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Barbara Bass, MD

Barbara Lee Bass, MD, John F. and Carolyn Bookout Presidential Endowed Chair of the Department of Surgery, Professor of Surgery, Houston Methodist Hospital, Houston, Texas. An international thought leader in surgical education, over the last 10 years at Houston Methodist Dr. Bass has created innovative surgical training pathways to develop surgeons to lead diverse roles in our evolving health care systems; as skilled providers of state of the art surgical care, as surgeon scientists in basic and translational research, and as skilled administrative leaders prepared to develop systems to improve delivery of quality surgical care. Exemplifying her passion to transform education, Dr. Bass is the founder and executive director of the Methodist Institute of Technology, Innovation and Education (MITIE), a unique 35,000 sq. ft. simulation, education and research facility committed to lifelong retraining and retooling of surgeons in practice. Since 2007, MITIE has hosted hands on courses for over 35,000 surgeons and health care providers. Coupled to research in surgical technologies and innovative educational platforms, MITIE is a unique education and research

institution. Dr. Bass is widely recognized as a visible and effective leader in American surgery. Leadership positions she has held include terms as Chair of the American Board of Surgery and the Board of Governors of the American College of Surgeons, Regent of the American College of Surgeons, and President of the Society for Surgery of the Alimentary Tract and the Society of Surgical Chairs and other officer positions in numerous professional organizations. Honors include the Distinguished Service Award of the American College of Surgeons, the highest honor bestowed for contributions to improve the surgical profession, and the Nina Starr Braunwald Award given for her contributions to advance the careers of women in surgery, and the US Army Commendation medal for her work at Walter Reed Army Institute of Research. Over 29 continuous years, Dr. Bass' research program has been funded by many agencies including the NIH, NSF, the VA, and industry. She has published over 170 peer reviewed manuscripts, monographs, and chapters and served as co-editor of 3 books and holds two patents for surgical technology devices. She has served on the editorial boards or as associate editor for the leading surgical academic scholarly journals including the Annals of Surgery, Surgery, World Journal of Surgery and others.

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Kenneth A.J. Mackenzie Founders Award

Awarded to members who have made significant contributions to the North Pacific Surgical Association

2011	Dr. John K. MacFarlane, Vancouver, BC
2011	Dr. R. Mark Vetto, Portland, OR
2013	Dr. Conrad Rusnak, Victoria, BC
2014	Dr. Michael J. Hart, Seattle, WA
2014	Dr. John A. Ryan Jr., Seattle, WA
2015	Dr. Clifford W. Deveney, Portland, OR
2015	Dr. James J. Peck, Portland, OR
2016	Dr. Preston L. Carter, Tacoma, WA

MEETINGS

Annual meetings have been held as follows:

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Vancouver, B.C., December 1921	Dr. Robert E. McKechnie, President
Tacoma, Washington, December 1922	Dr. J.B. McNerthney, President
Seattle, Washington, December 1923	Dr. James B. Eagleson, President

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 Spokane, Washington, December 1925 Dr. C.F. Eikenbary, President
 Vancouver, B.C., December 1926 Dr. Henry R. Storrs, President
 Victoria, B.C., December 1927 Dr. Herman Robertson, President
 Seattle, Washington, December 1928 Dr. Charles B. Ford, President
 Portland, Oregon, December 1929 Dr. Otis B. Wight, President
 Tacoma, Washington, December 1930 Dr. C.D. Hunter, President
 Vancouver, B.C., December 1931 Dr. Peter A. McLennan, President
 Spokane, Washington, December 1932 Dr. A.T.R. Cunningham, President
 Victoria, B.C., December 1933 Dr. Thomas McPherson, President
 Seattle, Washington, December 1934 Dr. Otis F. Lamson, President
 Portland, Oregon, December 1935 Dr. Eugene W. Rockey, President
 Tacoma, Washington, November 1936 Dr. Horace Whitacre, President
 Vancouver, B.C., November 1937 Dr. Frederic Brodie, President
 Spokane, Washington, November 1938 Dr. A.A. Matthews, President
 Victoria, B.C., November 1939 Dr. Gordon Kenning, President
 Seattle, Washington, November 1940 Dr. Robert Forbes, President
 Portland, Oregon, November 1941 Dr. Thomas Joyce, President
 Tacoma, Washington, November 1942 Dr. Harry G. Willard, President
 Vancouver, B.C. November 1943 Dr. Alexander J. MacLachlan, President
 Spokane, Washington, November, 1946 Dr. Robert N. Hamblen, President
 Victoria, B.C., November, 1947 Dr. Frank M. Bryant, President
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 Portland, Oregon, 1949 Dr. Louis Gambee, President
 Tacoma, Washington, 1950 Dr. S. F. Herrmann, President
 Vancouver, B.C., 1951 Dr. Lee Smith, President
 Spokane, Washington, 1952 Dr. Richard E. Ahlquist, President
 Victoria, B.C., 1953 Dr. T.M. Jones, President
 Seattle, Washington, 1954 Dr. Ralph H. Loe, President
 Portland, Oregon, 1955 Dr. William K. Livingston, President
 Tacoma, Washington, 1956 Dr. William H. Goering, President
 Vancouver, B.C. 1957 Dr. A. Taylor Henry, President
 Spokane, Washington, 1958 Dr. Donald G. Corbett, President
 Victoria, B.C., 1959 Dr. W.A. McElmoyle, President
 Seattle, Washington, 1960 Dr. John A. Duncan, President
 Portland, Oregon, 1961 Dr. Millard S. Rosenblatt, President
 Tacoma, Washington, 1962 Dr. Jess W. Read, President
 Vancouver, B.C., 1963 Dr. Gordon C. Johnston, President
 Spokane, Washington, 1964 Dr. Carl P. Schlicke, President
 Victoria, B.C., 1965 Dr. John Stenstrom, President
 Seattle, Washington, 1966 Dr. Charles E. MacMahon, President
 Portland, Oregon, 1967 Dr. Matthew McKirdie, President
 Tacoma, Washington, 1968 Dr. James L. Vadheim, President
 Vancouver, B.C., 1969 Dr. Roger Wilson, President
 Spokane, Washington, 1970 Dr. G. Edward Schnug, President
 Victoria, B.C., 1971 Dr. R. J. Wride, President
 Seattle, Washington, 1972 Dr. Dean K. Crystal, President

