Debas, Executive Director of Global Health Science and Dean Emeritus of the UCSF School of Medicine.

**Sunday, February 17 7:30–9:00 am**

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## RESIDENTS' FORUM

The top-scoring resident papers will be presented as a group during the scientific session. The presentation of each resident will be judged on clarity, focus, and the scientific relevance to surgical practice. Prizes will be presented at the President's Banquet.

**Sunday, February 17 9:00–10:30 am**

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# *Industry Support Displays*

A commercial display of scientific interest will be available during the Annual Meeting, providing an opportunity to view products and services from various corporations. Continental breakfasts and refreshment breaks will be served in the exhibit area. Please be sure to visit the exhibits daily to express your appreciation and for a chance to win prizes.

## **PCSA would like to thank the following companies for their support of our educational program:**

Aloka Ultrasound	Genomic Health, Inc.
AngioDynamics	Genzyme Biosurgery
Astra Zeneca	Gyrus ACMI
Bard Access Systems	MAST Biosurgery
B-K Medical Systems, Inc.	Prime Clinical Systems, Inc.
Covidien ( <i>formerly Autosuture</i> )	Surgical Principals
Cryolife	W. L. Gore & Associates
Cubist Pharmaceuticals	

*(Confirmed as of December 2007)*

# Evening Activities

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## WELCOME & NEW MEMBERS' RECEPTION & DINNER

*Friday, February 15, 2008, 7:00–10:00 pm*

### **SeaWorld**

**Reception 7:00–8:00 pm**

**Dinner 8:00–10:00 pm**

Meet motorcoach at 6:15 pm in front of the Hotel lobby.

Please join us in giving a warm welcome to our new members. Gather your family and enjoy a relaxing and memorable evening at SeaWorld, while socializing with new and old friends.

The reception will begin in the “Wild Arctic”, where you will begin your journey to the frozen wonderland. Half the fun is getting there. Guests will have the option to board a simulated jet helicopter for an exhilarating ride with real bumps, jumps, and thrills. Guests will disembark and find themselves at a realistic center for polar exploration. Enjoy cocktails and hors d'oeuvres while viewing polar bears, beluga whales, walruses, harbor seals, and penguins from both above and below the water. It's an expedition through an area of the world few have traversed before.

For dinner, guests will dine in the glass-enclosed Nautilus Pavilion, which will provide a beautiful view of Mission Bay. After dinner, you will have an opportunity to return to the “Wild Arctic” and the “Penguin Encounter” to continue your explorations.

**NOTE:** New members and their spouses will be wearing ribbons so they can be easily recognized.

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## PRESIDENT'S RECEPTION & BANQUET

*Sunday, February 17, 2008*

**President's Reception 6:30–7:00 pm**

**President's Banquet 7:00–10:00 pm**

Please join us this evening to honor our President Bruce Stabile and his wife, Caroline. Cocktails will be served in the Garden Patio at the Hotel Del Coronado.

The dinner will be in the elegant Ballroom with crystal chandeliers, tapestry draperies, and panoramic views of the Pacific Ocean. Dance the night away to the sounds of an energy-filled band!

**NOTE:** Preferred attire for the President's Reception and Banquet is black tie formal. Seating plans will be available at the Registration Desk for you to reserve your table.

# *Optional Activities*

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## GOLF TOURNAMENT

*Sunday, February 17, 2008*

Individual tee times start at 11:45 am

*\$130 per person includes green fees, shared cart, a box lunch with soda or bottled water, tees, ball markers, tournament scoring, and a chance to win prizes.*

The golf tournament will be held at the Coronado Municipal Golf Course.

This year's format for the tournament will be a foursome with seven tee times and scoring. Tee times and foursomes will be posted at the Registration Desk starting on Friday, February 15

Transportation will be provided to/from the Coronado Municipal Golf Course.

**TEAMS:** If you want to make up your own team, please include the information with your registration(s). No more than two people with handicaps under 10 on one team. Be sure to list your index/handicap on the registration form.

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## TENNIS TOURNAMENT

*Sunday, February 17, 2008*

Tournament starts at 2:30 pm

*\$70 per person includes court fee, balls, and tennis pro, afternoon refreshments, and a chance to win a great prize.*

Join us at the City of Coronado Tennis Pavilion, located 10 minutes from the Hotel Del Coronado, for a great tennis experience.

This round robin tournament will be held from 2:30 to 4:30 pm. Afternoon refreshments will be provided.

Transportation will be provided to/from the tennis tournament. Please meet the shuttle in front of the Hotel Del Coronado at 2:00 pm for a prompt departure.

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## KID'S STUFF & BABYSITTING SERVICES

We scouted out some great, fun things for you and your kids to do while in Coronado. For a listing of these kid-friendly activities, and recommendations on babysitting services, please visit the PCSA Web Site at [www.pcsaonline.org/2008\\_places.htm](http://www.pcsaonline.org/2008_places.htm) and [www.hotelchildcare.com](http://www.hotelchildcare.com).

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## SPA AND FITNESS CENTER AT THE HOTEL DEL CORONADO

The new state-of-the-art spa at The Del, located beachfront, includes 21 treatment rooms, hydrotherapy, relaxation areas for men and women, and steam rooms. Teen spa services are also available for 13 years and older. Guests can also unwind at the spa's expansive private terrace overlooking the magnificent Windsor Lawn and the Pacific Ocean. We recommend that you make your spa appointment early by calling the hotel directly at 619/522-8100. For more information on services offered, please visit the PCSA Web site at [www.pcsaonline.org/2008\\_places.htm](http://www.pcsaonline.org/2008_places.htm).

The brand new fitness center features state-of-the-art equipment and fitness classes that are designed to provide a daily infusion of energy. For a more structured workout, sign up for a personal training session. Adults 18 years and older are welcome. Minors ages 15 to 17 must be accompanied by an adult. Open daily, 6:00 am to 8:00 pm.

## *Optional Activities*

\*Advance registration is strongly recommended as all activities are subject to cancellation if minimum registration is not met. Availability of on-site tickets cannot be guaranteed.

\*Please note, refunds will not be given, for reasons such as inclement weather, once activity ticket has been purchased. If tour minimum has not been met, you will receive a refund.

\*Please bring an umbrella from home as the hotel does not provide them and they are not sold in the hotel gift shop.

\*ALL tours include round-trip motor coach transportation TO and FROM the Hotel Del, except where noted that transportation is not included.

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### WALKING TOUR OF HISTORIC CORONADO

What a wonderful way to become oriented to the charming community of Coronado and the Hotel Del Coronado! Guide Nancy Cobb has been welcoming visitors and sharing the fascinating history of The Del and the “island” of Coronado for 25 years. Her informative walking tour begins rightfully with The Del, and then on to see some of the 86 officially designated historic homes along the shore and other impressive 19th century buildings so integral to Coronado’s unique history. Tour will be given rain or shine. Comfortable clothing and shoes recommended.

**TIME:** Saturday, February 16, 9:15–11:00 am

**COST:** \$15 per person

**LOCATION:** Meet tour guide at 9:10 am in the main lobby of the Hotel Del

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### BALBOA PARK WALKING ARCHITECTURAL TOUR & LUNCH COOKING DEMONSTRATION AT BALBOA PARK FOOD & WINE SCHOOL

Discover the beauty and history of Balboa Park architecture with emphasis on the 1915 era with tour guide Anita Brown, board member of the nonprofit “Committee of 100” dedicated to the preservation of the beautiful architecture of Balboa Park. Tour lasts 45–75 minutes depending on the questions asked by participants.

Tour will be given rain or shine. Comfortable clothing and shoes are recommended.

Lunch will be prepared by an expert chef in the Culinary Kitchen, on the second floor of House of Hospitality above The Prado restaurant. For a simply delicious, unique, *and* entertaining, multicourse dining experience, the Culinary Kitchen is home to chefs who know how to make the art of cooking entertaining! In a private, informal setting surrounding the chef, participants can relax, savor each course, watch, and ask questions.

Participants will be given recipe packets for the various dishes to take home.

**TIME:** Saturday, February 16, 9:30 am–5:00 pm

**TOTAL COST:** \$140 per person (Museum entrance fees not included)

**NOTE:** Participation is limited to 16 guests due to size of the Culinary Kitchen

**LOCATION:** Meet the motor coach in the main lobby of Hotel Del at 9:15 am.

Participants meet at 11:45 am on second floor of House of Hospitality for the cooking demonstration, which will run from 12 noon–2:00 pm.

After lunch, participants will have time to explore the shops and museums of Balboa Park before meeting the motor coach at 4:30 pm. The motor coach is expected to arrive back at the Hotel Del at 5:00 pm.

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#### DINNER COOKING DEMONSTRATION AT BALBOA PARK FOOD AND WINE SCHOOL

Dinner will be prepared in the Culinary Kitchen, second floor of House of Hospitality, above The Prado restaurant. For a simply delicious, unique, and entertaining, multicourse dining experience, observe expert Chef Susan McCabe, voted “Best Personal Chef in 2006” by San Diego Magazine, in the Culinary Kitchen, home to chefs who know how to make the art of cooking entertaining! In a private, informal setting surrounding the chef, participants can relax, savor each course, watch, and ask questions. Chef McCabe calls her dinner “Urban Dining”; the cooking school calls it simply delicious! Participants will be given recipe packets for the various dishes to take home.

**TIME:** Saturday, February 16, 4:30–8:00 pm

**TOTAL COST:** \$145 per person

**NOTE:** Participation for this tour is limited to 16 guests due to the size of the Culinary Kitchen.

**LOCATION:** Motor coach departs Hotel Del at 4:30 pm for 5:10 pm arrival at House of Hospitality. Cooking demonstration runs 5:30–7:30 pm.

Motor coach will return to Hotel Del at 8:00 pm.

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#### BIKING THE STRAND, CORONADO WITH FRAN O’CONNELL

Join cycling enthusiast Fran O’Connell for a bracing ride down Coronado’s famed Silver Strand. The long slender isthmus connecting the “island” of Coronado with San Diego proper is suitable for bicyclists of all abilities. For those individuals who would rather bike for a shorter period of time, you can simply reverse at any point and head back to the hotel.

**TIME:** Sunday, February 17, 9:00–11:00 am

**COST:** Individual bike rental—pay on own at rental shop (Cruiser—\$10 per hour)

**LOCATION:** Meet at the Hotel Del bicycle rental shop. Shop opens at 9:00 am. Helmets are included at no additional cost.

Tour to begin when all participants have their bikes.

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## SAN DIEGO ZOO

The Zoo is a world-class facility occupying 100 acres in the heart of Balboa Park. Giant pandas on loan from the People's Republic of China, including the newly born baby panda, the 35-minute double-decker bus tour, and Skyfari aerial tram are highlights!

**TIME:** Sunday, February 17, 12:30–4:30 pm

**TOTAL COST:** \$60/adult and \$45/child. Ticket includes the entrance fee, double-decker bus tours and aerial tram.

**LOCATION:** Motor coach will depart Hotel Del at 12:30 pm and will depart Balboa Park at 4:00 pm.

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## BALBOA PARK MUSEUM EXPLORATION AND GUIDED TOUR

Discover the beauty and history of Balboa Park architecture with emphasis on the 1915 era with tour guide Anita Brown, board member of the nonprofit “Committee of 100”, dedicated to the preservation of the beautiful architecture of Balboa Park. Tour lasts 45–75 minutes depending on the questions asked by participants.

Tour will be given rain or shine. Comfortable clothing and shoes are recommended.

**TIME:** Sunday, February 17, 12:30–4:30 pm

**GUIDED TOUR TIME:** 1:00–2:00 pm

**TOTAL COST:** \$30/adult and \$16/child.

Museum entrance fees not included.

**LOCATION:** Motor coach will depart Hotel Del at 12:30 pm and will depart Balboa Park at 4:00 pm.

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## SEAWORLD TICKETS (ROUND-TRIP MOTOR COACH TRANSPORTATION NOT PROVIDED.)

One-day pass valid February 8–25, 2008, for PCSA attendees only. Regular price is \$57, but the negotiated price for PCSA is \$38 per person.

# Program Agenda

*Subject to Change*

## THURSDAY, FEBRUARY 14, 2008

Council Reception ( <i>by invitation only</i> )	6:00–7:00 pm	Windsor Patio
Council Dinner ( <i>by invitation only</i> )	7:00–9:00 pm	Windsor Complex

## FRIDAY, FEBRUARY 15, 2008

Finance Committee Meeting ( <i>by invitation only</i> )	7:00–8:00 am	Windsor Complex
Council Breakfast ( <i>by invitation only</i> )	8:00 am	Windsor Complex
Council Meeting ( <i>by invitation only</i> )	8:30 am–3:00 pm	Windsor Complex
Council Photo ( <i>by invitation only</i> )	11:55 am–12:05 pm	TBD
Council Lunch ( <i>by invitation only</i> )	12:05–1:00 pm	Windsor Complex
Registration	1:00–7:00 pm	Grande Hall Foyer
Hospitality Desk	1:00–4:00 pm	Grande Hall Foyer
Speaker Ready Room	1:00–6:00 pm	Edison J
New Members' Private Reception ( <i>by invitation only</i> )	5:00–6:00 pm	Coronet
Welcome Reception/New Members' Dinner at SeaWorld	7:00–10:00 pm	SeaWorld

*Please meet the motorcoach outside of the front lobby entrance at 6:15 pm. We are planning on a 6:30 pm departure to SeaWorld.*



SATURDAY, FEBRUARY 16, 2008

Continental Breakfast	7:00–9:00 am	Viceroy
Industry Support Displays	7:00 am–6:00 pm	Viceroy
Registration	7:00 am–5:00 pm	Grande Hall Foyer
Speaker Ready Room	7:00 am–5:00 pm	Edison J
Hospitality Desk	8:00 am–4:00 pm	Grande Hall Foyer
President's Address	8:00–8:45 am	Empress/Regent
Introduction of New Members	8:45–9:00 am	Empress/Regent
Scientific Session I	9:00–10:20 am	Empress/Regent
<b>Optional Activity</b> Walking Tour of Historic Coronado ( <i>ticket required</i> )	9:15–11:00 am	
<b>Optional Activity</b> Balboa Park Walking Architectural Tour & Lunch Cooking Demonstration at Balboa Park Food & Wine School ( <i>ticket required</i> )	9:30 am–5:00 pm	
Morning Break/Industry Support Displays	10:20–10:40 am	Viceroy
Scientific Session II	10:40 am–12:00 noon	Empress/Regent
Industry Support Appreciation Lunch ( <i>invitation only</i> )	12:15–1:30 pm	TBD
Lunch at leisure	12:15–1:30 pm	Individual On Own
Scientific Session III	1:30–2:30 pm	Empress/Regent
Scientific Panel IV: <i>Surgical Education: An Evolving Paradigm</i>	2:30–4:00 pm	Empress/Regent
E-Poster Sessions A & B and Industry Support Displays	4:20–6:00 pm	Viceroy
<b>Optional Activity</b> Dinner Cooking Demonstration ( <i>ticket required</i> )	4:30–8:00 pm	
Dinner at leisure		

SUNDAY, FEBRUARY 17, 2008

Speaker Ready Room	6:45 am–12:00 noon	Edison J
Continental Breakfast	6:45–9:00 am	Viceroy
Industry Support Displays	6:45–10:45 am	Viceroy
Registration	7:00 am–12:00 noon	Grande Hall Foyer
President's Forum: <i>The Future of Surgery in the Health Care Revolution</i>	7:30–9:00 am	Empress/Regent
Hospitality Desk	8:00 am–12:00 noon	Grande Hall Foyer
Scientific Session V—Residents' Forum	9:00–10:30 am	Empress/Regent
<b>Optional Activity</b> Biking the Strand	9:00–11:00 am	
Morning Break/ Industry Support Displays	10:30–10:50 am	Viceroy
Historical Vignette: <i>Frankenstein—The Modern Prometheus</i>	10:50–11:10 am	Empress/Regent
Scientific Session VI	11:10 am–12:30 pm	Empress/Regent
Golf Tournament	11:45 am <i>individual tee offs</i>	Coronado Municipal Golf Course
<b>Optional Activity</b> San Diego Zoo ( <i>ticket required</i> )	12:30–4:30 pm	
<b>Optional Activity</b> Balboa Park Walking Tour ( <i>ticket required</i> )	12:30–4:30 pm	
Tennis Tournament	2:30–4:30 pm	Coronado Tennis Center
President's Reception	6:30–7:00 pm	Garden Patio
President's Banquet	7:00–10:00 pm	Ballroom

MONDAY, FEBRUARY 18, 2008

Continental Breakfast	7:00–9:00 am	Viceroy
Industry Support Displays	7:00–10:30 am	Viceroy
Registration	7:00 am–12:00 noon	Grande Hall Foyer
Hospitality Desk	7:00 am–12:00 noon	Grande Hall Foyer
Speaker Ready Room	7:00 am–12:00 noon	Edison J
Scientific Session VII	8:00–9:40 am	Empress/Regent
Morning Break	9:40–10:00 am	Viceroy
Scientific Session VIII	10:00–11:30 am	Empress/Regent
Membership Business Meeting ( <i>members only</i> )	11:30 am–12:00 noon	Empress/Regent
Meeting Adjourns	12:00 noon	

# Scientific Session Agenda

SATURDAY, FEBRUARY 16, 2008

<b>8:00–8:45 AM</b>		<b>President's Address</b>
"The Surgeon: A Changing Profile," Bruce Stabile Introduced by Vice-President Christian de Virgilo		
<b>8:45–9:00 AM</b>		<b>Introduction of New Members</b>
<b>9:00–10:20 AM</b>		<b>Scientific Session 1</b>
<b>1</b>	Risk Factors for Recurrence After Repair of Enterocutaneous Fistula	
<b>2</b>	Death After Colectomy: It's Later Than We Think	
<b>3</b>	Are Laparoscopic-Assisted Colectomy Outcomes in the General Population as Good as in the COST Trial? Analysis of 11,038 Patients	
<b>10:20–10:40 AM</b>		<b>Break</b>
<b>10:40 AM–12:00 NOON</b>		<b>Scientific Session 2</b>
<b>4</b>	Combination of Microsatellite Instability and Lymphocytic Infiltrate as a Prognostic Indicator in Colon Cancer	
<b>5</b>	Primary Colorectal Tumor Characteristics as Predictors of Occult Nodal Metastasis in a Prospective Multicenter Trial	
<b>6</b>	Better Surgery or Better Staging: Quantitating the Impact of Stage Migration on Outcome in Node-Negative Colorectal Cancer	
<b>7</b>	Biomarkers of Adrenocortical Carcinoma by Gene Expression Profiling	
<b>1:30–2:30 PM</b>		<b>Scientific Session 3</b>
<b>8</b>	Are Octogenarians at High Risk for Carotid Endarterectomy?	
<b>9</b>	The Effects of Clopidogrel on Traumatic Brain-Injured Patients	
<b>2:30–4:00 PM</b>		<b>Scientific Session 4</b>
<b>Panel/Surgical Education: An Evolving Paradigm</b>		
<b>Moderator: Karen Deveney</b>		
<b>10</b>	Decreased Bile Duct Injury Rate During Laparoscopic Cholecystectomy in the 80-Hour Resident Workweek Era	
<b>11</b>	360-Degree Evaluation of Preclerkship Medical Students in the Operating Room	
<b>12</b>	Effective Laboratory-Based Instruction of Skin Closure and Hand-Sewn Bowel Anastomosis for Junior Surgical Residents	
<b>13</b>	Surgical Training and Global Health: Results of a Four-Year Partnership With a Surgical Training Program in a Low-Income Country	

## Session A

## Trauma/Vascular/General Surgery

Moderator: Geoffrey Stiles

<b>1A</b>	Initial Experience With the Laparoscopic Staged Roux-en-Y Gastric Bypass for the Treatment of Super-Super Obesity
<b>2A</b>	The Use of a Spring-Loaded Silo for the Treatment of Infants with Gastroschisis
<b>3A</b>	Does Insurance Status Matter at a Public Level 1 Trauma Center?
<b>4A</b>	Does Overnight Birth Time Influence Surgical Management or Outcome in Neonates with Gastroschisis?
<b>5A</b>	Deep Venous Thrombosis and Pulmonary Embolism in 1,098 Liver Transplant Recipients: A Single-Center Experience
<b>6A</b>	Portal and Mesenteric Vein Thrombosis After Laparoscopic Surgery
<b>7A</b>	Stoma Closure and Wound Infection Rates: Does the Method of Closure Matter?
<b>8A</b>	Safety and Accuracy of Laparoscopy in Trauma: Results From a National Database
<b>9A</b>	Predicting Strangulated Small-Bowel Obstruction: An Old Problem Revisited
<b>10A</b>	Efficiency and Value of a Surgical Hospitalist Program

## Session B

## Oncology/Teaching/Education

Moderator: John Vetto

<b>1B</b>	The Microstaging of Sentinel Lymph Node Biopsies Is Not Clearly Associated With Overall Survival or Recurrence-Free Survival in Breast Cancer
<b>2B</b>	Cystic Neoplasms of the Pancreas: Results of 123 Cases
<b>3B</b>	Increasing Death Rates in Cholangiocarcinoma: Can Surgery Change the Trend?
<b>4B</b>	Is Screening for Hepatocellular Cancer Necessary?
<b>5B</b>	Frequency Changes of Stem/Progenitor Cell Markers Between Normal and Malignant Human Breast Cells
<b>6B</b>	Benefit of Adjuvant Treatment in Patients Undergoing Surgery for Pancreatic Cancer
<b>7B</b>	Primary Tumor Characteristics Are Associated With Surgical Outcomes After Hepatectomy for Colorectal Cancer Metastases
<b>8B</b>	Clinical Utility of Breast-Specific Gamma Imaging for Evaluating Disease Extent in the Newly Diagnosed Breast Cancer Patient
<b>9B</b>	Jaundice and High-Grade Dysplasia Predict Malignancy in Ampullary Tumors: A Multivariate Analysis
<b>10B</b>	Implementation of a Preoperative Briefing Protocol Improves Operating Room Teamwork at a Rural Community Hospital