Portland, Oregon, 1973	Dr. Clare G. Peterson, President
Tacoma, Washington, 1974	Dr. Murray L. Johnson, President
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Spokane, Washington, 1976	Dr. Robert F. Welty, President
Victoria, B.C., 1977	Dr. Hugh S. Ford, President
Seattle, Washington, 1978	Dr. John K. Stevenson, President
Portland, Oregon, 1979	Dr. Harvey W. Baker, President
Tacoma, Washington, 1980	Dr. Stanley W. Tuell, President
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Spokane, Washington, 1982	Dr. Charles R. Cavanagh, President
Victoria, B.C., 1983	Dr. John D. Hough, President
Seattle, Washington, 1984	Dr. George I. Thomas, President
Portland, Oregon, 1985	Dr. R. Mark Vetto, President
.....	Dr. William W. Krippaehne, President
Tacoma, Washington, 1986	Dr. Edmund A. Kanar, President
Vancouver, B.C., 1987	Dr. R. Edward Robins, President
Spokane, Washington, 1988	Dr. Richard E. Ahlquist, President
Victoria, B.C., 1989	Dr. Robert T. Hosie, President
Seattle, Washington, 1990	Dr. Philip C. Jolly, President
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Spokane, Washington, 2012	Dr. Steven R. Beyersdorf, President
Victoria, British Columbia, 2013	Dr. Rene Lafreniere, President
Seattle, Washington, 2014	Dr. Robert S. Sawin, President
Portland, Oregon, 2015	Dr. John T. Vetto, President

SCIENTIFIC PROGRAM

November 11-12, 2016
Hotel Murano, Tacoma, WA

THURSDAY, NOVEMBER 10, 2016

5:00p—8:00p	Registration	Hotel Murano, Tacoma
6:00p—8:00p	Council Dinner	Pacific Grill, Tacoma
8:00p—9:00p	Council Executive Session	Pacific Grill, Tacoma

FRIDAY, NOVEMBER 11, 2016

6:30a—4:00p	Registration	Venice Ballroom Foyer
6:45a—9:00a	Continental Breakfast	Venice Ballroom Foyer
6:45a—4:00p	Industry Sponsored Scientific Exhibits	Venice 1
7:40a—10:00a	First Scientific Session	Venice 2,3
10:00a—10:15a	BREAK, Exhibits	Venice 1
10:15a—11:00a	Presidential Address—Dr. Eugene Cho	Venice 2,3
11:00a—12:00p	Lunchtime speaker—John Lauber, Ph.D.	Venice 2,3
12:00p—1:00p	Resident Competition Event	Venice 4
1:00p—3:15p	Second Scientific Session	Venice 2,3
3:15p—3:35p	BREAK, Exhibits	Venice 1
3:35p—4:20p	Founder's Lecture—Dr. Barbara Bass	Venice 2,3
4:30p—5:00p	NPSA Business Meeting (Members Only)	Venice 2,3
4:30p—5:00p	Meet the Professor with Barbara Bass (residents, students and guests)	Venice 4
6:00p—9:00p	Reception, LeMay – America's Car Museum / Resident Robotic Skills Competition Event	LeMay Museum, Tacoma