SUNDAY, FEBRUARY 17, 2008

7:30–9:45 AM

**President’s Forum**  
**“The Future of Surgery in the Health Care Revolution”**

7:30–7:45 am

*Moderator:* Thomas Russell, Executive Director, American College of Surgeons  
 “Health Care Reform: The Role of the American College of Surgeons”

7:45–8:00 am

William G. Plested III, President, American Medical Association  
 “What Surgeons Deserve and What They Can Expect From the Revolution in Health Care Financing”

8:00–8:15 am

Frank R. Lewis, Jr., Executive Director, American Board of Surgery  
 “Maintenance of Certification: Evolving Approaches to the Assessment of Surgical Competence”

8:15–8:30 am

Haile Debas, Executive Director, Global Health Science, and Dean Emeritus, UCSF School of Medicine  
 “New Approaches to Surgical Education from the Global Perspective”

*PCSA gratefully acknowledges Covidien for its support of this program*

9:00–10:30 AM

**Scientific Session 5 (Residents’ Forum)**

- |           |  |
|-----------|--|
| <b>14</b> | Tumor Markers (ER/PR/HER2) as Predictors of the Response to Neoadjuvant Chemotherapy in Breast Cancer  |
| <b>15</b> | Hemolysis: An Achilles Heel of Intraoperative Parathyroid Hormone (IOPH) Measurement?  |
| <b>16</b> | Definitive Risk Factors for Anastomotic Leak in Open Elective Colon Resection  |
| <b>17</b> | The Use of Leukoreduced Blood Does Not Reduce Infection, Organ Failure, or Mortality Following Trauma<br><br><i>PCSA gratefully acknowledges W.L. Gore for its support of this program</i> |

10:30–10:50 AM

**Break**

10:50–11:10 AM

**Historical Vignette: “Frankenstein: The Modern Prometheus,” by Roger Albery**

11:10 AM–12:30 PM

**Scientific Session 6**

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|-----------|--|
| <b>18</b> | Villous Adenoma of the Rectum: Treatment Strategies and Outcomes From a Single Center Experience |
| <b>19</b> | Long-Term Outcomes Following Pediatric Nissen Fundoplication                                     |
| <b>20</b> | Race and Insurance Status as Risk Factors for Trauma Mortality: Not All Black and White          |

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**MONDAY, FEBRUARY 18, 2008**

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**8:00–9:40 AM****Scientific Session 7**

<b>21</b>	Factors Associated to Weight Loss After Gastric Bypass
<b>22</b>	The Extreme Aggressiveness and Lethality of Gastric Adenocarcinoma in the Very Young
<b>23</b>	Thoracoscopic Repair of Congenital Diaphragmatic Hernia in Infancy
<b>24</b>	The “Critical View of Safety” Is Superior to Intraoperative Cholangiography for Prevention of Common Bile Duct Injury

**9:40–10:00 AM****Break****10:00–11:30 AM****Scientific Session 8**

<b>25</b>	Use of Microbial Sealant Significantly Reduces Incidence of Wound Contamination With Skin Flora
<b>26</b>	The Importance of Sentinel Lymph Node Biopsy in Patients With Thin Cutaneous Melanoma
<b>27</b>	Planned Early Discharge—Elective Surgical Readmit Pathway for Patients With Gallstone Pancreatitis

**11:30 AM–12 NOON****Member’s Business Meeting****CONCLUSION OF MEETING**

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**NOTICE ABOUT PRESENTATIONS**

Because of the length of the program, authors are allowed 10 minutes for their presentation, reserving the complete paper for publication. Three minutes are allowed for the primary discussant and three minutes for each subsequent discussant. Authors are required to submit manuscripts online prior to the annual meeting at <http://manuscripts.archsurg.com>. For guidelines on how to submit, visit [http://archsurg.ama-assn.org/jfora\\_current.dtl](http://archsurg.ama-assn.org/jfora_current.dtl).



## Risk Factors for Recurrence After Repair of Enterocutaneous Fistula

### AUTHORS:

Megan Brenner, MD  
John L. Clayton, MD, PhD  
Areti Tillou, MD  
Jonathan R. Hiatt, MD  
H. Gill Cryer, MD, PhD

### PRESENTER:

Megan Brenner, MD

### PRIMARY DISCUSSANT:

William Schecter, MD

### INSTITUTION:

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### DISCUSSION CLOSED BY:

H. Gill Cryer, MD

*Objective:* To assess outcomes after repair of enterocutaneous fistulas (ECFs) and identify factors that predict recurrence.

*Design:* Retrospective cohort study.

*Setting:* Academic medical center.

*Patients:* 135 patients undergoing ECF repair between 1989 and 2005.

*Interventions:* Techniques of ECF repair included resection and hand-sewn anastomosis in 91 patients, resection with stapled anastomosis in 26, and simple oversew in 18.

*Results:* For 135 patients undergoing ECF repair, mortality was 9%. Postoperative complications included ECF recurrence in 18% of patients and other complications in 33%. Factors that did not correlate with ECF recurrence included preoperative comorbidities (cancer in 24%, inflammatory bowel disease in 23%, and radiation in 6%); other common preoperative risk factors ( $\geq 3$  prior abdominal operations in 65%, referral from an outside institution in 52%, prolonged TPN dependence in 74%, albumin level  $<3$  g/dL in 56%, interval between diagnosis and operation  $<12$  weeks in 25%, and need for emergency operation in 10%); and operative factors (volume of blood replacement, duration of operation, and pathology in the resected fistula). Operative technique did correlate with recurrence, which occurred in 31% of patients with resection and stapled anastomosis, 22% with simple oversew, and 9% with resection and hand-sewn anastomoses ( $P < .05$ ). In multivariate analyses, after adjusting for age, preoperative albumin level, interval from diagnosis to operation, and chronic preoperative TPN, recurrence was 3.7 times more likely with stapled than with hand-sewn anastomosis (95% confidence interval, 1.1–14.3). Also, the mean interval between diagnosis and definitive operation was 44 weeks for patients with recurrence and 22 weeks for patients without recurrence ( $P < .05$ ).

*Conclusions:* Many patients undergoing ECF repair are at high risk for postoperative complications, but no specific preoperative risk factors or comorbidities were significantly associated with fistula recurrence. Few studies have focused on the operative predictors of recurrence, and our series suggests that patients with stapled anastomoses following resection are more likely to have recurrence, after adjusting for pertinent risk factors and comorbidities. In addition, patients with a greater mean interval between diagnosis and operation were more likely to have recurrence.

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**NOTES:**

## Death After Colectomy: It's Later Than We Think

**AUTHORS:**

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Hugh Keegan, BS  
Molinda Martin, BSN, RN  
Sherry M. Wren, MD

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**PRESENTER:**

Brendan Visser, MD

**PRIMARY DISCUSSANT:**

Thomas Russell, MD

**DISCUSSION CLOSED BY:**

Sherry Wren, MD

*Background:* Clinical outcomes are now, more than ever, subject to objective assessment and professional accountability. Informed consent relies on accurate estimation of operative risk. Current models and scoring systems for assessment of operative mortality after colorectal surgery (CRS) almost uniformly report 30-day mortality.

*Objectives:* Assess timing of mortality after emergency and elective CRS.

*Hypothesis:* Thirty-day mortality significantly underreports death following CRS.

*Design:* Prospective cohort.

*Setting:* University-affiliated Veterans Affairs Medical Center.

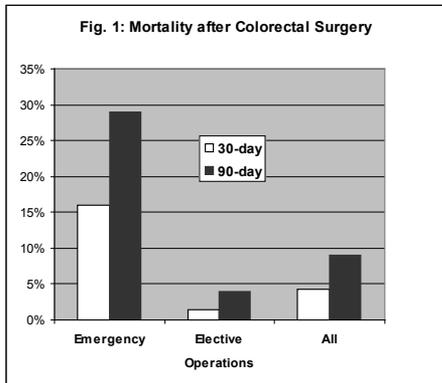
*Patients:* All patients undergoing resections of colon and/or rectum from January 2000–December 2006 in our facility's National Surgical Quality Improvement Program (NSQIP) database, a prospective sampling of approximately 50% of all operations performed.

*Methods:* Predicted risk-adjusted mortality was compared with observed mortality.

*Main Outcome Measures:* All-cause mortality at 30 and 90 days.

*Results:* The sample cohort included 186 patients who underwent CRS, including 148 (80%) elective and 38 (20%) emergency cases. All but 8 patients were men, with a median age of 66 years (range, 26–92 years). Of the operations, 24% were laparoscopic and 76% open. The majority (60%) were performed for neoplasms.

The actual 30-day mortalities for all, elective, and emergency cases were 4.3%, 1.4%, and 16%, respectively. These closely mirrored the calculated VA-NSQIP risk-adjusted O/E ratio for 30-day mortality (4.8%, 1.8%, and 18%). However, mortality at 90 days jumped dramatically to 9.1%, 4.1%, and 29% (Figure 1).



*Conclusion:* Thirty-day mortality significantly underreports the true risk of death following CRS. Ninety-day mortality should be included as a standard outcome measure following CRS and serves as a better estimation of risk for counseling patients.

NOTES:

## Are Laparoscopic-Assisted Colectomy Outcomes in the General Population as Good as in the COST Trial? Analysis of 11,038 Patients

**AUTHORS:**

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**DISCUSSION CLOSED BY:**

Thomas Russell, MD

*Background:* The COST prospective, randomized, controlled trial demonstrated that laparoscopic-assisted colectomy (LAC) outcomes are comparable to those of open colectomy (OC) when performed by experts; however, LAC has not been examined at the national level outside of clinical trials.

*Objectives:* To compare outcomes of LAC in the population with the COST trial.

*Methods:* The National Cancer Data Base (NCDB) receives data on approximately 70% of all new cancers in the United States annually. Patients were identified who underwent LAC and OC for nonmetastatic colon cancer, 1998–2002, to ensure 5-year follow-up.

*Results:* From the NCDB, 11,038 patients were identified who underwent LAC at 1,125 hospitals (only 7% performed  $\geq 6$  cases per year). LAC utilization increased from 3.8% in 1998 to 5.2% in 2002 ( $P < .0001$ ). Patients were significantly more likely to undergo LAC if they were younger than 75 years, had private insurance, lived in Mountain/Pacific census regions, had stage I or sigmoid cancers, or were treated at NCCN/NCI hospitals.

Age and stage distributions were similar between the NCDB population and COST. Patients undergoing LAC in the population had fewer lymph nodes examined compared with COST (median, 10 vs 12). Perioperative mortality was higher in the population compared with COST (3.7% vs 0.5%). Compared with the COST trial, the NCDB population had similar recurrence (16.0% vs 17.6%) but lower stage-specific survival rates for stages I, II, and III.

*Conclusion:* In this study of 1,125 hospitals performing LAC, the number of nodes resected, perioperative mortality, and long-term survival seem to be worse in the population than in the COST trial.

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**NOTES:**

## Combination of Microsatellite Instability and Lymphocytic Infiltrate as a Prognostic Indicator in Colon Cancer

**AUTHORS:**

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 Paul B. Dorsey, MS  
 Joseph Frankhouse, MD  
 Randy Lee, MD  
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 William Johnson, MD  
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Eugene Chang, MD

**PRIMARY DISCUSSANT:**

Howard Silberman, MD

**DISCUSSION CLOSED BY:**

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**INSTITUTION:**

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*Background:* Microsatellite instability (MSI) is a genetic aberration associated with less aggressive tumor biology. Some tumors with MSI also have lymphocytic infiltrate (LI), which suggests a heightened immune response against the tumor.

*Objectives:* To evaluate the combined prognostic significance of MSI and LI in colon cancer.

*Hypothesis:* Tumors with MSI and LI are associated with a more favorable prognosis.

*Design:* Prospective analysis.

*Setting:* Community hospital system.

*Patients or Participants:* Patients undergoing definitive operation for colon cancer.

*Methods:* Tumors were evaluated for MSI according to 11 satellite markers and classified as MSI+ if 2 or more satellite markers displayed instability. Tumors were classified as LI+ if at least 5 lymphocytes were observed per 10 high-power fields. Overall survival and disease-free survival (DFS) were compared according to combined MSI and LI status.

*Main Outcome Measures:* Survival.

*Results:* MSI and LI status were available for 150 patients who were classified as follows: 95 were MSI-/LI-, 9 were MSI-/LI+, 30 were MSI+/LI-, and 16 were MSI+/LI+. Median follow-up was 37.9 months. The 3-year DFS was 59.7% for patients with MSI-/LI- tumors and 100% for MSI+/LI+ ( $P = .014$ ). Patients with MSI+/LI- and MSI-/LI+ tumors had intermediate survivals, with rates of 74.2% and 75.0%, respectively.

*Conclusion:* Colon cancer patients with MSI-/LI- tumors have a worse DFS regardless of stage at diagnosis. Patients exhibiting both MSI + and LI+ tumors have superior DFS. MSI and LI show promise as combined prognostic markers and may prove useful in selecting patients for adjunctive therapy.

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**NOTES:**

## Primary Colorectal Tumor Characteristics as Predictors of Occult Nodal Metastasis in a Prospective Multicenter Trial

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**PRIMARY DISCUSSANT:**  
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**DISCUSSION CLOSED BY:**  
 Anton Bilchik, MD

**INSTITUTION:**

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*Background:* The clinical significance and the relationship between primary colorectal cancer (CRC) and occult nodal metastases (OM) detected by cytokeratin immunohistochemistry (CK-IHC) is unknown.

*Objectives:* To evaluate the correlation of pathologic variables of primary CRC with OM.

*Design:* Prospective multicenter trial of sentinel lymph node mapping in CRC between March 2001 and August 2006.

*Setting:* 5 tertiary referral cancer centers.

*Participants:* 141 patients with colorectal cancer.

*Methods:* Standard pathologic analysis on resected CRC specimens (hematoxylin-eosin [H&E]). CK-IHC was performed on H&E-negative nodes.

*Main Outcome Measures:* Correlation of primary tumor characteristics with OM.

*Results:* OM were detected in 29 (24%) of 120 patients with negative nodes by conventional H&E staining. OM correlated with lymphovascular invasion (LVI), tumor size and depth of penetration (T3/T4) in the primary tumor (Table 1). At a mean follow up of 35 months, 15 (11%) 140 patients had a recurrence, 5 of whom had occult metastases identified by IHC.





## Better Surgery or Better Staging: Quantitating the Impact of Stage Migration on Outcome in Node-Negative Colorectal Cancer

**AUTHORS:**

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**PRESENTER:**

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**PRIMARY DISCUSSANT:**

Karen Deveney, MD

**DISCUSSION CLOSED BY:**

Jan Wong, MD

*Background:* The number of nodes retrieved and lymph node status are powerful predictors of survival in colorectal cancer (CRC). Whether this is due to improved staging, improved surgery, or a combination of the two is unclear.

*Objectives:* We sought to quantitate the impact of stage migration in N0 CRC.

*Hypothesis:* The improved survival in N0 CRC patients with increased number of nodes is due to improved identification of node-positive patients.

*Design:* Case series.

*Patients or Participants:* Patients diagnosed with CRC in Region 5 of the California Cancer Registry (CCR).

*Methods:* Number of nodes examined, node-positive rate, and disease-specific survival.

*Main Outcome Measures:* Survival by Kaplan-Meier with significance assessed by log-rank tests. Mann-Whitney *U* was used where appropriate.

*Results:* Between January 1994 and December 2003, 13,277 patients with CRC were diagnosed in Region 5 of the CCR. Patients with in situ disease and M1 disease due to the possibility of incomplete node dissections being performed and patients in whom the number of nodes was not obtained at diagnosis were excluded from analysis. Therefore, 8,567 patients represent the study population. Fifty-two percent were men. Patients ranged in age from 18 to 103 years (mean, 70.1 years). The mean number of nodes examined was 9.3 (range, 0–89). The most common primary sites were the right colon (33.4%) and rectosigmoid colon (31.9%). The actuarial 5-year disease-specific survival (DSS) was 84.5% for N0, 65.2% for N1, and

46.8% for N2 disease. The actuarial 5-year DSS difference for patients who had more than 12 nodes retrieved was 87.3% (95% confidence interval [CI], 85.2%–89.3%) and for patients with 0 to 3 nodes retrieved, 83.7% (95% CI, 80.6%–86.82%;  $P = .0009$ ). As the number of nodes retrieved increased, the risk of understaging patients decreased. For 0 to 3 nodes, 78.3% of patients were N0; for 4 to 7 nodes, 67.6%; for 8 or 9 nodes, 62.1%; for 10 to 12 nodes, 59.5%; and only 57.2% for more than 12 nodes examined. By using more than 12 nodes as the definition of an adequate lymphadenectomy, approximately 50% (42.8% vs 21.7%) of patients who are truly node-positive would have been understaged if only 0 to 3 nodes were retrieved (20% of the entire 0–3 population). Assuming an actuarial outcome for understaged patients to be similar to N1 disease (65.2%), apparently N0 patients with 0 to 3 nodes retrieved would have DSS impacted by approximately 5%.

*Conclusion:* Stage migration alone can explain the entire DSS difference between patients with more than 12 nodes retrieved and patients with only 0 to 3 nodes retrieved. These data support the indicator hypothesis rather than the governor hypothesis of regional nodes in CRC.

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**NOTES:**

## Biomarkers of Adrenocortical Carcinoma by Gene Expression Profiling

### AUTHORS:

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### PRESENTER:

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### PRIMARY DISCUSSANT:

Michael Bouvet, MD

### DISCUSSION CLOSED BY:

Electron Kebebew, MD

*Background:* Distinguishing benign from malignant adrenocortical tumors is not possible, and many patients with an adrenal incidentaloma are subjected to adrenalectomy based on tumor size.

*Objectives:* To identify biomarkers of malignant adrenocortical tumors.

*Hypothesis:* The gene expression profile between benign and malignant adrenocortical tumors is different.

*Design:* Genome-wide gene expression profiling in 91 adrenocortical tumors (11 malignant/80 benign).

*Methods:* Criteria for differentially expressed genes between benign and malignant adrenocortical tumors were as follows: (1) false-discovery rate of less than 5% and (2) adjusted  $P$  value of less than .01. Genes differentially expressed by 8-fold higher or lower were validated by quantitative polymerase chain reaction (PCR).

*Main Outcome Measures:* Diagnostic accuracy of differentially expressed genes as determined by the area under the receiver operating characteristic curve (AUC), sensitivity, specificity, and positive and negative predictive values.

*Results:* We found 38 genes differentially expressed by 8-fold higher or lower. Thirteen genes were down-regulated  $P$  and 25 genes were up-regulated in adrenocortical carcinoma. Of the 38 genes, 31 were validated to be differentially expressed by PCR ( $P \geq .014$ ). Of the 38 genes, 7 had an AUC of more than 0.80, indicating high diagnostic accuracy for distinguishing benign from malignant adrenocortical tumors. The combination of these 7 genes as a marker for adrenocortical carcinoma had a sensitivity of 91%, specificity of 99%, positive predictive value of 91%, and negative predictive value of 99%.

*Conclusions:* We have identified 38 genes that are dysregulated in adrenocortical carcinoma, and 7 of the differentially expressed genes have excellent diagnostic accuracy for distinguishing benign from malignant adrenocortical tumors.



**NOTES:**



## Are Octogenarians at High Risk for Carotid Endarterectomy?

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**PRIMARY DISCUSSANT:**  
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**DISCUSSION CLOSED BY:**  
Steven Katz, MD

*Background:* Several prospective randomized trials have proven carotid endarterectomy (CEA) to be safe and effective for symptomatic and asymptomatic patients younger than 80 years. Recently, carotid artery stenting (CAS) has been approved for use in selected high-risk patients. It has been proposed that being an octogenarian places patients in this high-risk category.

*Hypothesis:* Octogenarians are not at high risk for CEA.

*Design:* Retrospective chart review.

*Setting:* 600-bed community hospital.

*Patients and Methods:* All patients between the ages of 80 and 89 years undergoing CEA during a 12-year period were included in the study. Information included indications for CEA, associated risk factors, length of stay, and hospital course. Perioperative morbidity and mortality, including neurologic events and myocardial infarction, were recorded. Operations were performed under general endotracheal anesthesia. Intraoperative shunting was routinely used, and a Dacron patch was used to close all arteriotomies. Patients were observed postoperatively for 6 hours in the postanesthesia care unit and then admitted to a monitored bed on a surgical unit. Patients were followed up for a minimum of 30 days postoperatively.

*Results:* A total of 103 CEAs were performed in 95 octogenarians. Procedures were performed on 59 men and 36 women. Indications for operation included symptomatic carotid stenosis in 44 cases (43%) and asymptomatic carotid stenosis in 59 (57%). Of the 44 symptomatic patients, 22 had a history of ipsilateral stroke, 19 had an ipsilateral transient ischemic attack, and 3 patients had nonhemispheric symptoms. Associated risk factors included diabetes mellitus (17%), hypertension (76%), coronary artery disease (28%), hyperlipidemia (39%), and history of smoking (42%). Mean length of stay was 2.8 days (range, 2–32 days). There were 9 perioperative complications (8.7%). Three patients experienced myocardial infarctions (2.9%), 2 patients had neck hematomas requiring evacuation (1.9%), and 3 patients experienced strokes (2.9%). Of the 3 strokes, there were 2 minor strokes (1.9%) and 1 major stroke (1.0%). There were no deaths.