SATURDAY, NOVEMBER 12, 2016

6:30a—2:00p	Registration	Venice Ballroom Foyer
7:00a—8:00a	Breakfast	Venice Ballroom Foyer
7:00a—4:00p	Poster Session	Venice Ballroom Foyer
7:00a—8:00a	Resident Competition Event	Venice 4
8:00a—10:55a	Third Scientific Session	Venice 2,3
10:55a—11:30a	Visiting Professor Lecture, Dr. Barbara Bass	Venice 2,3
11:30a—12:00p	Historian's Lecture—Dr. Preston Carter	Venice 2,3
12:00p—1:00p	Lunch, ERAS Panel—Dr. Scott Helton, Dr. Amir Bastawrous; Dr. Andy Wright.	Venice 2,3
1:00p—2:20p	Fourth Scientific Session	Venice 2,3
2:20p—2:40p	BREAK, Exhibits	Venice 1
2:40p—3:45p	Fifth Scientific Session, Surgical videos	Venice 2,3
3:45p—4:30p	Resident Competition Event	Venice 4
6:00p—7:00p	Reception	Venice Ballroom Foyer
7:00p—10:00p	NPSA Black Tie Awards Dinner and Dancing*	Venice 2,3,4

*black-tie encouraged

SUNDAY, NOVEMBER 13, 2016

8:00a—12:00p	Pediatric Surgery Symposium	Cavallino
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SYNOPSIS OF 2016 SCIENTIFIC PROGRAM

FRIDAY, NOVEMBER 11, 2016

FIRST SCIENTIFIC SESSION 7:40am – 10:00am

Moderator: John Mayberry, MD; Robert Sawin, MD

7:30am WELCOME AND INTRODUCTION

President – Eugene Cho, MD

Trauma and Basic Science

By the end of this session, attendees will be able to (1) distinguish factors associated with post traumatic splenectomy complications, (2) describe uses of wound clamps in extreme environmental settings, (3) tell which CT findings are associated with hollow viscus injuries, (4) explain how reimbursement systems impact trauma care in the US, (5) describe patterns and outcomes of rural and farm injuries and their impact to a developing trauma system, and (6) identify which cytokines are a part of abdominal sepsis spectrum for emergency abdominal surgery.

6 abstracts (20 min each: 10 min primary, 5 min Discussant, 5 min Closer and questions)

Friday, Nov 11, Session: 1. Order: 1. Resident Competition Paper

7:40:00 AM

Comparison of inflammatory cytokines in peritoneal fluid at source control surgery for abdominal sepsis

Authors: MS Bleszynski, T Chan, AK Buczkowski -Vancouver

Presenter: Michael Bleszynski, MD

Closer: Andrzej Buczkowski, MD

Discussant: Martin Schreiber, MD

Friday, Nov 11, Session: 1. Order: 2. Resident Competition Paper

8:00:00 AM

Splenectomy is associated with higher infection and pneumonia rates among trauma laparotomy patients

Authors: Fair KA, Connelly CR, Hart KD, Schreiber MA, Watters JM - Portland

Presenter: Kelly Fair, MD

Closer: Marin Schreiber, MD
Discussant: Matthew Martin, MD

Friday, Nov 11, Session: 1. Order: 3. Resident Competition Paper
8:20:00 AM

Abbreviated closure for remote damage control resuscitative laparotomies in extreme environments: a comparative study of suturing versus wound clamps comparing terrestrial and weightless conditions

Authors: Andrew W Kirkpatrick, Jessica L. McKee, Homer Tien, Anthony LaPorta, Kit Lavell, Tim Leslie, David R. King, Danielle Bouchard, Paul McBeth, Reginald Franciose, Derek Roberts, Vivian McAlister, Chad G. Ball

Presenter: Andrew W. Kirkpatrick, MD

Closer: Andrew W. Kirkpatrick, MD

Discussant: Bill Long, MD

Friday, Nov 11, Session: 1. Order: 4. Resident Competition Paper
8:40:00 AM

The affordable care act and its effect on length of stay and payer status for trauma patients at a level 1 trauma center

Authors: Vicente J. Undurraga Perl MD, Chris Dodgion, MD, Kyle Hart, MS, Bruce Ham, MD, Martin Schreiber, MD, David Zonies, MD, MPH - Portland

Presenter: Vicente J. Undurraga Perl, MD

Closer: Martin Schreiber, MD

Discussant: Andrew Kirkpatrick, MD

Friday, Nov 11, Session: 1. Order: 5. Resident Competition Paper
9:00:00 AM

Accuracy of clinical, laboratory test, and computed tomography findings for identifying hollow viscus injury in blunt trauma patients with intraperitoneal free fluid without solid organ injury