*Conclusion:* Combined end points for adverse events are acceptable in octogenarians. CEA can safely be performed in this patient population. CEA remains the “gold standard” for the treatment of extracranial carotid disease in all age groups. Age alone should not place patients in the high-risk category for CEA.



**NOTES:**



## The Effects of Clopidogrel on Traumatic Brain-Injured Patients

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Linda L. Wong, MD

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**PRESENTER:**  
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**PRIMARY DISCUSSANT:**  
Kenneth Waxman, MD

**DISCUSSION CLOSED BY:**  
Linda Wong, MD

*Background:* Patients are living longer with cardiovascular disease managed with antiplatelet drugs. These seniors are asked to be more physically active and are prone to falls and injuries. Few have studied the mortality and morbidity from anticoagulants in traumatic brain-injured (TBI) patients. With the increasing use of clopidogrel in elderly people, studies on the consequences of TBI are warranted.

*Design:* Retrospective case-controlled study.

*Setting:* Tertiary-care trauma center.

*Patients:* In a trauma data registry of 3,817 closed head trauma cases (2001–2005), 131 patients with preinjury use of clopidogrel, aspirin, or warfarin and evidence of traumatic intracranial bleeding (ICD-9 codes: 851.0–854.2) were selected. The frequency-matched control group ( $n = 178$ ) had comparable age, sex, Glasgow coma scale scores, and Injury Severity Scores.

*Main Outcome Measures:* Mortality, hospital/intensive care unit (ICU) duration, and discharge disposition.

*Results:* Of 131 patients receiving anticoagulants, patients receiving clopidogrel ( $n = 21$ ) were more likely to die (odds ratio [OR] = 14.7; 95% confidence interval [CI], 2.3–93.6) and be discharged to an inpatient long-term facility (OR = 3.25; 95% CI, 1.06–9.96). Length of hospital and ICU stay was not different from the control group. Mortality in aspirin patients ( $n = 90$ ) and warfarin patients ( $n = 20$ ) did not differ from the control group. Warfarin patients had increased hospital and ICU stays (10.6 and 5.3 days, respectively) when compared with the control group (4.7 and 0.9 days, respectively).

*Conclusions:* TBI patients receiving clopidogrel may have increased long-term disability and fatal consequences when compared with patients who are not taking this drug or other anticoagulants. Patients taking clopidogrel should be advised about safety when engaging in potentially dangerous activities to avoid the consequences of TBI.

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**NOTES:**

## Decreased Bile Duct Injury Rate During Laparoscopic Cholecystectomy in the 80-Hour Resident Workweek Era

**AUTHORS:**

Arezou Yaghoubian, MD  
 Guy Saltmarsh, BS  
 David K. Rosing, MD  
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 Christian de Virgilio, MD

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**PRESENTER:**

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**PRIMARY DISCUSSANT:**

Lawrence Way, MD

**DISCUSSION CLOSED BY:**

Christian de Virgilio, MD

*Background:* The effect of the 80-hour resident workweek on operative outcomes at teaching hospitals has not been well studied.

*Purpose:* To determine whether the implementation of the 80-hour workweek has affected the rate of bile duct injury and overall complications for laparoscopic cholecystectomy (LC) performed by surgical residents.

*Methods:* Patient morbidity and mortality for LC were reviewed at a major teaching hospital before (January 2000 through June 2003, period 1) and after (July 2003 through June 2006, period 2) the implementation of duty-hour limitations. All patients were operated on and managed by surgery residents under faculty supervision. The primary and secondary end points were bile duct injury and overall complications, respectively.

*Results:* In total, 2,470 LCs were performed including 1,353 in period 1 and 1,117 in period 2. In period 2, more patients had acute cholecystitis (49% vs 35%;  $P < .0001$ ), and a higher proportion were male (22% vs 18%;  $P = .01$ ). The incidence of bile duct injury and total complications decreased in period 2 from 1.0% to 0.4% ( $P = .04$ ) and from 5.0% to 2.0% ( $P < .0001$ ), respectively. The mortality rate was unchanged. Multivariate analysis for bile duct injury revealed that period 2 was protective (odds ratio [OR], 0.31;  $P = .04$ ). With respect to complications, female sex (OR, 0.62) and operation during period 2 (OR, 0.46) were protective, whereas older age (OR, 1.03) was associated with increased complications.

*Conclusions:* At a major public teaching hospital, the bile duct injury and overall complication rates after LC decreased following implementation of the 80-hour resident workweek.



**NOTES:**

## 360-Degree Evaluation of Preclerkship Medical Students in the Operating Room

<p><b>AUTHORS:</b></p> <p>Jordan Cloyd, BA*          Daniel Holtzman, BA*          Amanda Sammann, MPH*          Frank Tendick, PhD<sup>†</sup>          Patricia O’Sullivan, EdD*          Nancy Ascher, MD, PhD<sup>†</sup></p>	
<p><b>INSTITUTION:</b></p> <p>*School of Medicine and <sup>†</sup>Department          of Surgery, University of          California, San Francisco, CA</p>	<p><b>PRESENTER:</b></p> <p>Jordan Cloyd, MD</p> <p><b>PRIMARY DISCUSSANT:</b></p> <p>Mark Talamini, MD</p> <p><b>DISCUSSION CLOSED BY:</b></p> <p>Nancy Ascher, MD</p>

*Background:* Despite the importance of preclerkship experiences, surgical education has essentially remained confined to the third-year operating room (OR) experience. In conjunction with a previously described surgical skills elective, we implemented a clinical program in which first-year medical students were paired with surgical mentors and invited into the OR. A unique 360° evaluation of the preclerkship medical student OR experience is presented.

*Methods:* We paired 30 students with 24 volunteer surgeons and instructed them to participate in at least 2 surgeries during a 3-month period. Surgeons, nurses, and students anonymously filled out surveys using a 5-point Likert scale.

*Results:* Of 30 first-year medical students, 26 (86.7%) returned surveys following their first surgical case; 21 surgeon and 13 nurse surveys were available for matched analysis. Students were less likely to agree that the team was happy to have them participate (student, 84.6%; surgeon, 100%; nurse, 84.6%), the team benefited from their participation (19.2%; 38.1%; 61.5%), they provided valuable assistance to the team (30.8%; 47.6%; 76.9%), and they were not a burden to the surgical team (53.8%; 85.7%; 92.3%;  $P < .05$ ). Students and nurses agreed that the tone of the OR was friendly (student, 84.6%; nurse, 84.6%) and educational (92.3%; 100%).

*Conclusions:* A 360° evaluation allowed us to ascertain from all perspectives the value of this surgical experience. Students gave a somewhat less enthusiastic response owing to their tendency to underestimate their contributions. We found that the OR is indeed a suitable environment for preclerkship medical students.



**NOTES:**

## Effective Laboratory-Based Instruction of Skin Closure and Hand-Sewn Bowel Anastomosis for Junior Surgical Residents

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*Background:* While routinely implemented, no evidence exists supporting laboratory-based training of skin closure and bowel anastomosis.

*Objectives:* To demonstrate the effect of a structured multimedia curriculum followed by faculty-supervised practice on performance of 2 surgical tasks.

*Setting:* University-based surgical residency.

*Participants:* Surgical residents (n = 45).

*Methods:* Subjects were given comprehensive instructional materials, including structured curricula with goals and objectives, text, figures, and narrated expert video before the training session. Laboratory-based instruction was then performed in small groups and emphasized faculty-supervised practice. Subjects were asked to (1) excise a skin lesion and close the wound and (2) perform hand-sewn bowel anastomosis. These 2 tasks were performed before (pretest) and after (posttest) supervised practice. Performances were video recorded. Residents were surveyed after training.

*Interventions:* Subjects received 4 hours of standardized instruction and faculty-supervised practice.

*Main Outcome Measures:* Time to completion and Objective Structured Assessment of Technical Skill (OSATS) based on video recordings were evaluated by blinded reviewers. Final product quality was measured by anastomotic leak pressure and by wound closure aesthetic quality using a rating scale.

*Results:* Residents perceived the laboratory training to be equal to training in the operating room for skin closure and superior to the operating room for bowel anastomosis. Subjects perceived time spent on both tasks to be “perfect.” Mean scores improved on 5 of 6 objective outcome measures (Table 1).

<b>Mean (SD)</b>	<b>Skin Time, min</b>	<b>Skin OSATS</b>	<b>Skin Aesthetic</b>	<b>Bowel Time, min</b>	<b>Bowel OSATS</b>	<b>Bowel Leak, mm Hg</b>
Pretest	25.6 (8.9)	22.7 (6.3)	25.3 (4.4)	58.9 (7.3)	19.5 (4.9)	42.4 (34.9)
Posttest	18.1 (5.1)	25.5 (5.5)	25.8 (3.6)	50.3 (10.2)	24.8 (4.8)	59.1 (30.2)
<i>P</i>	<.001	.003	.569	<.001	<.001	.002

*Conclusion:* Junior resident surgical performance improved substantially after instruction and faculty-supervised practice. R1 and R2 residents benefited from this training. These data support laboratory-based instruction for junior surgical residents with faculty supervision in addition to standard curricula.

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**NOTES:**

## Surgical Training and Global Health: Results of a Four-Year Partnership With a Surgical Training Program in a Low-Income Country

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*Background:* Global health is a component of most medical school curricula, and surgical trainees have a rising interest in global health. The methods through which global health training and exposure can be formally incorporated into an academic surgical training program are unknown.

*Hypothesis:* Global health training and exposure can be effectively integrated into a surgical residency program.

*Methods:* A relationship with a surgical training program in a low-income country was established in 2003 with opportunities for short- and longer-term exchanges of faculty and trainees, short courses and formal degrees in global health, and collaborative research.

*Results:* During the last 4 years, 8 residents and 8 faculty have made overseas trips, and 1 international surgeon has visited the United States. During their research block, residents completed 1- to 2-month clinical rotations and contributed to mentored research projects. Three residents completed a university-based Global Health Clinical Scholars Program, and 4 residents obtained degrees in public health. Also, a joint conference in injury-trauma research was conducted. Currently, a full-time faculty member is based overseas with clinical and research responsibilities.

*Conclusion:* US surgical training programs have a responsibility to meet global surgical needs. Global health training and exposure for residents can be effectively integrated into an academic surgical residency program through mutually beneficial long-term relationships with training programs in low-income countries. These programs need to move beyond voluntarism and provide sustainable research and academic experiences to be successful. Reciprocity to collaborative partners must be ensured, and sustainable funding remains the greatest challenge to such programs.

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**NOTES:**

## Initial Experience With the Laparoscopic Staged Roux-en-Y Gastric Bypass for the Treatment of Super-Super Obesity

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*Background:* In super-super obese people, gastric bypass can be associated with significant morbidity and mortality. The 2-stage Roux-en-Y gastric bypass was designed to minimize the morbidity and mortality in these high-risk patients.

*Design:* Review of a prospectively maintained database.

*Setting:* University medical center.

*Patients:* A total of 16 super-super obese patients underwent laparoscopic staged Roux-en-Y gastric bypass.

*Intervention:* Laparoscopic staged Roux-en-Y gastric bypass; the first stage consists of a Roux-en-Y gastric bypass with a larger gastric pouch and placement of the gastrojejunal anastomosis lower on the lesser curvature of the stomach. The second stage consists of a completion sleeve gastrectomy.

*Main Outcome Measures:* Demographic data, interval between the 2 stages, morbidity, and mortality.

*Results:* There were 9 males with a mean age of 45 years. The mean preoperative body mass index was  $64 \text{ kg/m}^2$  (range,  $53\text{--}85 \text{ kg/m}^2$ ). For the first stage, the mean operative time was 140 minutes and the mean length of hospital stay was 3.7 days. There was 1 postoperative complication (gastric outlet obstruction requiring revision) and no mortality. Nine patients had had the second stage with a mean interval of 6.7 months. The mean percentage excess weight loss before the second stage was 36%. For the second stage, the mean operative time was 66 minutes, mean length of stay was 1.3 days, and there were no postoperative complications. The mean percentage excess weight loss at 12 months was 57%.

*Conclusion:* The staged Roux-en-Y gastric bypass reduces the morbidity and mortality in patients with super-super obesity and seems to be a safer alternative to the conventional single-stage Roux-en-Y gastric bypass.

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**NOTES:**

## The Use of a Spring-Loaded Silo for the Treatment of Infants With Gastroschisis

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*Background:* Spring-loaded silos were routinely used in our institution beginning in 2004 for the bedside treatment of infants with gastroschisis.

*Objectives:* To evaluate the impact of the use of a bedside-placed spring-loaded silo for infants with gastroschisis.

*Design:* Retrospective review comparing neonates with gastroschisis treated before and after the implementation of a spring-loaded silo.

*Setting:* Tertiary referral center.

*Patients:* 91 consecutive neonates with gastroschisis, 1998–2007, 45 before implementation and 46 after implementation of the spring-loaded silo.

*Main Outcome Measures:* Primary closure rate, infection rate, time to delayed closure, and length of hospital stay.

*Results:* The rate of primary closure was lower in the postimplementation group (58% preimplementation vs 20% postimplementation;  $P < .001$ ). Among patients undergoing staged repair, days to final closure was longer in the preintervention group (mean, 12.1 vs 6.4 days;  $P < .001$ ). In the postintervention group, patients with a bedside-placed spring-loaded silo had a shorter time to final closure than patients undergoing silo placement in the operating room (4.8 vs 8.4 days;  $P < .01$ ). Overall length of stay (60.5 vs 55.9 days;  $P = .57$ ) and infection rates (51% vs 37%;  $P = .17$ ) were not significantly different between preimplementation and postimplementation groups.

*Conclusions:* The use of a bedside-placed spring-loaded silo has resulted in lower primary closure rates for infants with gastroschisis without significant detrimental clinical outcome. The main benefit of using the bedside-placed spring-loaded silo is the avoidance of urgent operative intervention and intubation. For patients requiring staged closure, the bedside-placed spring-loaded silo resulted in shorter times to final closure.

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**NOTES:**

## Does Insurance Status Matter at a Public Level 1 Trauma Center?

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*Background:* Lack of insurance status has been shown to impact access to health care services. Very little has been reported on the impact of insurance status on trauma outcomes.

*Hypothesis:* Insurance status has no impact on outcomes following trauma.

*Design:* Retrospective database review.

*Setting:* Academic, county-based Level 1 trauma center.

*Patients and Methods:* Adult trauma patients (>18 years) admitted between January 1, 1998 and December 31, 2005. Patients transferred out within 1 week of injury were excluded. Variables examined included demographics, insurance status, mechanism, Injury Severity Score (ISS), abbreviated injury scale (AIS), Glasgow Coma Scale (GCS) score, and procedures performed.

*Interventions:* None.

*Main Outcome Measures:* Mortality.

*Results:* Of the 29,829 patients admitted, 68% were uninsured. Uninsured patients were younger (36 vs 41 years;  $P < .0001$ ) and less injured (ISS, 8 vs 10;  $P < .0001$ ) but had a significantly higher mortality rate (7.0% vs 4.9%;  $P < .0001$ ) compared with insured patients. Logistic regression identified uninsured status as an independent risk factor for mortality (odds ratio, 3.4; 95% confidence interval, 2.9–4.1;  $P < .0001$ ). Ethnicity was not an independent risk factor for mortality. However; the greatest disparity in outcomes between uninsured and insured patients were within the black (7.1% vs 3.3%;  $P < .0001$ ) and Hispanic (6.5% vs 4.1%;  $P < .0001$ ) populations. There was no such mortality difference with respect to the white (7.2% vs 6.9%;  $P = .7$ ) and Asian (9.7% vs 9.2%;  $P = .8$ ) populations.

*Conclusion:* Despite being younger and less severely injured, uninsured trauma patients had a significantly higher mortality rate. The exact cause is unclear but may be due to unmeasured confounding variables.

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**NOTES:**

## Does Overnight Birth Time Influence Surgical Management or Outcome in Neonates With Gastroschisis?

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*Background:* There is evidence that “out of hours” neonatal intensive care unit (NICU) admission associated with overnight birth may influence treatment and adversely affect outcome in selected neonatal populations. We examined the effect of overnight birth on surgical treatment and outcome in newborns with gastroschisis.

*Design:* Analysis of data from a prospective, observational, disease-specific national database.

*Setting:* 16 tertiary-care pediatric hospitals with level 3 NICUs.

*Patients or Participants:* 143 infants with gastroschisis born between May 1, 2005 and August 1, 2007. Overnight birth was defined as occurring between 8:00 PM and 8:00 AM.

*Main Outcome Measures:* Mortality, days of ventilation, days of total parenteral nutrition (TPN), and length of hospital stay (LOS).

*Results:* Of 143 infants, 6 (4%) died. Birth weight (BW) was the only significant predictor of survival, with an odds ratio of 1.001 and a 95% confidence interval of 0.996–1.007. Survivors averaged 5 ( $\pm$  6) ventilation days and 35 ( $\pm$  32) TPN days and had a mean LOS of 45 ( $\pm$  44) days. Of the infants with gastroschisis, 58 (41%) were born overnight. There was a significantly lower overnight cesarean-section rate (26% v 51%;  $P = .005$ ). Comparison of daytime and overnight birth cohorts revealed no difference in perinatal risk variables (prenatal bowel dilation, BW, gestational age, neonatal illness severity score), surgical treatment (urgent vs delayed abdominal closure), or outcome. Multivariate analysis identified gestational age ( $P = .01$ ), BW ( $P = .001$ ), SNAP-II score ( $P = .04$ ), and surgical treatment ( $P = .03$ –.001), but not overnight birth as predictive of nonmortality outcomes.

*Conclusion:* Except for a lower rate of cesarean section, overnight birth does not influence surgical treatment or outcome in newborns with gastroschisis.

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**NOTES:**

## Deep Venous Thrombosis and Pulmonary Embolism in 1,098 Liver Transplant Recipients: A Single-Center Experience

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*Background:* Deep venous thrombosis (DVT) and pulmonary embolism (PE) are important causes of morbidity and mortality in postoperative patients. Incidence and outcome of DVT and PE after orthotopic liver transplantation (OLT) are not well characterized.

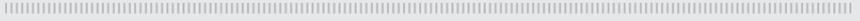
*Design:* Retrospective case series.

*Setting:* Large tertiary academic transplantation center.

*Patients and Methods:* A contemporary cohort of all 1,098 adults who underwent OLT from January 1, 2000 through December 31, 2006. All patients had pneumatic compression stockings intraoperatively and postoperatively. Diagnosis of lower extremity DVT or PE was confirmed by radiologic imaging (ultrasound, computed tomography scan) within 30 days of OLT. Intraoperative venovenous bypass was used in 52%. Patients developing DVT ipsilateral to a venovenous bypass site were excluded from analysis.

*Results:* DVT occurred in 27 OLT recipients (2.5%), and PE occurred in 4 (0.36%). Median age was 53 years (range, 27–68 years), 65% were men, 61% were white, and 68% were hospitalized before OLT. Median time to DVT or PE post-OLT was  $13 \pm 8.8$  days. Hepatic malignancy was the primary or incidental diagnosis in 29%. In 18 patients (58%), reoperation was needed before development of DVT or PE for reasons including hemoperitoneum (26%), bile leak (16%), intraabdominal abscess (10%), and retransplantation (6%). Median platelet count on day of diagnosis of DVT/PE was  $146 \pm 111 \times 10^3/\mu\text{L}$ , and median international normalized ratio (INR) was  $1.1 \pm 0.12$ . Anticoagulant therapy was the primary treatment, and IVC filter placement was used in 16%. Mean follow-up was  $1.5 \pm 1.3$  years with an overall mortality of 19%. All deaths were unrelated to DVT or PE.

*Conclusion:* This is the largest report of DVT and PE after OLT. These rare but serious complications can be treated safely with anticoagulation and/or IVC filter placement. Early prophylactic measures after OLT on normalization of INR may be beneficial for risk reduction.



**NOTES:**

## Portal and Mesenteric Vein Thrombosis After Laparoscopic Surgery

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*Background:* Portal and mesenteric vein thrombosis (PVT), a rare but potentially lethal condition, has been reported after many laparoscopic procedures. Its presentation, treatment, and outcomes remain ill defined.

*Objective:* To describe the clinical presentation, treatment, and outcomes of PVT after laparoscopic procedures other than splenectomy.

*Methods:* We searched MEDLINE for articles published between 1990 and 2007 on PVT after a laparoscopic procedure other than splenectomy. We included 2 cases treated at our institution. Available clinical data were summarized.

*Results:* Eighteen cases of PVT were reviewed: after appendectomy ( $n = 1$ ), Roux-en-Y gastric bypass ( $n = 7$ ), Nissen fundoplication ( $n = 5$ ), partial colectomy ( $n = 3$ ), and cholecystectomy ( $n = 2$ ). Mean patient age was 42 years (range, 20–74 years), and 50% were women. Pneumoperitoneum was at standard pressures in all cases, and perioperative anticoagulation was used in 8. Systemic predispositions toward thrombosis were identified in 61%, and a specific thrombophilic condition was identified in 1 patient only. On average, symptoms, most commonly abdominal pain, arose 15 days postoperatively (range, 3–42 days). Computed tomography (CT), obtained in 16 patients, documented isolated superior mesenteric vein thrombosis (SMVT) in 5; PVT with or without SMVT in 9, and combined PVT, SMVT, inferior mesenteric, and splenic vein thrombosis in 2. Fifteen patients received intravenous heparin followed by oral warfarin, and 10 underwent major interventions: exploratory laparotomy in 4, thrombolytic therapy in 5, and percutaneous thrombectomy in 1. Fourteen patients (78%) recovered fully without complications. Three patients had bowel infarctions, and 2 died.

*Conclusion:* PVT after laparoscopic surgery usually presents as nonspecific abdominal pain. CT can readily provide diagnosis and evaluate extent of the disease. Treatment should be individualized based on the extent of the thrombosis and presence of bowel ischemia. Venous stasis from increased intraabdominal pressure, intraoperative manipulation, or minimal damage to splanchnic endothelium and possibly systemic predisposition likely converge to produce this potentially lethal condition.



**NOTES:**

## Stoma Closure and Wound Infection Rates: Does the Method of Closure Matter?

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*Background:* Concerns about wound infection after stoma closure procedures have led to development of various methods of skin closure. The efficacy of these techniques is widely debated in the literature.

*Hypothesis:* There is no significant difference in wound infection rates after stoma closure among the different methods of skin closure.

*Setting:* A tertiary care teaching hospital.

*Patients or Participants:* The records of all patients who underwent stoma closure (end colostomy, loop colostomy, end ileostomy, and loop ileostomy) between 2000 and 2006, were retrospectively reviewed.

*Methods:* Three methods of stoma skin closure were used: complete closure (CC), partial closure (PC), and left open (LO). These methods of closure and wound infection rates were compared by using chi-square analysis.

*Main Outcome Measures:* Overall postoperative wound infection.

*Results:* In total, 178 patients with a mean age of  $40.7 \pm 14.6$  years had ostomy closure: 97 had end colostomy, 19 had loop colostomy, 24 had end ileostomy, and 38 had loop ileostomy. The overall wound infection rate was 5.6%. There was no statistically significant difference in wound infection rates for CC, PC, and stoma sites LO.

*Conclusion:* This study shows that the overall wound infection rate after ostomy closure is very low. Furthermore, there is no significant difference in wound infection rates regardless of the method of skin closure. Primary skin closure is recommended at stoma takedown owing to ease of postoperative care and better cosmetic outcome.

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**NOTES:**

## Safety and Accuracy of Laparoscopy in Trauma: Results From a National Database

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*Background:* Negative laparotomy for trauma is associated with morbidity and unnecessary hospitalization. Laparoscopy is an alternative for patients in stable condition that may decrease morbidity. We used a large national database to evaluate the safety and accuracy of laparoscopy compared with laparotomy for blunt and penetrating trauma in adults.

*Design:* Retrospective analysis of the National Trauma Database (NTDB) from January 1, 2001 through December 31, 2005.

*Main Outcome Measures:* Number of intensive care unit (ICU) and hospital days, morbidity, and mortality.

*Results:* Of 32,132 patients undergoing laparotomy, 30% had negative explorations. Of initial laparoscopies performed in 2,293 patients, 66% were negative, 14% were therapeutic, and 20% were converted to open. After eliminating 1,664 cases (13%) with invalid data, we compared patients with negative laparotomy (NEL) and negative laparoscopy (NL) by admission (systolic blood pressure [SBP], Injury Severity Score [ISS], Glasgow Coma Scale [GCS] score) and outcome measures. Results are shown in the Table:

	Blunt (n = 4,025)			Penetrating (n = 7,152)		
	NEL	NL	P	NEL	NL	P
No. of cases	3,746	279		6,181	971	
Age, y	40 ± 18	41 ± 18	.79	32 ± 12	31 ± 11	.14
Male, %	65	63	.50	88	85	.008
SBP, mm Hg	117 ± 38	131 ± 30	< .001	128 ± 32	135 ± 23	<.001
ISS	25 ± 15	18 ± 14	< .001	10 ± 11	5 ± 5	<.001
GCS	11 ± 5	12 ± 5	< .001	14 ± 3	15 ± 2	<.001
ICU, d	7 ± 1	8 ± 11	.48	2 ± 4	1 ± 2	<.001
Hospitalization, d	13 ± 17	14 ± 17	.20	6 ± 0	3 ± 5	<.001
Mortality, %	25	9	< .001	7	0.2	<.001
Complication rate was significantly lower for NL vs NEL following penetrating ( $P < .001$ ) but not blunt injury.						

*Conclusions:* Diagnostic laparoscopy is used infrequently in trauma evaluation, most often for less-injured patients in stable condition with penetrating trauma. Length of hospitalization, morbidity, and mortality were significantly lower for patients receiving NL compared with NEL following penetrating but not blunt trauma. Given the apparent safety and accuracy of laparoscopy in a small group of highly selected patients and the relatively large number of NELs, these data support further study of the use of laparoscopy in trauma evaluation, particularly for patients in stable condition with penetrating injuries.

NOTES:

## Predicting Strangulated Small-Bowel Obstruction: An Old Problem Revisited

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*Background:* Diagnosing the presence of strangulated intestine complicating a small-bowel obstruction (SBO) remains a considerable challenge. Despite decades of experience and numerous studies, no clinical indicators have been identified that reliably predict this life-threatening condition.

*Objectives:* Determine which clinical indicators in patients with SBO can be used to predict the presence of strangulated intestine.

*Hypothesis:* A combination of clinical and radiologic findings will allow prediction of compromised bowel in patients with SBO.

*Design, Setting:* Retrospective review at a single academic medical center.

*Patients, Methods:* Medical records were reviewed for 193 adult patients operated on for acute SBO in an 11-year period (1996–2006). Seventy-two preoperative physical examination, laboratory, and radiologic findings at admission were examined. Data from patients with strangulated intestine were compared with data from patients without bowel compromise. Likelihood ratios (LRs) were generated for each statistically significant parameter in a multivariate logistic regression analysis.

*Main Outcome Measure:* The presence or absence of bowel strangulation requiring resection in the setting of SBO.

*Results:* Of 193 patients, 50 had evidence of bowel strangulation requiring bowel resection, and 143 had no strangulation. No combination of clinical or laboratory values was found to predict strangulation. However, computed tomography (CT) findings of nonenhancing and thickened bowel wall predicted strangulated intestine with a combined sensitivity and specificity of 100% and 74.8% (LR, 3.97). No additional CT findings significantly improved the LR.

*Conclusion:* Specific CT findings correlate with bowel strangulation, thus finally allowing surgeons to distinguish patients with compromised intestine from those with a simple SBO.



**NOTES:**

## Efficiency and Value of a Surgical Hospitalist Program

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*Background:* Financial pressures have challenged the academic surgical missions of patient care, teaching, and research. In 2005, we restructured the delivery of surgery consultations at our institution into a surgical hospitalist model to improve timeliness of hospital-based emergency surgical care, promote patient safety, and enhance education.

*Hypothesis:* We hypothesized that the surgical hospitalist model could enhance departmental revenue through improved documentation and billing.

*Objectives:* To determine the financial impact of a surgical hospitalist program.

*Methods:* Review of billing data from the Division of Finance before and after creation of the hospitalist program.

*Setting:* University academic medical center.

*Patients:* Acute care patients evaluated from July 1, 2004 to July 1, 2007.

*Main Outcome Measures:* Number and complexity of consults and financial revenue data from fiscal years (FY) 2004 to 2006.

*Results:* Consult volume increased by nearly 200% in each of the 2 years after program introduction. This increase led to a 415% increase in revenue during the first year (FY 2005), which was sustained in the second year (591%). This increase resulted from more thorough and complex documentation by attending surgeons. The largest area of increase was observed in the documentation of subsequent care and follow-up, in which a 24-fold increase was observed in FY 2005 and 52-fold increase in FY 2006.

*Conclusions:* The surgical hospitalist model can enhance revenue collection, primarily through improved documentation of perioperative care. In addition to enhancing patient safety and surgical education, the surgical hospitalist can promote a financially sustainable model that promotes the academic surgical mission.

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**NOTES:**

## The Microstaging of Sentinel Lymph Node Biopsies Is Not Clearly Associated With Overall Survival or Recurrence-Free Survival in Breast Cancer

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*Background:* In 2003, the American Joint Committee on Cancer (AJCC) initiated the sixth edition staging criteria, including new pN0i(+) and pN1mi categories for breast cancer.

*Hypothesis:* Increased N stage is associated with adverse outcomes.

*Design:* Retrospective cohort study.

*Setting:* A private, nonprofit, teaching hospital.

*Methods:* A prospective registry identified patients staged with sentinel lymph node (SLN) biopsy (954 biopsies; 41 months mean follow-up). Patients were excluded for neoadjuvant therapy, bilateral disease, noninvasive disease, or N stage greater than N1a. SLN evaluation included serial sectioning and immunohistochemical stains. SLN biopsies performed before January 2003 were reviewed by pathologists and restaged according to the AJCC's sixth edition criteria.

*Main Outcome Measures:* Multiple prognostic and therapeutic variables were analyzed for impact on overall survival (OS) and recurrence-free survival (RFS).

*Results:* Three N stage groups were compared: A = N0i- (n = 491), B = N0i+ (n = 86) and N1mi (n = 73), and C = N1a (n = 146). Significant prognostic and therapeutic differences exist between the groups. The difference between groups A and C was significant in OS (18/491 and 13/146;  $P = .0095$ ) and RFS (17/491 and 18/146;  $P = .0001$ ). The difference in RFS between groups B and C (6/159 and 18/146;  $P = .0033$ ) was significant. The differences between groups A and B in OS (18/491 and 7/159;  $P = .949$ ) and RFS (17/491 and 6/159;  $P = .935$ ) and between groups B and C in OS (7/159 and 13/146;  $P = .086$ ) were not significant.

*Conclusion:* SLN biopsy allows a more sensitive evaluation of lymph nodes for metastatic cells. Although the new microstaging categories are not clearly associated with significantly decreased OS or RFS, further analysis to account for treatment effect is needed.

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**NOTES:**

## Cystic Neoplasms of the Pancreas: Results of 123 Cases

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*Objective:* The management of cystic neoplasms of the pancreas is rapidly evolving. These lesions are increasingly identified on high-quality imaging, but their natural history has yet to be fully determined, which can make management decisions difficult. The objective of this study was to review our experience with resection of cystic lesions of the pancreas.

*Design:* Retrospective case series.

*Setting:* Major academic medical and pancreatic surgical center.

*Patients:* 123 patients with cystic lesions of the pancreas underwent pancreatic resection between 1992 and 2006.

*Interventions:* Pancreaticoduodenectomy (PD), distal pancreatectomy (DP), middle pancreatectomy (MP), or total pancreatectomy (TP).

*Main Outcome Measures:* Risk of malignancy, postoperative morbidity, and mortality.

*Results:* From 1992 to 2006, 123 patients underwent pancreatic resection for a pancreatic cystic lesion. The majority of the patients were female (65.9%), the mean age was 63.7 years (range, 16–86 years), and most patients had symptoms (74.3%). Of 123 patients, 36 (29.3%) had a serous cystadenoma, 31 (25.2%) had benign intraductal papillary mucinous neoplasms, 20 (16.2%) had mucinous cystadenomas, 16 (13.0%) had mucinous cystadenocarcinomas, and 11 (8.9%) had invasive intraductal papillary mucinous neoplasms. There were 4 patients with solid and papillary epithelial tumors, 2 patients with intraductal papillary mucinous neoplasms with carcinoma in situ, 2 patients with cystic islet cell tumors, and 1 patient with a serous cystadenocarcinoma. The mean size of the cysts was 4.1 cm (range, 0.6–16 cm). Of the patients, 68 (55.3%) underwent PD, 51 (41.5%) had DP, 3 (2.4%) underwent TP, and 1 patient had an MP. There were no perioperative deaths in this series. The mean age of the patients with malignant disease was  $66.0 \pm 2.0$  years vs  $60.2 \pm 1.4$  years for benign pathology ( $P < .036$ ). Of the mucinous cystic lesions, 44% lesions were malignant, whereas 30% of intraductal mucinous papillary neoplasms were malignant. All patients with carcinoma or carcinoma in situ had symptoms and/or concerning imaging features, including large cyst, mural nodules, calcifications, or pancreatic duct dilation. However, the presence of preoperative symptoms did not correlate with the risk of malignancy because many of the patients with benign pathology also had symptoms. During the study period, an increased utilization of magnetic resonance imaging and endoscopic ultrasound was identified. Despite this increased use, there was no decrease in the number and percentage of serous cystadenomas resected in the recent era (27.8% vs 30.6%).

*Conclusion:* Cystic lesions of the pancreas require detailed evaluation. This series highlights the risk of malignancy in them and confirms that most patients with cancer have symptoms or suspicious features on imaging that prompt resection. Despite recent advances in assessment, almost one third of the resections were completed for lesions with little malignant potential, suggesting that despite the use of modern evaluation tools, better discrimination among the various types of pancreatic cysts is needed.

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**NOTES:**

## Increasing Death Rates in Cholangiocarcinoma: Can Surgery Change the Trend?

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*Background:* Liver and biliary tract cancers, although fewer in absolute numbers than other cancers, had the largest increase in death rates according to National Cancer Institute data (1995–2004). Surgery has traditionally been the best treatment for cholangiocarcinoma; therefore, it is important to promptly identify patients with resectable disease.

*Methods:* Retrospective review of 128 cholangiocarcinoma cases presenting to a tertiary-referral center, 1996–2007. Data were collected on demographics, risk factors, tumor characteristics, treatment, and survival.

*Results:* The mean age was 66.7 years, 54% were male, 78% were Asian/Pacific Islanders, 46% were foreign-born, and 27% had hepatitis B. Tumor distribution was as follows: 43 intrahepatic (ICC) and 85 extrahepatic (ECC) cholangiocarcinoma, including 43 proximal, 9 middle, and 33 distal tumors. ECC was more likely to manifest with jaundice (vs abdominal pain for ICC) and increased liver enzyme levels. Patients with resectable tumors ( $n = 47$ ) were more likely to have a cancer antigen (CA) 19-9 level less than 100 U/mL (71% vs 22%), higher gamma-glutamyltransferase (GGT; mean, 777 vs 376 IU/L), smaller tumors (3.25 vs 6.30 cm), and be US-born (73% vs 53%), possibly a surrogate for access to care. Distal ECC was more likely to be resectable than proximal (70% vs 16%). Patients who underwent resection had a 70% 1-year survival and a 41% 3-year survival compared with 30% and 10% for patients with unresectable disease.

*Conclusion:* Because resection confers a significant survival benefit in cholangiocarcinoma, prompt identification of patients who have it is important. CA 19-9 level, GGT level, tumor size, and location were associated with resectability in our cohort, which may assist with treatment planning.

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**NOTES:**

## Is Screening for Hepatocellular Cancer Necessary?

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*Background:* Currently there are no definitive studies determining whether screening patients with viral hepatitis or chronic liver disease for hepatocellular cancer (HCC) is effective. Despite this lack of data, screening with imaging and/or alphafetoprotein (AFP) is frequently recommended.

*Objective:* To determine if screening for HCC has an impact on outcome.

*Methods:* In a prospectively collected database of 457 patients with HCC (1991–2007), we identified 408 patients with viral hepatitis or chronic liver disease who would have qualified for screening. Patients were divided into 2 groups: HCC diagnosed with screening ( $n = 46$ ) and HCC found incidentally or owing to symptoms ( $n = 362$ ). Demographics, risk factors, tumor characteristics, treatment, and survival were compared between groups.

*Results:* There was no difference in age, sex, hepatitis C status, smoking, alcohol use, AFP, cirrhosis, or vascular invasion. The screened group had less hepatitis B (33% vs 48%), smaller tumors (3.81 vs 6.68 cm), and more patients who qualified for transplantation (54% vs 33%) per Milan criteria (single tumor  $< 5$  cm or 2–3 tumors each  $< 3$  cm). Treatment did not differ between the groups, including resections, transplants, and patients with advanced disease who received no treatment. There was a 1-year survival benefit in the screened group (78% vs 55%), but this disappeared by 5 years (23% vs 28%).

*Conclusion:* Screening for HCC identified patients while they still met transplantation criteria; however, this identification did not increase the likelihood of definitive therapy with liver resection or transplantation. Screening seemed to improve 1-year survival, possibly owing to lead-time bias, but did not impact 5-year survival.

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**NOTES:**

## Frequency of Changes of Stem/Progenitor Cell Markers Between Normal and Malignant Human Breast Cells

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*Background:* The high recurrence rate of breast cancer suggests a stem cell defect. While normal human breast stem cells have not been identified, mouse mammary stem cells express markers CK14<sup>+</sup>CD31<sup>-</sup>CD45<sup>-</sup>CD29<sup>hi</sup>CD24<sup>+</sup> or CD24<sup>med</sup>CD49<sup>hi</sup>. In human breast cancer, p63 may be absent and CD44 overexpressed.

*Hypothesis:* Human breast stem cells can be identified as cells expressing markers similar to mouse stem cells and examined for frequency and tumor-forming potential.

*Methods:* Normal breast tissue and breast cancer cells were examined by immunohistochemistry. Human breast cancer cells were subsequently transplanted into the brains of nude rats, and resulting tumors were scored for stem cell marker expression.

*Results:* In normal breast 2,852 CD29<sup>+</sup> cells were identified, all in the CK14<sup>+</sup>CK19<sup>-</sup> basal epithelium of the terminal ductal lobular unit. They were 95% CD24<sup>+</sup> and 60% CD44<sup>+</sup>. All CD24<sup>+</sup> and CD44<sup>+</sup> cells were p63<sup>+</sup>. CD29<sup>+</sup>p63<sup>-</sup> cells were rare (4.6%). The breast cancer cells expressed markers CK18<sup>+</sup> (99.5%), CK14<sup>+</sup> (0%), CK19<sup>+</sup> (0%), p63<sup>-</sup> (100%), CD44<sup>+</sup> (93%), CD29<sup>+</sup> (2%), and CD24<sup>+</sup> (0.4%). Marker expression changed with tumor formation in the brain. CD29<sup>+</sup> cells frequency decreased (2% vs 0.3%) but showed increased coexpression with CD24 (9% vs 92%). CK18<sup>+</sup> cells decreased 50%. CK19, CK14, CD44, and p63 expression remained unchanged.

*Conclusion:* Human cells expressing mouse stem cell markers were present in normal and cancerous breast tissue. They displayed a hierarchy of marker differentiation that changed from CD29<sup>+</sup>CD24<sup>-</sup>CD44<sup>-</sup>CK<sup>+</sup> in normal tissue to CD29<sup>-</sup>CD24<sup>+</sup>CD44<sup>+</sup>CK<sup>-</sup> in malignant tissue. These results open therapeutic avenues that will improve outcome by targeting malignant breast stem cells.

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**NOTES:**

## Benefit of Adjuvant Treatment in Patients Undergoing Surgery for Pancreatic Cancer

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*Background:* The benefit of postoperative adjuvant therapy after resection for pancreatic adenocarcinoma remains controversial. Despite the lack of definitive benefit, many patients undergo adjuvant therapy.

*Objective:* We sought to identify the impact of adjuvant therapy and factors associated with any improvement in survival after pancreatic adenocarcinoma resection.

*Methods:* Through the California Cancer Registry, we identified all California residents diagnosed with invasive pancreatic adenocarcinoma between 1994 and 2002. The study population consisted of people undergoing potentially curative resections. Factors potentially impacting survival including age, sex, tumor characteristics, lymph node status, stage, and type of adjuvant therapy were analyzed. Univariate survival analysis was performed by using the Kaplan-Meier method. Multivariate analysis was performed by using Cox regression analysis.

*Results:* We identified 26,518 patients, of whom 3,196 (12.1%) underwent resection as their primary treatment. Of these patients, 58% received some form of adjuvant therapy. The median overall survival was 16 months for patients who underwent resection. On multivariate analysis, after adjusting for patient demographics and tumor characteristics, adjuvant therapy demonstrated a statistically significant although modest impact on survival with a hazard ratio of 0.83 ( $P = .03$ ). Other prognostic factors associated with better survival included negative lymph node status, well-differentiated tumors, younger age, and female sex.

*Conclusions:* Adjuvant therapy provides for a modest improvement in overall survival following surgical resection of pancreatic adenocarcinoma. The absolute effect is most pronounced in people with poor prognostic indicators. To identify effective systemic therapy for this deadly cancer, future clinical trials of adjuvant therapy should focus on these groups of patients.

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**NOTES:**

## Primary Tumor Characteristics Are Associated With Surgical Outcomes After Hepatectomy for Colorectal Cancer Metastases

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*Background:* Studies have described an association between primary colorectal cancer (CRC) features and hepatic metastasectomy outcomes.

*Objectives:* To determine if hepatectomy outcomes for metastatic CRC correlate with primary tumor characteristics and to compare global expression profiles between matched primary and secondary CRC tumors.

*Design:* Cohort study.

*Patients:* 180 consecutive patients who underwent hepatectomy from 1989 to 2002, and 42 matched CRC primary and liver tumors.

*Methods:* Primary tumor variables, including T stage and nodal status, were analyzed for impact on disease-free survival (DFS) and overall survival (OS). Global messenger RNA expression was determined in matched primary and secondary CRC tumors by using an oligonucleotide array featuring 10,671 genes.