Authors: Evan Jost, Derek J Roberts, Todd Penney, Grant Brunet, and Andrew W Kirkpatrick - Calgary

Presenter: Evan Jost, MD

Closer: Andrew Kirkpatrick, MD

Discussant: Bill Morgan, MD

Friday, Nov 11, Session: 1. Order: 6. Resident Competition Paper
9:20:00 AM

Farming and Ranching Related Injuries in Southern Idaho

Authors: Jackson Shaver, Drew McRoberts, Brian O'Byrne, Bill Morgan, Christian Surjan, John Mayberry - Boise
Presenter: Jackson Shaver, MD
Closer: John Mayberry, MD
Discussant: Slate Wilson, MD

10:00 – 10:15a Break

10:15-11:00a THE PRESIDENT'S LECTURE
President – Eugene Cho, MD
Small People and Small Organizations Can Make a Big Difference

11:00 – 12:00p LUNCH, SPEAKERS
John Lauber, Ph.D. - "Some Reflections on Safety in Air Transportation and the Management of Human Error - Are there lessons for the medical community?"

SECOND SCIENTIFIC SESSION 1:00pm – 3:15pm Moderators: Al Hayashi, MD and Kirsten Newhams, MD

Education and Quality

By the end of this session, attendees will be able to (1) distinguish factors that are important in assisting with good and bad depositions in resident dictations, (2) be familiar with the importance of simulation in the education of surgeons for the safe performance of laparoscopic cholecystectomy, (3) identify best practices in intra-operative family communication, (4) recognize the volume to quality relationship in laparoscopic and robotic surgery, (5) apply a method by which presentations can be fairly evaluated and (6) identify the elements of a residency program that allows of safe bariatric surgical care.

6 abstracts (20 min each: 10 min primary, 5 min Discussant, 5 min Closer and questions)

Friday, Nov 11, Session: 2. Order: 1. Resident Competition Paper
1:00:00 PM

Use of a Mock Deposition Program to Improve Resident Understanding of the Importance of Documentation

Authors: Mina Guerges, MD, Yacoub Zayadin, MD, Eliza Slama, BSc,

Alicia Kieninger, MD - Pontiac
Presenter: Mina Guerges, MD
Closer: Mina Guerges, MD
Discussant: Marc Horton, MD

Friday, Nov 11, Session: 2. Order: 2.

1:20:00 PM

Early Analysis of Laparoscopic Common Bile Duct Exploration Simulation

Authors: Phillip M. Kemp Bohan, Christopher R. Connelly, Jeff D. Crawford, Nathan W. Bronson, Martin A. Schreiber, Chris W. Lucius, John G. Hunter, Laszlo N. Kiraly, & Bruce Ham - Portland
Presenter: Christopher Connelly, MD
Closer: Laszlo Kiraly, MD
Discussant: Mia DeBarros, MD

Friday, Nov 11, Session: 2. Order: 3. Resident Competition Paper

1:40:00 PM

Improving Intraoperative Family Communication

Authors: Wieck MM, Blake B, Sellick C, Kenron D, DeVries D, Terry S, Krishnaswami S - Portland
Presenter: Minna Wieck, MD
Closer: Minna Wieck, MD
Discussant: Laszlo Kiraly, MD

Friday, Nov 11, Session: 2. Order: 4.

2:00:00 PM

Outcome comparisons between high-volume robotic and laparoscopic surgeons in a large healthcare system

Authors: L. Rashidi, J. Lee, C. Neighorn, AL. Bastawrous - Seattle
Presenter: Laila Rashidi, MD
Closer: Amir Bastawrous, MD
Discussant: Eugene Cho, MD

Friday, Nov 11, Session: 2. Order: 5. Resident Competition Paper

2:20:00 PM

Validation of a novel surgical presentation assessment tool: The Four-part Assessment

Authors: Justin JJ Watson MD, Phillip M Kemp Bohan BA, Katrina Ramsey MPH, John D Yonge MD, Christopher R Connelly MD, Richard J Mullins MD, Jennifer M Watters MD, Martin A Schreiber MD, Laszlo N Kiraly MD - Portland

Presenter: Justin Watson, MD
Closer: Laszlo Kiraly, MD
Discussant: John Mayberry, MD

Friday, Nov 11, Session: 2. Order: 6.
2:40:00 PM

Improving transitions of care across the spectrum of healthcare delivery: A multidisciplinary approach to understanding variability in outcomes across hospitals and skilled nursing facilities for surgical patients

Authors: Giana Davidson, Elizabeth Austin, Sonya Malashanka, Allison Devlin, Lee Burnside, David Flum - Seattle
Presenter: Giana Davidson, MD
Closer: Giana Davidson, MD
Discussant: Bill Long, MD