*Main Outcome Measures:* OS and DFS after hepatectomy; differential gene expression between matched primary and secondary tumors.

*Results:* Mean follow-up of living patients was 49 months. Univariate analysis revealed primary T stage as a significant risk factor for DFS ( $P = .006$ ) and OS ( $P = .001$ ). Primary nodal status was significant for DFS ( $P = .04$ ) but not for OS ( $P = .07$ ). Multivariate analysis demonstrated that primary T stage was an independent risk factor for DFS and OS. We found 144 genes with consistent differential expression in metastases relative to matched primary tumors, representing only 1% of the genes assayed.

*Conclusion:* Primary tumor characteristics are an important prognostic feature in patients who undergo hepatectomy for CRC liver metastases. There are few differentially expressed genes between primary and secondary CRC tumors, and we speculate that the biologic behavior of CRC liver metastases reflects the characteristics of the primary tumor.

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**NOTES:**

## Clinical Utility of Breast-Specific Gamma Imaging for Evaluating Disease Extent in the Newly Diagnosed Breast Cancer Patient

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*Hypothesis:* Breast-specific gamma imaging (BSGI) is a functional imaging modality using a sestamibi tracer that may result in fewer false-positive studies than magnetic resonance imaging (MRI) and, thereby, improve clinical management of newly diagnosed breast cancer patients.

*Design:* Retrospective chart and imaging review of newly diagnosed breast cancer patients in whom BSGI was performed as part of the imaging workup. Changes in clinical management based on BSGI findings were evaluated.

*Setting:* Two community-based breast health centers.

*Patients:* 79 consecutive patients with biopsy-proven invasive ductal carcinoma (IDC), invasive lobular carcinoma (ILC), and/or ductal carcinoma in situ (DCIS).

*Interventions:* Nuclear imaging of the breast using sestamibi tracer and dedicated camera (BSGI).

*Main Outcome Measures:* Of the patients, 11 (13.9%) had synchronous lesions detected on BSGI: 8 confirmed as positive on biopsy, 2 as benign on biopsy, and 1 as a benign cyst on follow-up ultrasound.

*Results:* Complete clinical data were available for 79 consecutive patients (IDC, 39; ILC, 15; DCIS, 18; mixture of IDC, ILC, and/or DCIS, 7). In 11 (13.9%), there was a positive BSGI study at a site remote from the known cancer. Of the 11 studies, 8 were positive for a synchronous malignancy in the same or contralateral breast. Two patients had benign pathologic findings on biopsy and 1 benign findings on ultrasound follow-up. Of 79 patients, 9 (11.4%) had a negative BSGI study (4 with no residual tumor, 5 with minimal residual tumor). For 2 patients (2.5%) with positive MRI findings at a new location but negative BSGI findings, final pathology confirmed the BSGI findings. In 1 patient (1.3%) with positive MRI findings at a new location and confirmed on BSGI, the final pathology report indicated benign. The findings changed plans for 3 patients to mastectomy for multifocal disease. Plans for 1 patient changed back to lumpectomy after BSGI called the only known lesion over MRI with multifocal enhancement.

*Conclusion:* BSGI detected additional malignancy in the same or contralateral breast in 10.1% of newly diagnosed breast cancer patients. Only 3.8% had an additional site biopsy or follow-up ultrasound with benign results. BSGI provides accurate evaluation of remaining breast tissue in newly diagnosed breast cancer patients with few false-positive readings. With further study, it may prove to be the optimum imaging for patients needing further tissue imaging in this setting.

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**NOTES:**

## Jaundice and High-Grade Dysplasia Predict Malignancy in Ampullary Tumors: A Multivariate Analysis

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*Background:* While the merits of Whipple vs local excision for benign ampullary adenomas are debated, endoscopic removal/ablation is common. However, preoperative biopsy (PreBx), on which the decision depends, may not be reliable. To formulate a management strategy, we analyzed the factors predicting malignancy.

*Design:* Multivariate analysis, retrospective case series.

*Setting:* Academic medical center.

*Patients:* 157 consecutive patients with ampullary tumors, treated 1989–2006.

*Methods:* Clinical presentation and PreBx were correlated with final pathology. Factors predicting malignancy on univariate analysis were used in a multivariate model.

*Main Outcome Measures:* Factors associated with malignancy.

*Results:* Of the tumors, 33 were benign and 124 were malignant. We found that 57% of tumors shown as benign on PreBx were malignant. Factors associated with malignancy included PreBx showing malignancy (carcinoma [CA] or high-grade-dysplasia [CIS]), jaundice, weight loss, and presentation with bleeding/pancreatitis (negative association) (Table). On multivariate analysis, PreBx showing CA/CIS and jaundice independently predicted malignancy (Table). Using these factors gave a positive predictive value of 95%, a negative predictive value of 84%, a specificity of 78%, and a sensitivity of 97%.

*Conclusions:* Most ampullary tumors were malignant, and “benign” endoscopic PreBx was incorrect in 60% of cases. Jaundice strongly correlated with malignancy. This report is the first to show the striking significance of this finding. We conclude that endoscopic or local resection is only appropriate in cases without jaundice or CA/CIS. Nevertheless, even 16% of these cases were malignant—indicating that ampullary tumors should be completely excised, a frozen section obtained, and Whipple performed as indicated.

	Univariate Analysis		Multivariate Analysis	
	Odds Ratio	P	Odds Ratio	P
PreBx-CA/CIS	44.7	< .0001	3.97	< .0001
Jaundice	19.9	< .0001	2.98	.001
Weight loss	4.6	.113		.300
Bleeding/pancreatitis	0.152	< .0001		.519

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**NOTES:**

## Implementation of a Preoperative Briefing Protocol Improves Operating Room Teamwork at a Rural Community Hospital

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*Objectives:* Effective teamwork contributes to patient safety in the operating room (OR). For the busy rural surgeon, enhancing OR teamwork can be difficult. This presentation describes results of the initial implementation of a preoperative briefing protocol at a rural community hospital.

*Methods:* From July 2006 to February 2007, teamwork among OR staff working with a single general surgeon at a rural hospital in Alaska was evaluated before and after introduction of a preoperative briefing protocol. After each case, participants completed questionnaires using a 6-point Likert-type scale targeting effectiveness of the preoperative debriefing and OR team interaction. The protocol and the questionnaire reflected teamwork competencies appropriate for the OR setting. Prior work on instrumentation supported validity and reliability for use in this study. Mean values were calculated from 20 cases before introduction of the preoperative briefing and 16 cases after its introduction. Statistical analysis of the difference between preprotocol and postprotocol team performance was conducted by using the Student *t* test.

*Results:* Ten OR staff members, including the general surgeon, completed the preprotocol and postprotocol questionnaires. Following implementation of the preoperative briefing protocol, the mean score of overall preoperative debriefing was 1.01 units higher than before ( $P < .0001$ ) and overall OR team interaction was 0.50 units higher ( $P < .0001$ ).

*Conclusions:* Implementation of a preoperative briefing protocol improved overall preoperative debriefing and OR team interaction in the study setting. These findings are encouraging for enhancing teamwork and patient safety through a systematic protocol. Additional studies continue in another setting.

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**NOTES:**

## Tumor Markers (ER/PR/HER2) as Predictors of the Response to Neoadjuvant Chemotherapy in Breast Cancer

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*Background:* The principal rationale for neoadjuvant chemotherapy in the management of breast cancer is the downsizing of the primary tumor, allowing for breast conservation.

*Hypothesis:* Breast cancer tumor markers are predictors of the response of the primary tumor and lymph node metastases to neoadjuvant chemotherapy.

*Patients:* By the institutional prospectively maintained database, we reviewed the records of 304 patients with breast cancer treated with neoadjuvant chemotherapy followed by definitive surgical resection.

*Methods:* All tumors were tested for estrogen receptor (ER), progesterone receptor (PR), and human epidermal growth factor receptor 2 (HER-2). ER+ and/or PR+ patients were considered ER/PR(+). Breast and nodal pathologic complete response (pCR) rates were determined from surgical specimens.

*Results:* Of 119 ER/PR– patients, 44 (37%) achieved pCR in the breast, whereas 28 (32%) of 87 patients with nodal disease had nodal pCR. Among 185 ER/PR+ patients, 13 (7%) demonstrated pCR in the breast, with 24 (20%) of 120 node-positive patients achieving nodal pCR. Addition of neoadjuvant trastuzumab for HER+ patients resulted in a 26% increase in breast pCR in ER/PR– patients and a 9% increase in breast pCR in ER/PR+ patients. Increases in nodal pCR rates were similar between ER/PR– and ER/PR+ patients (24% and 23% increase, respectively) when neoadjuvant trastuzumab was added.

*Conclusion:* The status of ER, PR, and HER-2 in breast cancer is predictive of the rate of breast and nodal pCR to neoadjuvant chemotherapy. Patients with ER/PR– tumors derive substantially greater benefit from neoadjuvant chemotherapy. Inclusion of trastuzumab in the neoadjuvant regimen for HER+ patients results in a superior response.

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**NOTES:**

## Hemolysis: An Achilles Heel of Intraoperative Parathyroid Hormone (IOPTH) Measurement?

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*Background:* The manufacturer of the Elecsys® cobas e411 parathormone assay recently released a warning to its users that hemolysis may cause a downward shift in PTH at levels of 100 or less. IOPTH is the cornerstone of intraoperative surgical decision making for focused parathyroidectomy.

*Hypothesis:* Hemolysis is a cause of false-positive and false-negative results of IOPTH and accounts for failures of focused parathyroidectomy.

*Design:* Retrospective review.

*Setting:* Tertiary referral center.

*Patients or Participants:* All patients who underwent parathyroidectomy with IOPTH between May and August 2007.

*Methods:* We determined the frequency of hemolyzed IOPTH samples, the percentage of IOPTH samples measuring 100 or less, and the effect of hemolysis on parathormone levels.

*Main Outcome Measures:* Frequency of hemolysis of IOPTH measurements; magnitude of decrease in IOPTH levels due to hemolysis.

*Results:* During the study period, 48 patients underwent parathyroidectomy with IOPTH, and a total of 226 specimens were sent. A total of 17 (7.5%) of 226 specimens were hemolyzed from 9 (18.8%) distinct patients. Of the 17 hemolyzed specimens, 9 (53%) were less than 100. Of 48 patients, 21 (44%) had preexcision PTH levels of less than 100, and all but 2 had postexcision PTH levels of less than 100. In 7 split samples, the range of decrease due to hemolysis was 24.5% to 53.8% as compared with nonhemolyzed control samples.

*Conclusion:* Hemolyzed IOPTH specimens occur in 19% of patients and result in up to a 53% decrease in IOPTH value. Hemolysis may be an important, unrecognized, and preventable cause of erroneous IOPTH measurements resulting in operative failure or unnecessary additional exploration.

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**NOTES:**

## Definitive Risk Factors for Anastomotic Leak in Open Elective Colon Resection

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*Hypothesis:* Anastomotic leak following elective colon resections increases morbidity, mortality, and the need for additional intervention. An accurate understanding of risk factors would potentially reduce anastomotic leak or allow appropriate selection of patients for diverting stomas.

*Design:* Prospective review of patient and operative characteristics that contribute to anastomotic leak.

*Setting:* 51 sites within the United States from May 2002 through March 2005.

*Patients:* 672 patients who participated in a trial comparing preoperative antimicrobials in elective open colorectal surgery.

*Main Outcome Measures:* Anastomotic leak was diagnosed by clinical findings and confirmed with imaging. We examined 20 variables possibly affecting anastomotic healing in univariate and multivariate analysis.

*Results:* There were 24 anastomotic leaks in 672 patients (3.6%) undergoing elective colorectal resection. Baseline albumin level less than 3.5 g/dL ( $P = .035$ ), steroid use at time of surgery (1–40 mg/d,  $P = .057$ ), and male sex ( $P = .027$ ) were associated with anastomotic leak in univariate and multivariate analyses (adjusted odds ratio [OR], 2.56, 3.18, and 3.12). Increased duration of surgery (SD = 60 minutes) was significant in univariate analysis (OR, 1.53;  $P = .024$ ).

*Conclusions:* The rate of anastomotic leak after open colorectal resection in 672 North American patients is 3.6%. Risk factors are low preoperative serum albumin level, steroid use, male sex, and increased duration of surgery. Appreciation of risk factors allows surgeons to prospectively counsel patients about the risk of anastomotic leak and provides a rational basis for temporary diversion.

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**NOTES:**

## The Use of Leukoreduced Blood Does Not Reduce Infection, Organ Failure, or Mortality Following Trauma

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*Background:* Leukocyte-reduced (LR) blood has been demonstrated to reduce morbidity and mortality in high-risk surgical patients, but not in trauma patients.

*Objectives:* To determine the effect of LR blood on morbidity and mortality.

*Hypothesis:* The use of LR blood does not improve outcome in trauma patients.

*Design:* Retrospective cohort analysis.

*Setting:* Level 1 trauma center.

*Patients:* Trauma patients receiving transfusions at a Level 1 trauma center from 2001 to 2004.

*Methods:* Between 2002 and 2003, LR blood was transfused. Before this time and after it, non-LR (NLR) blood was transfused. This created 2 historical comparison groups. Data collected included demographics, units of blood transfused, intensive care unit (ICU) and hospital days, ventilator days, Injury Severity Score (ISS), mortality, presence of acute respiratory distress syndrome (ARDS), and infectious complications. A multiple organ dysfunction syndrome (MODS) score was calculated.

*Interventions:* None.

*Main Outcome Measures:* Maximal MODS score, ARDS, infection, mortality.

*Results:* Transfusions were administered to 437 patients. There were 284 patients in the NLR group and 153 in the LR group. The mean ISS was similar (NLR, 26; LR, 24;  $P > .1$ ). No differences were seen between groups in units transfused (6.2 vs 5.5), number of ICU days (8.2 vs 9.0), hospital days (16.9 vs 18.6), ventilator days (6.1 vs 5.7), incidence of ARDS (8.3% vs 8.5%), MODS score (5.5 vs 5.9), mortality (15.1 vs 15.7%), or infection (36 vs 30%) ( $P > .1$ ).

*Conclusion:* This study represents the largest series comparing trauma patients who received LR or standard blood transfusions. The use of LR blood does not improve outcome in trauma patients.

NOTES:

## Villous Adenoma of the Rectum: Treatment Strategies and Outcomes From a Single Center Experience

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*Background:* Rectal villous adenomas can be difficult to detect and may harbor occult adenocarcinoma. Treatment is complete excision, transanally or by proctectomy. Treatment recommendations are based on small published series with limited follow-up.

*Objectives:* To analyze a 13-year, single surgeon experience with respect to procedure, complications, recurrence, and cancer incidence.

*Hypothesis:* Transanal excision of rectal villous adenoma provides good oncologic outcome with acceptable complication and recurrence rates.

*Design:* Retrospective review of patient and tumor characteristics, procedure, recurrence, and complications.

*Setting:* University hospital.

*Patients:* Patients who underwent excision of rectal villous adenoma.

*Main Outcome Measures:* Complications, recurrence, malignancy rate.

*Results:* During the study period, 36 patients underwent 30 transanal and 10 transabdominal excisions. Average age was 66 years (range, 41–86 years); average follow-up was 25 months (range, 0.5–132 months). Average tumor size was 3.0 cm (range, 0.5–11 cm); average distance from the anal verge was 5.2 cm (range, 0–22 cm). Preoperatively, 23 lesions (58%) harbored low-grade dysplasia, and 17 (43%) had high-grade dysplasia or carcinoma in situ. Postoperative pathology was discordant in 50%, including 5 (13%) of 40 lesions that were recategorized as invasive cancer. Tumor size did not correlate with malignancy. The complication rate was significantly lower for transanal than transabdominal excision (3.6% vs 50%;  $P < .05$ ). There were 4 benign recurrences (12.5%), all after transanal excisions.

*Conclusion:* Complete excision is warranted for rectal villous adenomas because biopsies are accurate only 50% of the time, and 1 in 8 patients had unsuspected cancer found after excision. Transanal excision with negative margins is associated with low recurrence and complication rates and is the preferred approach, even with large lesions.

|||||

**NOTES:**

## Long-Term Outcomes Following Pediatric Nissen Fundoplication

<p><b>AUTHORS:</b>                  Steven L. Lee, MD                  Roman M. Sydorak, MD                  Harry Applebaum, MD                  Philip I. Haigh, MD</p> <p><b>INSTITUTION:</b>                  Kaiser Permanente, Los Angeles                  Medical Center, Los Angeles, CA</p>	<p><b>PRESENTER:</b>                  Steven Lee, MD</p> <p><b>PRIMARY DISCUSSANT:</b>                  Diana Farmer, MD</p> <p><b>DISCUSSION CLOSED BY:</b>                  Harry Applebaum, MD</p>
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*Background:* Long-term outcome data following pediatric Nissen fundoplication (NF) are not available.

*Hypothesis:* NF decreases use of antireflux medications and number of hospital admissions for pulmonary symptoms and failure to thrive (FTT).

*Design:* Retrospective cohort study using discharge abstract data.

*Patients:* 342 patients underwent Nissen fundoplication.

*Main Outcome Measures:* Use of antireflux medications, number of hospital admissions.

*Results:* The number of patients requiring antireflux medications decreased from 233 patients (68.7%; before NF) to 197 (57.6%; after NF). Within 1 year after NF, 75.6% of patients restarted taking antireflux medications. Use of antireflux medication decreased in neurologically normal patients but was unchanged in neurologically impaired children. The number of patients requiring hospital admission for pneumonia, respiratory distress/apnea, and FTT was similar before and after NF. The readmission rate within 1 year after NF for pneumonia was 45%; for respiratory distress/apnea, 50%; and for FTT, 57%. Associated neurologic disorders independently increased hospital admissions for pneumonia, respiratory distress/apnea, and FTT. Age was inversely related to hospital admissions for respiratory distress and FTT. More than 1 fundoplication was required by 26 patients (7.6%). During the study period, 51 patients (14.9%) died, 4 of gastroesophageal reflux disease (GERD)-related complications.

*Conclusion:* Use of antireflux medication decreased after NF in neurologically normal children. NF did not decrease hospital admissions for respiratory symptoms and FTT. Neurologically impaired patients had increased risk of hospital admission for pneumonia, respiratory distress/apnea, and FTT. Increasing age decreased readmission for respiratory distress and FTT. The reoperation and GERD-related mortality rates following NF were low.

|||||

**NOTES:**

## Race and Insurance Status as Risk Factors for Trauma Mortality: Not All Black and White

**AUTHORS:**

Adil H. Haider, MD, MPH  
 David C. Chang, MPH, MBA, PhD  
 Elliott R. Haut, MD  
 David T. Efron, MD  
 Neal Handly, MD  
 Edward E. Cornwell III, MD

**INSTITUTION:**

Johns Hopkins School of  
 Medicine, Baltimore, MD

**PRESENTER:**

Adil Haider, MD

**PRIMARY DISCUSSANT:**

David Hoyt, MD

**DISCUSSION CLOSED BY:**

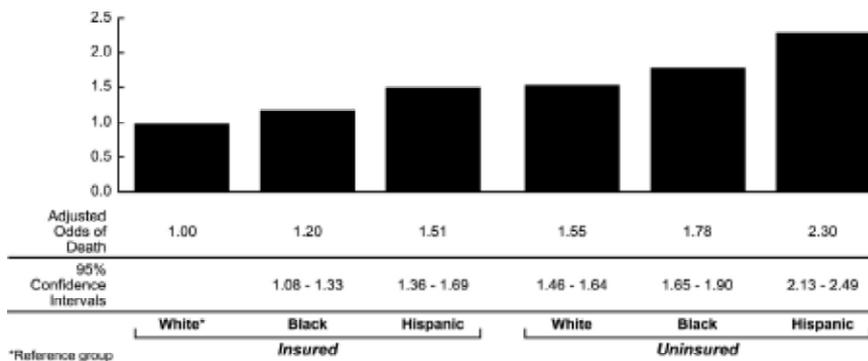
Edward Cornwell, MD

*Background:* Race-based outcome disparities have been described across a host of surgical diseases. Questions remain as to whether these observed differences can be explained by disparities in insurance status.

*Objective:* To determine the impact of race and insurance status on trauma mortality.

*Methods:* Review of patients (ages 18–64 years) included in the National Trauma Data Bank (2001–2005) with moderate to severe injuries (Injury Severity Score [ISS]  $\geq 9$ ). Black patients and Hispanic patients were each compared with non-Hispanic whites. Insured patients (commercial insurance) were compared with uninsured patients (Medicaid or self-pay), and the interaction between race and insurance status was analyzed. Multiple logistic regression was used to determine differences in survival, which was the main outcome measure. Each case was adjusted for age, sex, injury severity (ISS and Revised Trauma Score), severity of head and extremity injury, and injury mechanism. Significance was defined as a  $P$  value less than .05\*.

*Results:* Inclusion criteria were met by 429,751. Black (n = 72,249) and Hispanic (n = 41,770) patients were younger\*, less likely to be insured\*, and more likely to sustain penetrating trauma\* compared with whites (n = 262,878). Minorities had higher unadjusted mortality\* (white, 5.6%; black, 8.2%; Hispanic, 9.1%). After adjustment for the aforementioned variables, minorities had an increased odds ratio (OR) of death compared with whites (OR of death [95% confidence interval] for blacks = 1.17 [1.10–1.23]; Hispanics = 1.47 [1.39–1.57]). Approximately 50% of patients had insurance, and they had a lower crude mortality than uninsured patients\* (4.22% vs 8.24%). Uninsured patients had a 1.46 (1.39–1.54) times greater adjusted odds of death compared with insured patients. Figure 1 demonstrates the interaction between race and insurance status on mortality, with white insured patients as the reference group:



**Figure 1**

*Conclusion:* Race and insurance status each independently predict outcome disparities after trauma. Black, Hispanic, and uninsured patients have worse outcomes, but insurance status seems to have the stronger association with mortality after trauma.

NOTES:

## Factors Associated to Weight Loss After Gastric Bypass

### AUTHORS:

Guilherme M. Campos, MD, FACS<sup>1</sup>  
 Charlotte Rabl, MD<sup>1</sup>  
 Ruxandra Ciovisa, MD<sup>1</sup>  
 Andrew Posselt, MD, PhD<sup>1</sup>  
 Antonio Westphalen, MD<sup>2</sup>  
 Feng Lin, MS<sup>3</sup>  
 Eric Vittinghoff, PhD<sup>3</sup>

### INSTITUTION:

Departments of Surgery,<sup>1</sup> Radiology,<sup>2</sup>  
 and Epidemiology and Biostatistics,<sup>3</sup>  
 University of California San  
 Francisco, San Francisco, CA

### PRESENTER:

Guilherme Campos, MD

### PRIMARY DISCUSSANT:

Bruce Wolfe, MD

### DISCUSSION CLOSED BY:

Guilherme Campos, MD

*Background:* Gastric bypass (GBP) is the most common operation for morbid obesity performed in the United States. It provides significant weight loss, improves comorbidities, and extends life span. However, weight loss is poor in 10% to 15% of patients.

*Objectives:* To determine the independent factors associated with poor weight loss after GBP.

*Design:* Prospective cohort study.

*Setting:* University tertiary referral center.

*Patients:* All patients submitted to GBP from January 2003 to July 2006.

*Methods:* Demographic, clinical, operative, and follow-up data were collected prospectively and examined by univariate and multivariate analysis to define the factors independently associated with poor weight loss. Variables investigated were age, race, marital and insurance status, initial weight and body mass index (BMI), comorbidities (diabetes mellitus, hypertension, joint disease, sleep apnea, hyperlipidemia, and psychiatric disease), laparoscopic vs open approach, gastric pouch area, gastrojejunostomy technique, and roux limb length.

*Outcome Measures:* Weight loss defined as poor ( $\leq 40\%$  excess weight loss [EWL]), good ( $> 40\%$  but  $\leq 75\%$  EWL), or excellent ( $> 75\%$  EWL).

*Results:* Follow-up at 12 months was available for 310 (85.9%) of the 361 consecutive patients who underwent GBP during the study period. Mean preoperative BMI was 51 (range 35–108). Mean BMI and EWL at follow-up were 34 (range, 17–74) and 60% (range, 8%–117%), respectively. Thirty-eight patients (12%) had poor weight loss. Of the 7 variables associated with poor weight loss in the univariate analysis (older age, black race, higher preoperative weight and BMI, presence of diabetes, open approach, and larger pouch), only presence of diabetes (odds ratio [OR], 3.1; 95% confidence interval [CI], 1.4–7.1;  $P = .0076$ ) and larger pouch (OR, 1.6; 95% CI, 1.1–2.3;  $P = .01$ ) were independently associated with poor weight loss in multivariate analysis.

*Conclusion:* GBP provides good or excellent weight loss for most patients. Presence of diabetes mellitus and a larger pouch are independently associated with poor weight loss after GBP.

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**NOTES:**

## The Extreme Aggressiveness and Lethality of Gastric Adenocarcinoma in the Very Young

<p><b>AUTHORS:</b>                  Brian R. Smith, MD                  Bruce E. Stabile, MD</p> <p><b>INSTITUTION:</b>                  Harbor-UCLA Medical                  Center, Torrance, CA</p>	<p><b>PRESENTER:</b>                  Brian Smith, MD</p> <p><b>PRIMARY DISCUSSANT:</b>                  Clifford Deveney, MD</p> <p><b>DISCUSSION CLOSED BY:</b>                  Bruce Stabile, MD</p>
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*Background:* Gastric adenocarcinoma is most commonly a disease of elderly people that is associated with poor overall survival.

*Hypothesis:* In very young patients, gastric adenocarcinoma is biologically more aggressive and has unusually dismal perioperative outcomes and long-term survival.

*Design:* Retrospective cohort study.

*Setting:* Large public teaching hospital.

*Patients:* 339 patients diagnosed between 1993 and 2005.

*Interventions:* Gastroscopic biopsy, endoscopic ultrasonography, computerized tomography, and surgical resection or bypass.

*Main Outcome Measures:* Age, demographics, histologic tumor type, TNM stage, disease stage, tumor resectability, operation performed, postoperative outcomes, and long-term survival.

*Results:* Of 339 total patients, 29 (8.6%) were 35 years old or younger. Compared with older patients, the very young more often had diffuse-type tumors (93% vs 69%;  $P = .005$ ), adjacent organ invasion (77% vs 30%;  $P = .001$ ), nodal metastases (94% vs 70%;  $P = .046$ ), distant metastases (80% vs 51%;  $P = .006$ ), and stage IV disease (89% vs 66%;  $P = .010$ ). Potentially curative (R0) gastrectomy was accomplished in 57% of older but only 18% of very young patients ( $P = .002$ ). Very young patients had a dramatically higher perioperative mortality rate (24% vs 3%;  $P = .003$ ) that was related to advanced disease stage and more frequent performance of nontherapeutic laparotomy (35% vs 6%;  $P = .002$ ). Mean survival among older patients was 15.2 months but was only 7.7 months in among very young patients ( $P = .098$ ).

*Conclusions:* Very young patients ( $\leq 35$  years) with gastric adenocarcinoma have significantly higher incidences of diffuse tumor histology and locally advanced and metastatic disease at presentation that confirm a more aggressive tumor biology and result in often futile operations and a grave prognosis. Strategies for earlier diagnosis together with effective new therapies are desperately needed to attenuate the extreme lethality in these uniquely disadvantaged patients.

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**NOTES:**

## Thoracoscopic Repair of Congenital Diaphragmatic Hernia in Infancy

**AUTHORS:**

Stephen S. Kim, MD  
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**PRESENTER:**

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**INSTITUTION:**

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**DISCUSSION CLOSED BY:**

John Waldhausen, MD

*Background:* Congenital diaphragmatic hernia (CDH) has traditionally been repaired through a laparotomy or thoracotomy. Recent studies have demonstrated the advantages of the minimally invasive surgical approach compared with standard open techniques.

*Objectives:* To review our initial experience with thoracoscopic repair of CDH in infancy.

*Hypothesis:* Thoracoscopic CDH repair in infants is safe and effective.

*Design:* A retrospective review of all patients treated with thoracoscopic repair of CDH from April 2006 to July 2007, with a median follow-up of 9 months.

*Setting:* Tertiary referral center.

*Patients or Participants:* 12 infants diagnosed with CDH, ages 2 days to 4 months, average weight 3.05 kg, and gestational age 35 weeks at the time of operation.

*Interventions:* Thoracoscopic technique for the treatment of CDH.

*Main Outcome Measures:* Intraoperative and postoperative complications, operative duration, postoperative length of hospital stay.

*Results:* Of 12 patients, 9 (75%) were successfully treated with the thoracoscopic approach. There were 3 conversions to thoracotomy owing to large diaphragmatic defects requiring prosthetic patch repair, for a conversion rate of 25%. There were no intraoperative or postoperative complications. Average operative duration was 144 minutes, postoperative days to extubation was 3 days, and postoperative length of hospital stay was 18 days.

*Conclusion:* Thoracoscopic repair of CDH in infancy is safe and effective. It is a reasonable surgical approach in select infants with potential short-term benefits. Long-term follow-up is required to assess durability of the repair.



**NOTES:**

## The “Critical View of Safety” Is Superior to Intraoperative Cholangiography for Prevention of Common Bile Duct Injury

<p><b>AUTHORS:</b> S. Yegiyants T. Tejirian J. C. Collins</p> <p><b>INSTITUTION:</b> Kaiser Permanente Medical Center, Los Angeles, CA</p>	<p><b>PRESENTER:</b> Sara Yegiyants, MD</p> <p><b>PRIMARY DISCUSSANT:</b> John Hunter, MD</p> <p><b>DISCUSSION CLOSED BY:</b> J. Craig Collins, MD</p>
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*Background:* Common bile duct (CBD) injury is a major complication of laparoscopic cholecystectomy (LC). Intraoperative cholangiography (IOC) has been suggested to decrease the rate of CBD injury, yet recent studies show no change in the overall injury rate. The “critical view of safety” technique of dissection (CV) provides all needed anatomic information and may reduce the risk of CBD injury.

*Hypothesis:* The CV technique is associated with a lower risk of CBD injury than IOC.

*Design:* Retrospective population database study.

*Setting:* 12 affiliated medical centers in southern California.

*Methods:* A database search identified all patients undergoing LC from January 2002 through December 2006, using Current Procedural Terminology codes. CBD injury was defined by a second surgical procedure to repair the CBD injury within 1 year. Rates of CBD injury with and without IOC were determined. Only 1 medical center used the CV method; these cases were analyzed as a subset.

*Main Outcome Measures:* Frequency of CBD injury in patients with and without IOC and CV.

*Results:* We identified 32,995 LCs and 165 CBD injuries (0.5%). CBD injury occurred in 129 of 28,620 patients without IOC (0.45%) and 29 of 4,375 with IOC (0.66%;  $P = .08$ ). Demographics did not differ across the 2 groups. Of the LCs performed, 3,042 were done with the CV. There was 1 CBD injury in this subset (0.03%; compared with IOC,  $P = .0001$ ).

*Conclusion:* The critical view of safety technique is superior to IOC in preventing CBD injury during LC.

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**NOTES:**

## Use of Microbial Sealant Significantly Reduces Incidence of Wound Contamination With Skin Flora

<p><b>AUTHORS:</b>                  Shirin Towfigh                  William G. Cheadle                  Stephen F. Lowry                  Samuel E. Wilson                  Mark A. Malangoni</p> <p><b>INSTITUTION:</b>                  University of California,                  Irvine, Orange, CA</p>	<p><b>PRESENTER:</b>                  Shirin Towfigh, MD</p> <p><b>PRIMARY DISCUSSANT:</b>                  Jonathan Hiatt, MD</p> <p><b>DISCUSSION CLOSED BY:</b>                  Samuel E. Wilson, MD</p>
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*Background:* Surgical site infection (SSI) remains a common cause of morbidity, despite standards for perioperative prophylactic antibiotics, hair clipping, and skin prepping. Many SSIs are caused by contamination from the patient's skin flora.

*Objective:* To reduce wound contamination from skin flora.

*Hypothesis:* Sealing skin flora before incision reduces microbial contamination of the wound.

*Design:* Prospective, randomized, multicenter clinical trial.

*Setting:* 6 teaching hospitals.

*Patients:* Adult patients undergoing elective open inguinal hernia repair.

*Methods:* For the study, 177 patients were randomized to standard skin preparation with 10% povidone-iodine or skin preparation followed by a cyanoacrylate-based liquid microbial sealant.

*Interventions:* Wound contamination was assessed during surgery by sampling inside the wound at initiation of skin incision and before skin closure.

*Main Outcome Measures:* Patient demographics included age, sex, height, weight, comorbidities, use of perioperative antibiotics, method of hair removal, incision length, mesh use, operative time, and skin closure technique. Wound samples were analyzed for quantitative bacterial counts. Wound infection was surveyed postoperatively for 1 month.

*Results:* Microbial sealant and control groups had similar demographics ( $P > .05$ ). Patients treated with sealant more commonly had no bacterial counts found in the wound as compared with control subjects (47% vs 31%;  $P = .04$ ). Three patients developed SSI, and all were in the control group ( $P = .25$ ). Independent factors that reduced wound contamination were use of microbial sealant (odds ratio [OR], 0.45; confidence interval [CI], 0.23–0.87;  $P = .02$ ) and perioperative antibiotics (OR, 0.245; CI, 0.10–0.59;  $P = .002$ ).

*Conclusion:* Cyanoacrylate-based microbial sealant may be an important tool to reduce wound contamination and potentially prevent SSI.

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**NOTES:**

## The Importance of Sentinel Lymph Node Biopsy in Patients With Thin Cutaneous Melanoma

**AUTHORS:**

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M. Faries, MD  
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D. L. Morton, MD

**INSTITUTION:**

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**PRESENTER:**

Byron Wright, MD

**PRIMARY DISCUSSANT:**

James Goodnight, MD

**DISCUSSION CLOSED BY:**

Richard Essner, MD

*Background:* Patients with thin melanoma are not typically offered sentinel lymph node biopsy (SLNB) because of the low incidence of nodal metastasis and perception that nodal status has little impact on outcome.

*Hypothesis:* We hypothesized that the status of the sentinel node (SN) confers important prognostic information for patients with thin melanoma.

*Setting:* Tertiary care cancer institute.

*Methods:* We queried our melanoma database to identify patients undergoing SLNB for thin ( $\leq 1.0$  mm) primary cutaneous melanoma. Slides of tumor-positive SNs were reviewed by a single melanoma pathologist to confirm nodal status and intranodal tumor burden, defined as isolated tumor cells (ITCs), micrometastases, or macrometastases ( $< 0.2$ ,  $0.2-2.0$ , or  $> 2.0$  mm, respectively). Nodal status was correlated with age and tumor depth ( $< 0.25$ ,  $0.26-0.50$ ,  $0.51-0.75$ , or  $0.76-1.0$  mm); survival was determined by log-rank test.

*Main Outcome Measures:* Disease-free (DFS) and overall survival (OS).

*Results:* Of 1,594 patients who underwent SLNB during the 1991–2004 period, 633 (40%) had thin melanomas; 31 (5%) of 633 had positive SNs. The Table shows nodal status and intranodal tumor burden according to tumor depth. At a median follow-up of 45 months, 10-year DFS was  $62\% \pm 14.1\%$  vs  $96\% \pm 1.3\%$  ( $P < .0001$ ) and 10-year OS was  $66\% \pm 14.4\%$  vs  $89\% \pm 2.7\%$  ( $P < .05$ ) for SN+ vs SN– patients. Positive SNs were more common in patients 50 years old or younger ( $P < .04$ ). SN status maintained prognostic importance in multivariate analysis (hazard ratio, 9.3; 95% confidence interval, 3.3–26.2;  $P < .0001$ ); intranodal tumor burden was not significant.

*Conclusions:* Status of the SN is a strong prognostic indicator in patients with thin melanoma. Therefore, SLNB should be selectively offered to patients desiring complete prognostic information.

<b>Depth of Primary Melanoma, in mm</b>				
	<0.25	0.25-0.50	0.51-0.75	0.76-1.00
SN-	12/13 (92%)	160/167 (96%)	186/194 (96%)	244/259 (94%)
SN+	1/13 (8%)	7/167 (4%)	8/194 (4%)	15/259 (6%)
ITC	1	4	1	8
Micro	0	2	6	7
Macro	0	1	1	0

NOTES:

## Planned Early Discharge—Elective Surgical Readmit Pathway for Patients With Gallstone Pancreatitis

**AUTHORS:**

Tatyan Clarke, MD  
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 Rebecca Kelso, MD  
 Mikael Petrosyan, MD  
 Shirin Towfigh, MD  
 Rodney Mason, MD

**INSTITUTION:**

Keck School of Medicine, University of Southern California, Los Angeles, CA

**PRESENTER:**

Tatyan Clarke, MD

**PRIMARY DISCUSSANT:**

Sherry Wren, MD

**DISCUSSION CLOSED BY:**

Rodney Mason, MD

*Objective:* To assess outcomes of using a clinical “Readmit Pathway” for managing patients with gallstone pancreatitis (GSP).

*Design:* Prospective cohort study.

*Setting:* County-based academic center.

*Patients:* 252 patients (202 women and 50 men; mean age, 41 years) admitted to the Division of Emergency Surgery from June 2005 to June 2007, with gallstone pancreatitis.

*Interventions:* The study group was managed with a clinical Readmit Pathway, which incorporated early hospital discharge after clinical resolution of pancreatitis and elective outpatient cholecystectomy. The control group was managed with supportive care followed by cholecystectomy during the same admission.

*Main Outcome Measures:* Overall length of hospital stay, time from admission to cholecystectomy, pathway or management failures, including unplanned readmissions for recurrent GSP, and perioperative morbidities.

*Results:* Results are shown in the Table.

	<b>Readmit Pathway (n = 108)</b>	<b>Control (n = 144)</b>	<i>P</i>
<b>Overall length of stay (d)</b>	5.9 ± 3.1	8.5 ± 6	< .001
<b>Time to cholecystectomy (d)</b>	27.8 ± 40.3	16.1 ± 35	.01
<b>Management failures</b>	33/108 (30.6%)	34/144 (23.6%)	.21
<b>Recurrent GSP</b>	7	-	
<b>Delay to surgery*</b>	10	15	
<b>Other</b>	16	19 <sup>†</sup>	
<p>* Factors that influenced failures were patient- and institution-related.  <sup>†</sup> Control group failure was defined as discharge without cholecystectomy.                      The overall morbidity was similar in the 2 groups.</p>			

*Conclusion:* This clinical Readmit Pathway significantly reduced length of stay without increasing complications. This may be an efficacious alternative for the management of patients with GSP in environments with restricted resources.

NOTES:

## Founders

Harold Brunn	Frank Hinman	Emmett Rixford
Thomas O. Burger	W. D. Kirkpatrick	Samuel Robinson
Samuel H. Buteau	Otis F. Lamson	Paul Rockey
S. L. Caldbick	A. Stewart Lobinger	Henry Sherk
Robert C. Coffey	Charles D. Lockwood	Ernst A. Sommer
Walter B. Coffey	A. O. Loe	Stanley Stillman
John F. Cowan	J. Tate Mason	Charles T. Sturgeon
Richard B. Dillehunt	A. Aldridge Matthews	George W. Swift
Sumner Everingham	J. B. McNerthney	Wallace G. Toland
Charles Fox	Wayland A. Morrison	Alanson Weeks
Edgar L. Gilcrest	Howard C. Naffziger	Horace G. Wethrill
Philip K. Gilman	Charles E. Phillips	

## Past Presidents and Meetings

President	Elected Year	Location	Meeting Year	Caucus
Bruce Stabile	2007	San Diego, CA	2008	SC
Michael J. Hart	2006	Kohala Coast, HI	2007	AK/BC/WA
Cornelius Olcott IV	2005	San Francisco, CA	2006	NC
Samuel Eric Wilson	2004	Laguna Nigel/Dana Point, CA	2005	SC
Livingston Wong	2003	Wailea, HI	2004	HA/OR
Thomas R. Russell	2002	Monterey, CA	2003	NC
Theodore X. O'Connell	2001	Las Vegas, NV	2002	SC
John K. MacFarlane	2000	Banff, AB	2001	AK/BC/WA
Robert C. Lim, Jr.	1999	San Francisco, CA	2000	NC
Thomas V. Berne	1998	San Jose del Cabo, Baja, Mexico	1999	SC
R. Mark Vetto	1997	Kaanapali Beach, HI	1998	HA/OR
F. William Heer	1996	Napa Valley, CA	1997	NC
Ronald K. Tompkins	1995	San Diego, CA	1996	SC
Meredith P. Smith	1994	Seattle, WA	1995	AK/BC/WA
Norman M. Christensen	1993	Sacramento, CA	1994	NC
Louis L. Smith	1992	Scottsdale, AZ	1993	SC

President	Elected Year	Location	Meeting Year	Caucus
Clare G. Peterson	1991	Keonelo Bay at Poipu, Kauai, HI	1992	HA/OR
Allen H. Johnson	1990	Pebble Beach	1991	NC
Eric W. Fonkalsrud	1989	Laguna Niguel, CA	1990	SC
George I. Thomas	1988	Vancouver, BC	1989	AK/BC/WA
John K. Stevenson	1988	Vancouver, BC	1989	AK/BC/WA
F. William Blaisdell	1987	San Francisco, CA	1988	NC
John E. Connolly	1986	Rancho Mirage, CA	1987	SC
Thomas J. Whelan, Jr.	1985	Maui, HI	1986	HA/OR
Roy Cohn	1984	Monterey, CA	1985	NC
Wiley F. Baker	1983	Newport Beach, CA	1984	SC
Hilding H. Olson	1982	Seattle, WA	1983	AK/BC/WA
David J. Dugan	1981	Napa Valley, CA	1982	NC
William R. Mikkelsen	1980	Coronado, CA	1981	SC
Thomas R. Montgomery	1979	Hawaii	1980	HA/OR
Philip R. Westdahl	1978	Yosemite, CA	1979	NC
William F. Pollock	1977	Newport Beach, CA	1978	SC
Carl R. Schlicke	1976	Palm Springs, CA	1977	AK/BC/WA
Ralph D. Cressman	1975	Monterey, CA	1976	NC
Max R. Gasper	1974	Scottsdale, AZ	1975	SC
Allen M. Boyden	1973	Kaanapali Beach, HI	1974	HA/OR
Paul C. Samson	1972	Yosemite, CA	1973	NC
Gordon K. Smith	1971	San Diego, CA	1972	SC
Joel W. Baker	1970	Mexico City, Mexico	1971	AK/BC/WA
H. Brodie Stephens	1969	San Francisco, CA	1970	NC
Lyman A. Brewer III	1968	Palm Springs, CA	1969	SC
Matthew McKirdie	1967	Honolulu, HI	1968	HA/OR
Leon Goldman	1966	Monterey, CA	1967	NC
Arthur Pattison	1965	Palm Springs, CA	1966	SC
Ralph H. Loe	1964	Vancouver, BC	1965	AK/BC/WA
Carleton Mathewson, Jr.	1963	San Francisco, CA	1964	NC
John C. Jones	1962	Palm Springs, CA	1963	SC
John E. Raaf	1961	Portland, OR	1962	HA/OR
Robert A. Scarborough	1960	San Francisco, CA	1961	NC
Clarence J. Berne	1959	Palm Springs, CA	1960	SC
Caleb S. Stone, Jr.	1958	Victoria, BC	1959	AK/BC/WA
H. Glenn Bell	1957	Santa Barbara, CA	1958	NC
William J. Norris	1956	Palm Springs, CA	1957	SC
Louis R. Gambie	1955	Palm Springs, CA	1956	HA/OR
Loren R. Chandler	1954	Yosemite, CA	1955	NC