3:15-3:35p Break

3:35-4:20p FOUNDER'S LECTURE

Barbara Bass, MD

Incorporating New Surgical Technology – Simulate Use Ahead of Clinical Incorporation

4:40-5:15p MEET THE PROFESSOR

Barbara Bass, MD

An informal gathering for residents/medical students to meet Dr. Bass

4:40-5:30p EXECUTIVE SESSION – NPSA Members only

***Friday Evening Reception
LeMay – America's Car Museum***

Shuttle busses available to/from Hotel Murano
From 5:30 pm – 9:00 pm

**6:00 – 7:00 pm – Reception, Light Appetizers
Bar service
7:00 – 9:00 pm – Museum Access**

SATURDAY, NOVEMBER 12, 2016

THIRD SCIENTIFIC SESSION 8:00am – 10:55am

Moderator: Eugene Cho, MD; Analisa Armstrong, MD

Oncology, Endocrine Surgery and Colorectal Surgery

By the end of this session, attendees will be able to (1) extrapolate acceptable outcomes in laparoscopic colorectal surgery across all surgical venues in the US, (2) recognize which gene expression profiles are associated with a complete pathologic response after neoadjuvant chemo-radiotherapy in esophageal cancer, (3) recognize that thyroid ultrasound reports need to have certain specific criteria which impacts the timing and triggering of biopsy and surgery, (4) recognize that pelvic sentinel lymph node biopsy is only useful when lymph node mapping shows no drainage to superficial inguinal lymph nodes in the treatment of lower extremity melanoma, (5) discuss the relationship between MRI and ERUS in evaluating patients with rectal cancer, (6) apply transition of care programs to improve patient safety and quality (7) realize that larger ileoinguinal nerves result in greater pain after ligation of the ileoinguinal nerve during inguinal herniorrhaphy.

7 abstracts (20 min each: 8-10 min primary, 5 min discussant, 5 min questions)

Saturday, Nov 12, Session: 3. Order: 1. Resident Competition Paper
8:00:00 AM

Specific Gene Expression Profiles are Associated with a Pathologic Complete Response to Neoadjuvant Therapy in Esophageal Adenocarcinoma

Authors: Patrick J McLaren MD 1, A Paul Barnes PhD 2, Willy Z Terrell BS 1, Gina M Vaccaro MD 3, Jack Wiedrick MS 4, John G Hunter MD 1, James P Dolan MD, MCR 1 - Portland

Presenter: Patrick McLaren, MD

Closer: James Dolan, MD

Discussant: Flavio Rocha, MD

Saturday, Nov 12, Session: 3. Order: 2. Resident Competition Paper
8:20:00 AM

Is Pelvic Sentinel Node Biopsy Necessary for Lower Extremity and

Trunk Melanomas?

Authors: Darryl Schuitevoerder MBBS, Stanley P L Leong MD, Jonathan S Zager MD, Richard L White MD, Eli Avisar MD, Heidi Kosiorek MS, Amylou Dueck PhD, Jeanine Fortino HIMA, Kyle Hart MS, John T Vetto MD - Portland

Presenter: Darryl Schuitevoerder, MD

Closer: John Vetto, MD

Discussant: Vance Sohn, MD

Saturday, Nov 12, Session: 3. Order: 3. Resident Competition Paper
8:40:00 AM

More is Better: Lymph Node Harvesting in Colorectal Cancer

Authors: O'Boyle ST and Stephenson KR - Blacksburg

Presenter: Keith Stephenson, MD

Closer: Keith Stephenson, MD

Discussant: John Vetto, MD

Saturday, Nov 12, Session: 3. Order: 4.
9:00 AM

Completeness of ultrasound reporting is associated with time to biopsy and operation for benign and malignant thyroid nodules

Authors: Alexandra Inman, MD¹; Kaidi Liu, BKin²; Kaye Ong, MSc²; Pari Tiwari, MD³; Patrick Vos, MD³; Adam White, MD¹; Sam M.

Wiseman, MD, FRCSC² - Vancouver

Presenter: Sam M. Wiseman, MD, FRCSC

Closer: Sam M. Wiseman, MD, FRCSC

Discussant: Adnan Alseidi, MD

Saturday, Nov 12, Session: 3. Order: 5. Resident Competition Paper
9:20 AM

Evaluation of Endorectal Ultrasound (ERUS) and MRI for Prediction of Circumferential Resection Margin (CRM) for Rectal Cancer

Authors: Catherine Tsai, Manoj Raval, Carl Brown, Ahmer Karimuddin, P Terry Phang - Vancouver

Presenter: Catherine Tsai, MD

Closer: P. Terry Phang, MD

Discussant: Yarrow McConnell, MD

Saturday, Nov 12, Session: 3. Order: 6. Resident Competition Paper
9:40 AM

Comparison of three caval reconstruction techniques in orthotopic liver transplantation: a retrospective review

Authors: T Chan, K DeGirolamo, MS Bleszynski, AK Buczkowski - Vancouver

Presenter: Tiffany Chan, MD

Closer: Andrzej Buczkowski, MD

Discussant: Terry Phang, MD

Saturday, Nov 12, Session: 3. Order: 7.