President	Elected Year	Location	Meeting Year	Caucus
E. Eric Larson	1953	Santa Barbara, CA	1954	SC
Alexander B. Hepler	1952	Harrison Hot Springs, BC	1953	AK/BC/WA
Alson R. Kilgore	1951	Del Monte, CA	1952	NC
William K. Kroger	1950	Coronado, CA	1951	SC
Eugene W. Rockey	1949	Gearhart, OR	1950	HA/OR
Howard C. Naffziger	1948	San Francisco, CA	1949	NC
Leroy B. Sherry	1947	Los Angeles, CA	1948	SC
Homer D. Dudley	1946	Victoria, BC	1947	AK/BC/WA
Philip K. Gilman	1945	San Francisco, CA	1946	NC
Philip K. Gilman	1944	No meeting due to WWII	1945	NC
Philip K. Gilman	1943	No meeting due to WWII	1944	NC
Philip K. Gilman	1942	No meeting due to WWII	1943	NC
Philip K. Gilman	1941	No meeting due to WWII	1942	NC
Charles T. Sturgeon	1940	Los Angeles, CA	1941	SC
Richard B. Dillehunt	1939	Pointland, OR	1940	HA/OR
Sumner Everginham	1938	Del Monte, CA	1939	NC
Wayland A. Morrison	1937	Los Angeles, CA	1938	SC
Otis F. Lamson	1936	Vancouver, BC	1937	AK/BC/WA
Harold Brunn	1935	Del Monte, CA	1936	NC
E. C. Moore	1934	Santa Barbara, CA	1935	SC
Ernst A. Sommer	1933	Gearhart, OR	1934	HA/OR
Emmet Rixford	1932	Del Monte, CA	1933	NC
Rea Smith	1931	Santa Barbara, CA	1932	SC
J. Tate Mason	1930	Victoria, BC	1931	AK/BC/WA
Wallace I. Terry	1929	Del Monte, CA	1930	NC
A. Stewart Lobinger	1928	No info available	1929	No info available
Robert C. Coffey	1927	No info available	1928	No info available
Stanley Stillman	1926	No info available	1927	No info available
Charles D. Lockwood	1925	Del Monte, CA	1926	NC
Founder's Meeting		San Francisco, CA	1925	

He was proud to be President of the Portland Surgical, North Pacific Surgical Association, and the Pacific Coast Surgical Association. Dr. Bill Mikkelson, my mentor at USC, described Clare as the most intellectual of surgeons. After one of Dr. Peterson's classic discussions of a PCSA paper in 1980, Dr. Mikkelson, who was then PCSA President, said "Clare, that was beautifully said. Unfortunately, many of us now will need to consult a dictionary." No Oregon/Hawaii Caucus would be brief if Clare were there with an opinion. His interests were many besides medicine and science. He loved art, music, literature, and golf. He was a skilled golfer and member of the prestigious Waverly Country Club founded in 1896 where he had his 50th wedding anniversary.

Family was most important to Clare. He cherished his wife, Harriet, of 66 years, and his beloved children—three daughters Sue, Mae, and Mary, and a son Ernest. He had 10 grandchildren and one great-grandchild. One of Clare's favorite books was *The Little Prince*. The secret of *The Little Prince* is that one sees clearly only with heart. Clare will be missed by many people for his wisdom, intellect, guidance, healing touch, and love.

—Jim Peck, MD



WILLIS C. SCHAUPP  
1927–2006

Willie, as he was affectionately known, died peacefully at California Pacific Medical Center on April 12, 2006, of infectious complications of Cronkite-Canada Disease. This esoteric disease is associated with extensive hamartoma polyps of the stomach. The disease is associated with malabsorption, diarrhea, and weight loss.

He was proud to be a San Franciscan, born there on April 9, 1927, to Dr. Karl L. and Mrs. Enid F. Schaupp. He graduated from Grant School in 1940 and Lowell High School in 1944. He served 18 months in the V-12 Navy officers' training program at UCLA, and following the end of WWII, earned a BA degree from Stanford University. He then started Stanford Medical School but finished his clinical years at Harvard Medical School in 1950, at age 23.

He was tempted to join the "family business" in San Francisco where his father and two brothers, Karl and John, practiced Obstetrics and Gynecology and led the Ob-Gyn Stanford teaching service at San Francisco General Hospital, but decided to opt out and pursue a surgical career instead. However, immediately following receipt of his MD degree, the Korean War was on and this required a second period of military service. This included 18 months off the coast of Japan on the destroyer tender USS Bryce Canyon. This second naval tour delayed his surgical residency, which began at Stanford Hospital (1953–54) and ended with him as Chief Resident at San Francisco General Hospital in 1958 (Stanford Service). During his residency he loved to teach and constantly rattled

forth on any and all medical subjects, including many humorous stories, much to the delight and education of his juniors.

Upon completion of his training he initiated a practice in general surgery, but shortly thereafter he decided to specialize in proctology. Willie devoted himself *fully* to his profession and his patients for 55 years until his retirement at the end of 2005. Further, following family tradition, he volunteered to teach which he did at San Francisco General and Children's Hospitals, earning the rank of Clinical Professor of Surgery at UCSF. He used to say that he knew at age 12 that he wanted to be a doctor and that he never had second thoughts about the chosen profession he loved.

In 1948, he married his high school sweetheart, Anne W. Veazie. Three children were born of this union—Will Jr., Pamela, and Veazie. In 1969 Anne died suddenly and tragically at age 42. In 1970 a new family was formed when Willie married Joan W. Pinger who had two children from a previous marriage. Gradually the blended family relocated to Stinson Beach, where Joan and Willie lived for many years until Joan's death in July 2004.

Willie was an avid outdoors man, hunter, and fisherman. He was a hobbyist with broad interests and a brilliant tinkerer and do-it-your-selver. He was a member of the Bohemian Club and the Pacific Coast Surgical Association. He was an accomplished story teller and continually entertained his children and grandchildren. He had a natural ability to project enthusiasm that he honed as a teacher.

He is survived by five children: Willis C. Schaupp, Jr., of Rapid City, SD; Pamela Stragnell and her husband, Sanford, of Huletts Landing, NY; Ned Pinger and his wife, Minna Towbin, of New York, NY; Whitney Pinger and her husband, Roger Pollak, of Washington, DC; and Veazie Schaupp of San Francisco. In addition he is survived by 11 grandchildren: Carol Anne and Robert Stragnell; Lillian and Hannah Schaupp; Eli, Jesse, Robin and Rosie Pinger Pollak; and Dash, Belmont, and Zyla Pinger.

—F. William Blaisdell, MD



## EDWARD A. STEMMER

1930–2007

The life of Edward A. Stemmer, MD, drew peacefully to a close Saturday morning, July 21, 2007. Dr. Stemmer was a Clinical Professor of Surgery at the University of California, Irvine who exerted extraordinary influence in the development of the new School of Medicine at Irvine and who served 42 years as Chief of Surgical Service, at Veterans Affairs Medical Center in Long Beach.

Dr. Stemmer was born in Cincinnati, OH, on January 30, 1930. He obtained an undergraduate degree from the University of Chicago in 1949 and his MD degree from the same school in 1953. He interned at the University of Chicago progressing to senior resident in surgery in 1960 and completed his training in cardiothoracic surgery at Stanford University after two years active duty as a flight surgeon in the United States Air Force. He was certified by the American Board of Surgery in 1962 and in thoracic surgery the following year.

Dr. Stemmer's first academic positions were at Stanford and the University of Utah. He was recruited in July 1965 as Chief of Surgery at the Veterans Affairs Medical Center in Long Beach. This critical appointment transferred the academic affiliations from a triumvirate of Los Angeles medical schools to the sole relationship the Long Beach VA enjoys today with the University of California, Irvine. Even this early in his academic career, he found time for important administrative duties such as curriculum planning for surgical students, clinical faculty review, promotions and appointments, instructional resources, multiple search committees and service in the Academic Senate. He stepped in to rescue the Department of Surgery as Acting Chair for two years 1978–1980 during which time the department was searching for a successor to the founding chairperson. He fostered the integrated relationship of the Department of Surgery at both VA and University and California, Irvine so that most faculty surgeons held

duel appointments. Above all, he emphasized education within the Department of Veterans Affairs health care system. He was an organizing member for the National Quality Insurance Program (NQIP) that is now the standard for measuring outcomes throughout the Department of Veterans Affairs Hospitals and for the American College of Surgeons.

From the beginning Dr. Stemmer's academic direction was in cardiovascular surgery. He participated in many cooperative trials and published well over 100 articles in the peer-reviewed literature, his most recent within the last year. His earliest contribution, however, was a demonstration that parental nutrition alone could maintain growth of puppies and was much heralded when published in 1956.

In the early days of cardiopulmonary bypass surgery, Dr. Stemmer's name appeared on many publications describing innovative methods in both cardiac and peripheral bypass surgery. More recently he edited a standard text book on the management of cardiovascular disease in the elderly patient. Recognition of Dr. Stemmer's professional career came by appointments and awards but, most importantly, he earned the gratitude of the many residents and faculty who were privileged to call him "The Chief".

Dr. Stemmer served as President of the Association of VA Surgeons and received the distinguished service award from the Department of Veterans Affairs. He was President of the Southern California Chapter of the American College of Surgeons and President of the Los Angeles Surgical Association. He received the military order of the Purple Heart and Distinguished Service Award of the American Heart Association. He was a member of all the important surgical societies including the PCSA, American Surgical Association, the Society of University Surgeons, and the American College of Surgeons. Dr. Stemmer examined regularly for the American Board of Surgery. Those of us who were fortunate enough to work with Edward Stemmer remembered his willingness to help out with any clinical problem. His patience in assisting residents in the operating room, his fairness in all personnel interactions, his wisdom in Morbidity and Mortality Conferences, and most of all, his determination to complete the task assigned were exemplary. Indeed, despite a debilitating last six months which he bore stoically, Dr. Stemmer kept involved in surgical affairs until the very end.

Dr. Stemmer is survived by his wife, Lois, and family of five children—four daughters, Susan, Linda (Robert), Nancy (Keith), Carol (Bryan), son, Paul, a surgeon practicing in Southern California, and 10 grandchildren.

—*Samuel Eric Wilson, MD*



## PHILIP R. WESTDAHL

1912–2005

Philip Westdahl, former President of the Pacific Coast Surgical Association, died peacefully at the age of 93 surrounded by his family on September 16, 2005. Phil's death occurred as a result of complications of a hip fracture caused by a fall during a family vacation in the San Juan Islands.

Born in San Francisco, Phil graduated from Galileo High School, a good student, where he excelled as an athlete on the football team, swim team, and crew team. He was the captain of the championship crew team, was elected class president and served in the ROTC during his senior year in high school in 1930.

He matriculated at UC Berkeley thereafter but held colorful summer jobs at a lumber camp in 1929 and 1930, and as an ordinary seaman on the Dollar Line Ship cruising to ports in Hawaii, Japan, China, Hong Kong, the Philippines to New York and home via Cuba and the Panama Canal in 1931. In 1932 and 1933 he worked as a stevedore on the waterfront in San Francisco and in 1934 worked as an orderly at San Francisco General Hospital because of the famous waterfront strike during that year.

Phil began his academic career at Berkeley as a General Letters and Science student. He rowed on the freshman and sophomore crew teams and also served in the ROTC which he led in his senior year. He was a member of the Kappa Sigma fraternity, the Skull and Keys Society, and the Order of the Golden Bear Honor Society.

He matriculated at the Stanford University Medical School after four years of study at Berkeley prior to graduation and received the BA degree from Stanford after the first year of medical school. He received his MD degree from Stanford in 1939.

He did his residency training on the Stanford Service at the San Francisco General Hospital under the legendary Leo Eloesser. However, in April, 1942, his residency training was interrupted by active duty military service as a member of the famous 59th Evacuation Hospital formed by the Stanford Service and commanded by Carleton Mathewson. Phil saw action in North Africa, Sicily, Naples, Anzio, Southern France, and Germany prior to his return home in October 1945 to complete his residency training. Phil carried a bullet that he removed from the brain of a German soldier (who survived) on his key chain for the rest of his life—his lucky bullet!

After completion of residency in 1946, Phil entered surgical practice in San Francisco with John Cline. His secretary soon after critiqued him because she felt he was charging too little for his services. Phil was always more interested in patients than income. He was an outstanding clinician and technical surgeon who practiced surgery with compassion. Once, as a chief resident, I observed him, without his knowledge, hold the hand of an elderly patient with ischemic bowel gently advising an operation in an attempt to save her life. His genuine concern and compassion made a deep impression upon me. He rose to prominence in the surgical community serving as President of the San Francisco Surgical Society and the Northern California Chapter of the American College of Surgeons as well as the Pacific Coast Surgical Association.

Phil was also a creative thinker, ahead of his time. In the last 10 years of his career, his practice gravitated toward breast surgery. Working with Michael Lagios, the pathologist at Children's Hospital, he was one of the first surgeons to challenge the conventional wisdom of modified radical mastectomy. He was attacked for performing "lumpectomy and axillary dissection" but studied and published his excellent results. In time, some surgeons who had previously criticized him, referred their wives to him for care. His vision proved to be correct and is now part of the standard treatment for women with breast cancer.

Phil was an active member of the community. Soon after his return from the war, he joined “The Guardsmen”, an organization devoted to sending underprivileged children to summer camp. Typically, he soon rose to become President of The Guardsmen. He served on the Boys Welfare Committee whose members took boys from Juvenile Court under their wings. Phil’s “boy” became almost a member of the family and he and his family remained steadfast friends throughout the years. He later served the San Francisco Boys and Girls Clubs remaining an active member for more than 50 years and receiving several awards for service gladly given. Phil was also an active member of the Family Club and started the “Make-Up Committee” which prepared the actors and performers for their roles in the many shows presented at the Family Club. The Club honored Phil for his many contributions by naming the “Make-Up Room” the “Westdahl Room”.

Several months before military mobilization, Phil married the love of his life, Georgia, who was all of 20 years of age at the time of their marriage! They had been sweethearts for many years as their families vacationed near each other in cabins on the Russian River. Phil and Georgia later bought a cabin on the Russian River and happily spent a great deal of time together at this favorite spot. Phil and Georgia had four wonderful children: Laurie, Georgia, Paula, and Philip. Sadly, Phil was predeceased by his son Philip. Family vacations consisted of canoe trips on the Russian River, backpacking trips in Yosemite National Park, and skiing at Tahoe and Badger Pass. Phil and Georgia now have two grandchildren and two great granddaughters.

Phil took an interest in the many young surgeons (now not so young!) he met. His Pacific Coast Presidential Address, “A Letter to Jim”, is a paragon of modesty and a prescription for a successful surgical career and safe surgical practice long before the safety concept became “fashionable”. His Presidential Address should be required reading for all surgical residents. Phil Westdahl was an outstanding surgeon, but more importantly, a truly good man who lived his life with love, joy, and passion in the service of others.

—William P. Schecter, MD



# Deceased



Leroy C. Abbott	1966	C. James Carrico	2002	James B. Eagelson	1928
Alfred O. Adams	1989	Charles R. Cavanagh	2006	K. William Edmark	1994
Lemuel P. Adams	1940	Lawrence Chaffin	1995	William K. Ehrenfeld	2005
Frank Anderson	1989	Loren R. Chandler	1982	Charles F. Eikenbary	1933
Harvey Baker	1990	Herbert S. Chapman	1963	Leo Eloesser	1976
Joel Wilson Baker	1999	Lester R. Chauncy	1962	John E. Else	1935
Edwin J. Bartlett	1954	Walter C. Chidester	1936	Sumner Everingham	1959
Robert H. Beach	1969	Albert Guernsey Clark	2002	Fred R. Fairchild	1959
Hiram Belding III	1984	James S. Clarke	1976	Jack M. Farris	1990
H. Glenn Bell	1981	Edwin G. Clausen	1966	Paul G. Flothow	1953
Folkert O. Belzer	1995	Harry B. Cliff	1951	Frederick C. Foote	1958
Frederick H. Bentley	1980	John W. Cline	1974	Robert D. Forbes	1974
Clarence J. Berne	1987	Guy H. Cochran	1940	Hugh S. Ford	2003
Eugene F. Bernstein	1995	Robert C. Coffey	1933	Charles M. Fox	1962
Alexander H. Bill	1996	Walter B. Coffey	1944	Donald M. Gallagher	1997
Frederick M. Binkley	2006	Arthur Cohen	1988	Louis R. Gambee	1957
John F. Binnie	1936	Roy Cohn	1998	Richard E. Gardner	1995
Walter D. Birnbaum	2004	Foster K. Collins	1939	Frank Gerbode	1984
Harry M. Blackfield	1983	John Collins	1992	August E. Gerhardt	1942
Harry Blair	1975	Hugh D. Colver	2002	Edgar L. Gilcrest	1964
George M. Bogardus	1974	Donald G. Corbett	1980	Philip K. Gilman	1948
Frederic C. Bost	1959	John F. Cowan	1929	John Gius	1998
Allen Boyden	1993	Francis J. Cox	1981	John M. Goin	1995
Donald F. Brayton	2002	Peter Crabtree	1955	Leon Goldman	1975
Lyman A. Brewer III	1988	Albert C. Daniels	1985	John N. Goodwin	1998
A. Lincoln Brown	1962	Sherman W. Day, Jr.	1999	Willard E. Goodwin	1998
Maurice Brown	2003	John Dawson	2006	H. Earl Gordon	2007
Rexwald Brown	1940	Lawrence DenBesten	1988	Robert H. Gourlay	2001
Clarence W. Brunkow	1974	Richard Diefendorf	1994	Walter Graham	1990
Harold Brunn	1950	David H. Dillard	1993	W. Wallace Greene	2003
Thomas O. Burger	1953	Richard D. Dillehunt	1953	Charles A. Griffith	1995
Lucian C. Buscaglia	2004	Edward T. Dillon	1939	Orville Frank Grimes	1998
Samuel H. Buteau	1926	Leonard Dobson	1979	Leroy E. Groshong	2003
Edmond Butler	1996	Frank Dolley	1961	Lewis Guiss	1992
Edmund Butler	1955	Homer D. Dudley	1950	Jack R. Gustafson	1998
Ralph V. Byrne	1981	David J. Dugan	1999	Russell G. Gustavson	2001
Samuel L. Caldbick	1941	John Duncan	1988	Donald Hall	1994
James R. Cantrell	1983	J. Englebert Dunphy	1981	Bert L. Halter	1995

John R. Hand	1991	Maurice Kahn	1950	J. Tate Mason	1936
Kenneth L. Hardy	1973	Edmund Kanar	1996	J. Tate Mason, Jr.	1997
Henry N. Harkins	1967	Allen B. Kanavel	1938	Carleton Mathewson, Jr.	1989
R. Cameron Harrison	2002	Joseph J. Kaufman	1999	Ralph C. Matson	1945
Sherman W. Hartman	1979	Paul A. Kennedy	1993	A. Aldridge Matthews	1940
Leonard D. Heaton	1983	John H. Kieraldo	1977	Karl J. May, Jr.	2003
Erle Hendriksen	1996	Alson R. Kilgore	1959	Ray B. McCarthy	1950
R. Bruce Henley	1966	Eugene S. Kilgore	2003	Horce McCorkle	2001
Alexander B. Hepler	1971	Brien T. King	1965	Ian McDonald	1967
Clifford M. Herman	2007	Lawrence B. Kiriluk	1997	Robert E. McKechnie	1974
Siegfried F. Herrman	1970	W. D. Kirkpatrick	1954	Francis M. McKeever	1973
George A. Higgins, Jr.	1994	William S. Kiskadden	1969	Robert J. McKenna	2005
John Higginson	1998	Russell R. Klein	1991	Allen McKenzie	1992
Lucius D. Hill	2001	Samuel L. Kountz	1982	Matthew McKirkie	1984
Frank Hinman	1961	Wm. W. Krippaehne	1985	Thomas R. McNab	1948
Harold H. Hitchcock	1955	William Kroger	1981	J. B. McNerthney	1928
William B. Holden	1955	William C. Krupski	2004	David Metheny	1972
Emile F. Holman	1977	Otis F. Lamson	1957	Bert W. Meyer	2006
George M. Horton	1927	Henry J. Lange	2002	Herbert W. Meyer	1973
Lucius W. Hotchkiss	1925	E. Eric Larson	1962	William P. Mikkelsen	1990
Martin A. Howard	1980	Earl P. Lasher, Jr.	1984	Thomas Montgomery	1999
Nelson J. Howard	1981	Roy E. Lau	2007	Herbert S. Mooney	1989
Arthur Hunnicutt	1993	G. Hugh Lawrence	2001	Alois E. Moore	1970
Verne C. Hunt	1943	Sanford Leeds	1995	E. C. Moore	1945
Thomas W. Huntington	1929	Frederick Leix	2003	Thomas C. Moore	2004
Edward John Hurley	2007	George C. Lindesmith	2006	William Moore	1969
William B. Hutchinson	1927	Wm. K. Livingston	1966	Wayland A. Morrison	1949
Paul Pierce Jackson	2000	Allan W. Lobb	1998	Edmund G. Morrissey	1986
Conrad Jacobson	1955	A. Steward Lobinger	1939	Lewis B. Morton	1943
Robert W. Jamplis	2003	Charles D. Lockwood	1932	H. Stephens Moseley	1995
W. Kenneth Jennings	1981	A. O. Loe	1935	Roscoe E. Mosiman	1981
Floyd H. Jergensen	1990	Ralph H. Loe	1970	Herbert John Movius	2004
Eugene Joergenson	1990	William P. Longmire, Jr.	2003	George Mulfinger	2007
Clark M. Johnson	1948	Alvin H. Lorch	1962	Bernard P. Mullen	1978
Murray L. Johnson	1995	Leo S. Lucas	1961	Thomas F. Mullen	1967
John C. Jones	1976	Vetnon Lundmark	1971	Joseph Murray	2004
S. Austin Jones	1985	Frank W. Lynch	1945	Joseph W. Nadal	2001
Thomas W. Jones	2006	Clayton G. Lyon	1983	Howard C. Naffziger	1961
Thomas M. Joyce	1947	Charles E. MacMahon	1980	Gunther Nagel	1993
Charles Judd	1987	Gordon E. Madding	1989	Millard T. Nelson	1945
James R. Judd	1947	Thomas L. Marchioro	1995	J. Norton Nichols	1972