10:00 AM

PET Diagnosed Thyroid Incidentalomas Management of British Columbia Canada: Critical Importance of the PET Report

Authors: Jordan Wong, MD^{1,2}; Kaidi Liu, BKin³; Celia Siu, MSc^{4,5}, Marlise Sovka²; Don Wilson, MD, FRCPC^{1,6}; Sam M. Wiseman, MD, FRCSC^{3,7} - Vancouver

Presenter: Sam M. Wiseman, MD, FRCSC

Closer: Sam M. Wiseman, MD, FRCSC

Discussant: Nathalie Johnson, MD

10:55-11:30a VISITING PROFESSOR LECTURE

Barbara Bass, MD

What is on the Horizon in Breast Cancer Treatment

11:30-12:00p HISTORIAN'S LECTURE

Preston Carter, MD

The Remarkable Life of Dr. Rob Schaller

12:00-1:00p LUNCH - ERAS PANEL

Scott Helton, MD; Amir Bastawrous, MD, MBA; Andy Wright, MD.

Enhanced Recovery after Surgery

FOURTH SCIENTIFIC SESSION 1:00pm – 2:20pm

Moderator: Neely Pantou, MD and Michael Bleszynski, MD

General, Pediatric and Vascular Surgery

By the end of this session, attendees will be able to (1) apply concepts of bedside sedation to perform procedures in pediatric patients without need for endotracheal intubation, (2) explain which patients require conversion from Roux-en-Y gastric bypass to sleeve gastrectomy for refractory morbid obesity, (3) explain how surgical residents can be successfully incorporated into a safe bariatric surgical practice, (4)

recognize the lower recurrence rate when treating varicose veins with vein sparing techniques vs high ligation and vein stripping.

Saturday, Nov 12, Session: 4. Order: 1.

1:00 PM

Outcomes of Bedside Sutureless Umbilical Closure Without Endotracheal Intubation For Gastroschisis Repair in Surgical Infants

Authors: Gillian Pet, Rebecca A. Stark, John J. Meehan, Patrick J. Javid - Seattle

Presenter: Patrick J. Javid, MD

Closer: Patrick J. Javid, MD

Discussant: Kenneth Azarow, MD

Saturday, Nov 12, Session: 4. Order: 2. Resident Competition Paper

1:20:00 PM

Bariatric Surgery is Safe in General Surgery Training

Authors: John Kuckelman DO, Jason Bingham MD, Morgan Barron MD, Michael Lallemand MD, - Tacoma

Presenter: John Kuckelman, MD

Closer: Vance Sohn, MD

Discussant: Karen Deveney, MD

Saturday, Nov 12, Session: 4. Order: 3. Resident Competition Paper

1:40 PM

CHIVA vs vein stripping; a prospective study.

Authors: Marta Zmudzinski, Pierre Malo, Allen Hayashi, Christine Hall - Victoria

Presenter: Marta Zmudzinski, MD

Closer: Allen Hayashi, MD

Discussant: Kaj Johansen, MD

Saturday, Nov 12, Session: 4. Order: 4.

2:00 PM

Conversion of Sleeve Gastrectomy to Roux-en-Y Gastric Bypass: a Canadian Experience

Authors: Ekua Yorke, Caroline Sheppard, Noah Switzer, David Kim, Daniel Birch, Christopher de Gara, Aliyah Kanji, Shahzeer Karmali - Edmonton

Presenter: Ekua Yorke, MD

Closer: Daniel Birch, MD

Discussant: Cliff Deveney, MD

Saturday, Nov 12, Session: 4. Order: 5.

2:20 PM

Fascicle counts in ilioinguinal nerves from primary open inguinal hernia correlate with increased preoperative hernia pain

Authors: Robert Wright, M.D. , Donald Born, M.D., PhD, Natasha D'Souza, BS, Daniel Wright, MS, Rachel Gill, Larisa Hurd, BS, Matthew Cunningham, PhD - Puyallup

Presenter: Robert Wright, MD

Closer: Robert Wright, MD

Discussant: Mark Hardin, MD

2:20-2:40p Break

FIFTH SCIENTIFIC SESSION 2:40pm – 3:45pm

Moderator: Martin Schreiber, MD; Kelly Fair, MD

Surgical Videos

By the end of this session, attendees will be able to learn various techniques in approaches to general surgical procedures and disease treatments.