William Norris	1987	Eric R. Sanderson	1982	C. T. Sturgeon	1967
Hilding H. Olson	2007	Robert A. Scarborough	1976	William H. Sutherland	1988
Claude H. Organ, Jr.	2005	Willis Schaupp	2006	William R. Sweetman	1990
Arthur C. Pattison	1975	John A. Schilling	2000	George W. Swift	1938
John R. Paxton	1968	Carl P. Schlicke	2001	Joseph K. Swindt	1945
J. Howard Payne	1984	John M. Schmcele	1963	David Tapper	2002
Seibert Pearson	1993	Karl J. Schmutzer	1988	William A. Taylor	1947
Harry Emerson Peters	1998	G. Edward Schnug	2002	Wallace I. Terry	1950
Richard M. Peters	2006	Albert J. Scholl	1982	Clarence G. Toland	1947
Clare Peterson	2007	Dean Seabrook	1960	Donald Trueblood	1958
Charles E. Phillips	1945	Henry H. Searls	1974	Ernest F. Tucker	1927
Roland Pinkham	1986	Casper W. Sharples	1941	Robinson Ward	1976
William F. Pollack	2001	C. Hunter Shelden	2003	Horace D. Warden	2006
John M. Porter	2001	Henry H. Sherk	1926	Raymond E. Watkins	1945
Frederick W. Preston	1996	LeRoy B. Sherry	1968	Edward Ewing Wayson	1982
Kirk H. Prindle	1975	Frederic P. Shidler	2004	Alanson Weeks	1947
John E. Raaf	2000	Norman E. Shumway	2006	Joseph A. Weinberg	1986
Kenneth P. Ramming	2004	Henry L. Silvani	1983	Robert F. Welty	1989
Beatty Haig Ramsey	2000	Andrew C. Smith	1944	Francis E. West	1982
Clarence E. Rees	1963	Ernest T. Smith	1995	Philip R. Westdahl	2005
David L. Reeves	1971	Gordon K. Smith	1982	Horace G. Wethrill	1941
Frederick L. Reichert	1969	Rea Smith	1935	Thomas J. Whelan, Jr.	1999
George K. Rhodes	1944	William R. Smith	1988	Thomas T. White	1988
Dexter N. Richards	1965	William H. Snyder, Jr.	1974	Parke Weede Willis	1958
Victor Richards	2002	Ernest A. Sommer	1936	Irving Wills	1967
Emmet Rixford	1938	Alfred B. Spalding	1942	John Wilson	2001
Joseph M. Roberts	1990	Charles H. Sparks	1973	John C. Wilson	1957
Ross Robertson	1993	Edward Spier	1971	John C. Wilson, Jr.	1984
R. Edward Robins	2004	David Sprong	1978	Nat D. Wilson	2006
Samuel Robinson	1947	Clarence E. Stafford	1974	Roger Wilson	1973
A. E. Rockey	1927	Howard Stearns	1985	Dean F. Winn	2006
Eugene W. Rockey	1970	Muriel Steele	1980	Robert A. Wise	1972
Paul Rockey	1952	John H. Steelquist	1986	J. Homer Woolsey	1980
William L. Rogers	1987	Edward A. Stemmer	2007	Edwin J. Wylie	1982
Grosvenor Root	1993	H. Brodie Stephens	1983	Raymond L. Zech	1963
Millard Rosenblatt	2000	John K. Stevenson	1988		
Leonard Rosoff	2001	Stanley Stillman	1934		
Charles J. Rowan	1952	Caleb S. Stone, Jr.	1982		
William R. Russell	1988	Brian D. Stringer	2005		
John R. Rydell	1991	Joseph E. Strode	1972		
Paul C. Samson	1982	J. Guy Strohm	1973		

ARTICLE I

*Section 1.* The name of this Association shall be THE PACIFIC COAST SURGICAL ASSOCIATION.

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ARTICLE II

*Section 1.* The object of the Association shall be to advance the science and practice of surgery.

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ARTICLE III

*Section 1.* The Association shall consist of Active, Senior, Honorary, and Non-Resident Fellows.

*Section 2.* Active membership shall be limited to 230 Fellows, the number elected each year to be left to the discretion of the Council.

*Section 3.* No one shall be eligible for membership unless his/her practice is limited to surgery and he/she has established a reputation as a practitioner, author, teacher or original investigator, and has been recommended by the Council. Candidates must be in practice for two years on the West Coast. The candidate shall also have been certified either by the American Board of Surgery, the appropriate specialty Board, or its foreign equivalent.

*Section 4.* The Council shall have the power of decision in the consideration of each candidate's eligibility and its judgment upon such eligibility shall be final. No candidate for membership shall be voted upon at the executive session of the Association unless recommended by the Council.

*Section 5.* Proposals for membership shall be made by Fellows on applications furnished by the Secretary of the Association. The proposal of a candidate for membership shall be supported by letters to the Secretary from each of the three sponsors who shall vouch for his/her character and standing. The application and letters shall be presented to the Council by the Secretary.

*Section 6.* Proposals for membership, properly filled out, accompanied by the necessary endorsements and confidential letters from the sponsors, shall be in the hands of the Secretary at least six months before the date of the annual meeting. Three months before the annual meeting, the Secretary shall send to each member of the Association a list of all candidates for active membership and a printed summary of their qualifications, including educational attainments and professional positions. Members are encouraged to submit to the Council written comments on the candidates' qualifications for membership. The Council at its Annual Meeting shall, after full consideration of all information available, recommend to the Association such candidates as are qualified for membership. The Council shall have the power to request

from any member of the Association a careful and unbiased investigation of the qualifications of any candidate for election to the Association.

Any candidate for active membership may be assigned to a member of the Council for careful investigation as to his/her personal and professional qualifications.

*Section 7.* After recommendation by the Council, election to Fellowship shall be by ballot at the executive session of each Annual Meeting and if three-quarters of the ballots are favorable, the candidate shall be declared elected.

*Section 8.* Candidates who have not been recommended for active membership by the Council three years after nomination, shall be withdrawn and their sponsors notified. This action shall not prevent the reproposal of such candidates for membership. Any candidate for Fellowship who has been recommended by the Council, but not elected by the Association cannot be proposed again for membership for at least two years.

*Section 9.* Prospective Fellows after election must qualify within three months by the payment of the initiation fee and annual dues to the Treasurer and by filing a recent 8"×10" photograph with the Association. To become an Active member, the nominee shall be expected to attend the first Annual Meeting after election to be introduced to the Association and to receive the certificate of membership. Should the nominee fail to attend the first subsequent meeting, the second Annual Meeting must be attended. If the nominee is unable to attend the second meeting, membership will not be conferred subject to action by the Council. Fees contingent on membership will not be refunded.

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#### ARTICLE IV

*Section 1.* Candidates for Honorary Fellowship shall be nominated by the Council and elected by ballot at the executive session of the Annual Meeting. Honorary Fellows shall not be required to pay dues or initiation fee and shall enjoy all the privileges of other Fellows except those of voting and holding office.

*Section 2.* All Fellows automatically shall become Senior Fellows at the age of sixty (60) years. They shall pay dues to the age of seventy (70) years or upon retirement from active practice, whichever occurs first. They shall have the privilege of voting and holding office.

*Section 3.* A Non-Resident Fellow shall be a Fellow under the age of sixty who no longer resides in the Pacific Coast geographical area. He/She shall be excused from attendance requirements. He/She may vote at such meetings as he/she attends and enjoy all the privileges of the Association except that he/she may not hold office or membership on standing committees. He/She shall pay annual dues. A request for non-resident status must be submitted in writing to the Secretary and shall be granted only by the Council. Upon written request the Council may restore a Non-Resident Fellow to active status. At its discretion, the Council may terminate membership as a Non-Resident Fellow.

A Non-Resident Fellow shall automatically become a Senior Fellow at age sixty.

*Section 4.* The resignation of a Fellow may be accepted at the discretion of the Council.

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## ARTICLE V

*Section 1.* The officers of the Association shall be a President, a President-Elect who becomes President one year following election, a President-Elect who becomes President two years following election, a Vice-President, a Secretary-Treasurer, a Recorder, an Historian, and four Councilors. There shall be a Program Committee appointed by the President, consisting of five members, one representing each of the four geographical sections of the Association, and the Recorder, who shall act as Chairman. The Council member and the Program Committee member who resides in the same geographical area as the Recorder shall act as an Advisory Committee to him/her.

*Section 2.* The Presidents-Elect, the Vice-President, the Secretary-Treasurer, the Recorder, and the Historian shall be elected for one year, and a Councilor shall be elected as provided by the Bylaws. The President shall not be eligible for reelection at any time. The Secretary-Treasurer and Recorder shall not serve more than six years, shall not both be retired in the same year, and shall not be elected from the same region of the Association.

*Section 3.* All officers shall be nominated by a Committee, appointed by the President, consisting of the three most recent past Presidents, at least three (3) months prior to the Annual Meeting. Additional nominations may be made from the floor.

*Section 4.* The election of officers shall take place at an executive session of the Annual Meeting. A majority of votes cast shall constitute an election.

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## ARTICLE VI

*Section 1.* It shall be the duty of the President to be present and to preside at all meetings of the Association; to see that the rules of order and decorum are properly enforced in all deliberations of the Association; to sign the certificates of Fellowship.

*Section 2.* In the absence of the President, the Vice-President shall preside, and in the absence of the Vice-President, the Secretary-Treasurer shall preside.

*Section 3.* In the absence of all three, the Association shall elect one of its Fellows to preside pro tem.

*Section 4.* The Secretary-Treasurer shall keep the minutes of the Association and shall issue, at least six weeks prior to the Annual Meeting, a preliminary notice of the time and place of the meeting, and the business to be transacted. He/She shall issue the final program of the Annual Meeting and a list of the names of the candidates for Fellowship who are under consideration by the Council. He/She shall attest all official acts requiring certification, in connection with or independent of the President, notify officers and Fellows

of their election, keep in his/her custody the Seal of the Association and affix it to all documents and papers that the Association may direct; take charge of all papers not otherwise provided for. He/She shall serve as Secretary and keep minutes of the meetings of the Council. He/She shall, with the President, sign the certificates of Fellowship and receive all monies and funds belonging to the Association. He/She shall pay the bills of the Association, collect all dues and assessments as promptly as possible, report to the Association at each Annual Meeting the names of all Fellows in arrears who have, in accordance with the Bylaws, regulating the same, forfeited their Fellowship. He/She shall annually present a review of the Association's finances performed by a Certified Public Accountant. A full audit shall be performed as determined by the Council.

*Section 5.* It shall be the duty of the Historian to assemble and preserve the Archives of the Association for storage and reference. The Archives shall consist of the roster of the members of the Association since its inception, and such photographs as are available. It shall be his/her duty likewise to secure and file a photograph of each new member.

*Section 6.* The Recorder shall, as Chairman of the Program Committee, assemble the scientific program and forward it to the Secretary at least two months before the annual meeting. The Recorder shall receive all papers and reports of discussion on papers presented before the Association and as the Chairman of the Program Committee take charge of the publication of the papers presented before the Association.

*Section 7.* It shall be the duty of the President of the Association to appoint an Audit Committee, consisting of two (2) Fellows of the Association, whose duty it shall be to examine the books of the Secretary-Treasurer and report on the same during the annual session.

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## ARTICLE VII

*Section 1.* Vacancies occurring in the offices of the Association shall be filled by appointment by the President until the next meeting. He/She shall also have the authority to appoint all committees not otherwise provided for.

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## ARTICLE VIII

*Section 1.* The Constitution may be amended at any regular meeting by a written resolution embodying the proposed changes, which shall lie over for one year and which must receive approval by two-thirds of the members present and voting.

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## ARTICLE IX

*Section 1.* The President, the two Presidents-Elect, Vice-President, Secretary- Treasurer, Recorder and Historian shall act as ex-officio members of the Council with the right to vote.

# *Bylaws*

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## CHAPTER I

*Section 1.* The Pacific Coast Surgical Association shall meet annually at such time and place as may be designated by the Council, preferably on President's Day weekend.

*Section 2.* There shall be at least one annual executive session of the Association, at which the order of business shall be as follows: (a) reading the minutes of the last meeting; (b) reports of the Secretary-Treasurer, Recorder and Historian; (c) reports of the Council; (d) report of Program Committee; (e) reports of representatives of the Association to the American Board of Surgery and to the American College of Surgeons; (f) unfinished business; (g) new business; (h) report of Auditing Committee; (i) report of Nominating Committee; (j) election of officers; (k) election of Fellows; (l) induction of new officers; (m) adjournment.

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## CHAPTER II

*Section 1.* The Fellows present at any executive session shall constitute a quorum for business.

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## CHAPTER III

*Section 1.* The annual dues and the initiation fee shall be recommended by the Council and voted upon by the membership each year at the Annual Meeting. Members may be exempted from payment of dues at the discretion of the Council.

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## CHAPTER IV

*Section 1.* The usual parliamentary rules (Robert's Rules) governing deliberative bodies shall govern the business workings of the Association.

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## CHAPTER V

*Section 1.* All questions before the Association unless otherwise provided shall be determined by a majority vote of the members present and voting except changes in the Constitution and Bylaws and the election of new members which require a two-thirds (2/3) majority.

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## CHAPTER VI

*Section 1.* The President shall deliver an address at the Annual Meeting of the Association.

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## CHAPTER VII

*Section 1.* The Secretary-Treasurer and Recorder of the Association shall receive at each annual session a draft from the President for such sum as may be voted

by the Council for services rendered the Association, and to this shall be added the necessary expense incurred in the discharge of his/her official duties.

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## CHAPTER VIII

*Section 1.* Those members submitting titles of essays shall supply the Recorder with the title and an abstract of the proposed essay. The Program Committee shall have the responsibility for choosing the primary discussant. The discussant shall receive a copy of the essayist's paper not later than two weeks before the Annual Meeting. The presenting author and opening discussant shall submit the manuscript and a text of the discussion ready for publication just prior to presentation.

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## CHAPTER IX

*Section 1.* The Council shall consist of five members, of which four are elected, the fifth member to be the retiring President who automatically serves for one year. The President, Presidents-Elect, Vice-President, Secretary-Treasurer, Recorder and Historian shall act as ex-officio members of the Council with the right to vote. One member of the Council shall be elected annually to serve four years. Any member of the Association shall be eligible for membership on the Council, provided that each regional section of the Association shall always be represented on the Council. These regional sections, which may be enlarged at the will of the Association, shall consist, respectively, of the Fellows residing in 1) Washington, British Columbia and Alaska, 2) Oregon and Hawaii, 3) Northern California to, but not including Santa Barbara and Bakersfield, 4) Southern California including Santa Barbara and Bakersfield.

The President shall be notified by any Councilor who is unable to attend a meeting of the Council. Upon such notification, the President shall appoint from the Councilor's regional section an alternate who shall act as Councilor for that meeting.

*Section 2.* The President shall preside as Chairman of the Council and the Secretary-Treasurer shall keep a record of its proceedings.

*Section 3.* The duties of the Council shall be: **1.** To investigate candidates for membership and report to the Association the names of such persons as are deemed worthy. **2.** To take cognizance of all questions of an ethical, judicial, or personal nature, and upon these, the decisions of the Council shall be final, provided that appeal may be taken from such decision of the Council to the Association under a written protest, which protest shall be voted upon by the Association. **3.** All resolutions before the Association shall be referred to the Council before debate, and the Council shall report by recommendation at the earliest hour possible. **4.** The Program Committee and the Council shall have power to invite guests to appear on the scientific program. **5.** The Council at the invitation of the President shall meet at some date preceding the Annual Meeting for consideration of matters of importance with reference to the Annual Meeting and particularly with reference to the eligibility of proposed candidates for admission.

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## CHAPTER X

*Section 1.* The Council shall have full power to withdraw from submission for publication any paper that may be referred to it by the Association, unless specially instructed to the contrary by the Association, which shall be determined by vote.

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## CHAPTER XI

*Section 1.* The President shall appoint for the following Annual Meeting a Committee on Arrangements, and the Program Committee as provided in the Constitution. The Program Committee shall consist of four members representing each of the caucuses and a chairman. A Program Committee member shall serve for three years and shall be eligible for reappointment for one additional term.

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## CHAPTER XII

*Section 1.* Active membership shall be forfeited by failure to be present at four consecutive meetings. After failure to attend three consecutive meetings, the Secretary will notify the member that a fourth consecutive absence will terminate his/her membership. In cases where the fourth absence was caused by extremely compelling circumstances, the Council may at its discretion, stay the termination of membership. Failure by any member of the Association to pay dues for one year may be considered sufficient cause to drop the member from the membership roll on recommendation of the Council to the Association. Membership also may be forfeited for reasons deemed sufficient by the Association.

*Section 2.* Attendance at an annual session shall be defined as registration with Secretary, payment of the registration fee and attendance at not less than one scientific session. Retired members and those exempt from dues because of illness shall have the privilege of attending the Annual Meeting at a registration fee determined by the Council.

*Section 3.* At the discretion of the Council, and for good and sufficient reasons, an Active Fellow may be transferred to the list of Senior Fellows.

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## CHAPTER XIII

*Section 1.* A paper shall not be read before this Association which has been published previously or which does not deal with a subject of surgical importance. The member shall close the discussion.

*Section 2.* The maximum time allowed essayists shall be 10 minutes, except by permission of the Program Committee. The primary discussant shall be allowed 5 minutes, each subsequent discussant 2 minutes, and final closing discussant 5 minutes.

*Section 3.* No paper read before this Association shall be published in any medical journal or pamphlet for circulation as having been read before the Association without having received endorsement of the Program Committee.

*Section 4.* At the discretion of the Program Committee, poster sessions may be held during the Scientific Meeting. Papers representing work from these poster sessions may be submitted for consideration for publication.

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#### CHAPTER XIV

*Section 1.* The Scientific Meetings shall be open to any doctor of medicine in good standing in his/her profession, provided he/she establish his/her identity. Only officially invited guests may register and attend functions.

*Section 2.* Fellows may request invitations for guests by applying to the Secretary in writing at least one month prior to the first day of the annual meeting. The Council shall determine the number of guests which may be invited. Invitations to guests shall be issued only by the Secretary.

A Fellow requesting that an invitation be extended to a guest shall assume such financial responsibility as may be determined by the Council for the guest so invited.

The President may invite distinguished members of the profession to be guests of the Association.

*Section 3.* The Association shall have no financial responsibility for invited guests, except distinguished guests invited by the President.

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#### CHAPTER XV

*Section 1.* Pursuant to Article V, Section 3, of the Constitution, the Nominating Committee shall request some specific information from each of the four regional sections where new candidates are required for the offices of the President-Elect, Secretary-Treasurer, Recorder, and Regional Councilor. An election with written mail ballot shall be held within each regional section involved in selecting candidates for each of these four offices. The Regional Councilors will conduct the balloting and provide the Nominating Committee with a report reflecting the wishes of their caucus. The Nominating Committee may review the ballots if questions arise about the voting process.

*Section 2.* The candidate for Vice-President shall be selected by each President-Elect.

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#### CHAPTER XVI

*Section 1.* These Bylaws may be amended at any annual session by a two-thirds vote of the Fellows present and voting. Proposed amendments shall be made in writing as motions before the Association, and shall then be dealt with in accordance with the provisions of Chapter IX, Section 3, Paragraph 3, of the Bylaws.

 *Future Meetings* 

- 2009 February 13–16  
**HOST:** Northern California  
**SITE:** The Fairmont, San Francisco, CA
- 2010 February 13–16  
**HOST:** Oregon, Hawaii  
**SITE:** Ritz-Carlton, Kapalua, Maui, HI