4 abstracts (15 min each: 5 min discussant, 5 min questions)

Saturday, Nov 12, Session: 5. Order: 1. Resident Competition Paper

2:40 PM

Circumferential pedicled omental flap for protection of portal venous reconstruction (PVR) and gastroduodenal artery (GDA) stump following pancreatoduodenectomy

Authors: Angelena Crown MD, Adnan A. Alseidi MD, Thomas R. Biehl MD, W. Scott Helton MD, and Flavio G. Rocha MD - Seattle

Presenter: Angelena Crown, MD

Saturday, Nov 12, Session: 5. Order: 2. Resident Competition Paper

2:55 PM

“The Missing Linx” for Gastroesophageal Reflux Disease?

Authors: John Kuckelman, Matthew Martin - Tacoma

Presenter: John Kuckelman, MD

Saturday, Nov 12, Session: 5. Order: 3. Resident Competition Paper

3:10 PM

Constructing a Video Tutorial to Educate the Layperson on Assessment of the Critical View of Safety in Laparoscopic Cholecystectomy

Authors: Shanley B. Deal MD, Adnan Alseidi MD MEd, L. Michael Brunt MD, and Dimitrios Stefanidis MD PhD - Seattle

Presenter: Shanley B. Deal, MD

Saturday, Nov 12, Session: 5. Order: 4.

3:25 PM

Seamguard Preserves Staple Line Histology for Pathological Analysis

Authors: Nathaniel Paull, MD; Eugene Cho, MD; Brian Folz, MD - Gig Harbor

Presenter: Nathaniel Paull, MD

3:45 – 4:30p Resident Competition Event

***Saturday Evening
Presidential Reception & Gala
Venice Ballroom, Hotel Murano
6:00 pm – FORMAL RECEPTION
7:00 pm – DINNER
(Black Tie Encouraged)
Music & Dancing with “Ain’t No Heaven Seven”***

PEDIATRIC SURGERY SYMPOSIUM

8:00 am – 12:00 pm

Hotel Murano, Nov. 13

Moderator: Kenneth Azarow, MD

NEXT MEETINGS

November 10-11, 2017, Vancouver, BC

November 9-10, 2018, Boise, ID

November 8-9, 2019, Victoria, BC

November 13-14, 2020 Seattle, WA

November 12-13, 2021 Portland, OR

ABSTRACTS AND SELF-ASSESSMENT

Session 1

Friday, Nov 11, 7:40 AM Resident Competition Paper
Comparison of inflammatory cytokines in peritoneal fluid at source control surgery for abdominal sepsis

Authors: MS Bleszynski, T Chan, AK Buczkowski

Presenting Author: Michael Bleszynski, MD

Closer: Andrzej Buczkowski, MD

Discussant: Martin Schreiber, MD

Introduction:

Clinical presentation of severe sepsis is triggered by a systemic inflammatory response to infection by an uncontrolled release of cytokines. Primary abdominal closure (PAC) at initial source control laparotomy (SCL) has traditionally been the mainstay of surgical management. Open abdomen with vacuum assisted closure (VAC) at SCL has become more prevalent in critically ill patients in order to overcome deranged physiology (secondary to uncontrolled cytokine release). Objective was to determine if concentrations of peritoneal fluid (PF) cytokines could support use of VAC and differentiate severity of sepsis in patients with abdominal sepsis requiring SCL.

Methods:

Prospective case series of patients (2012-2013) with severe sepsis/septic shock according to 2012 ACCP/SCCM criteria requiring SCL. PF samples were obtained after laparotomy prior to definitive source control. Samples were analyzed with a human cytokine 30-plex panel. Cytokine concentrations were reported as pg/mL and compared using the Mann-Whitney U test (sig $p < 0.05$).

Results:

Twelve patients (4 PAC and 8 VAC cases) were included. PAC mortality was 25%, septic shock prior to SCL 75%. VAC mortality was 37.5%, septic shock prior to SCL 100%. VAC PF cytokine concentrations were significantly higher compared to PAC; IL-17 (6.2 vs 1.45), IL-5 (12.8 vs 3.68), IL-6 (17176 vs 9746), HGF (4350 vs 613), $p < 0.05$.

Discussions:

Inflammatory cytokines IL-17, IL-5, IL-6, HGF were significantly higher in peritoneal fluid of patients who underwent SCL with VAC. This provides biochemical evidence and proof of concept that VAC cases had

significantly worse degree of sepsis, and VAC management was correctly selected.

Self Assessment

A 55 year old male undergoes a hemicolectomy and primary anastomosis for colorectal carcinoma. His anastomosis leaks, and he is admitted to the intensive care unit with fevers and hypotension. After source control laparotomy, you would choose vacuum assisted closure over primary abdominal closure because cytokines are:

- A. Decreased
- B. Suppressed
- C. Blocked
- D. Elevated

Friday, Nov 11, 8:00 AM Resident Competition Paper

Splenectomy is associated with higher infection and pneumonia rates among trauma laparotomy patients

Authors: Fair KA, Connelly CR, Hart KD, Schreiber MA, Watters JM

Presenting Author: Kelly Fair, MD

Closer: Martin Schreiber, MD

Discussant: Matthew Martin, MD

Introduction:

Splenectomy increases lifelong risk of thromboembolism (VTE) and is associated with long-term infectious complications, primarily, overwhelming post-splenectomy infection (OPSI). Our objective was to evaluate VTE and infection risk at index hospitalization post-splenectomy.

Methods:

Retrospective review of all patients who received a laparotomy in the National Trauma Data Bank from 2007–2012. Propensity score matching for splenectomy was performed, based on injury severity score (ISS), abdominal abbreviated injury score >3, Glasgow Coma Score (GCS), sex and mechanism. Major complications, VTE, and infection rates were compared. Multiple logistic regression models were utilized, controlling for age, ISS, GCS, sex, central line placement, transfusion, pelvic and lower extremity fractures, and hospital, ICU, and ventilator days.

Results:

93,221 laparotomies were performed and 17% (15,411) underwent splenectomy. Multiple logistic regression models demonstrated no association between splenectomy and major complications (OR 0.96, 95% CI 0.91-1.03, $p=0.25$) or VTE (OR 1.05, 95% CI 0.96-1.14, $p=0.33$). Splenectomy was associated with infection (OR 1.07, 95% CI 1.00-1.14, $p=0.045$). Subgroup analysis of patients with infection demonstrated that splenectomy was most strongly associated with pneumonia (OR 1.41, 95% CI 1.26-1.57, $p<0.001$), but also with decreased incidence of decubitus ulcer (OR 0.82, 95% CI 0.72-0.94, $p=0.003$), deep surgical site infection (OR 0.80, 95% CI 0.65-0.99, $p=0.04$), and severe sepsis (OR 0.74, 95% CI 0.61-0.91, $p=0.003$).

Discussion:

Splenectomy is common among trauma patients who undergo laparotomy. In this study splenectomy is not associated with significantly higher overall complication or VTE rates during index hospitalization. However, splenectomy is associated with a higher rate of pneumonia.

Self Assessment

What is the rate of splenectomy for trauma in the NTDB during the study period?

- A. 9.50%
- B. 17%
- C. 34%
- D. 68%

Friday, Nov 11, 8:20 AM Resident Competition Paper

Abbreviated closure for remote damage control resuscitative laparotomies in extreme environments: a comparative study of suturing versus wound clamps comparing terrestrial and weightless conditions

Authors: Andrew W Kirkpatrick, Jessica L. McKee, Homer Tien, Anthony LaPorta, Kit Lavell, Tim Leslie, David R. King, Danielle Bouchard, Paul McBeth, Reginald Franciose, Derek Roberts, Vivian McAlister, Chad G. Ball*

Presenting Author: Andrew W. Kirkpatrick, MD

Closer: Andrew W. Kirkpatrick, MD

Discussant: Bill Long, MD

Introduction:

Torso bleeding remains the most potentially preventable cause of post-traumatic death. Far-forward Care (FFC) Remote Damage Control

Resuscitative Laparotomies (RDCRLs) might provide direct compression of visceral hemorrhage. However, suturing is a markedly limiting factor in FFC, especially for non-physician novices. We thus compared abbreviated skin closures after RDCRL, comparing skin-suture (SS) versus a wound clamp (WC), on-board a research aircraft both in weightlessness during Parabolic flight (0g) and normal gravity (1g) as an example of extreme conditions.

Methods:

Ten surgeons conducted RDCRLs on a high-fidelity surgical phantom (“Cut-Suit”). All procedures were conducted onboard the aircraft hangered (1g), or during parabolic flight (0g). After completion of a torso exsanguination task, participants were randomized to skin-only closure using a WC or formal SS. Due to parabolic flight limitations participants were limited to three 20 second parabolas. Primary outcome successful skin closure.

Results:

Ten surgeons attempted the task in 1g. In 0g two surgeons randomized to suture were incapacitated due to motion-sickness. All 5 utilizing WC proceeded in 0g. With suturing, none was able to close in 1 or 0g. With WC, 2 completely closed the incision in 1g as did three in 0g, despite having made longer incisions ($p=0.016$). Thus, total skin-closure with WC was significantly greater in both 1g ($p=0.016$) and 0g ($p=0.008$).

Conclusions:

WC was much more effective closing laparotomies, in both 1g and particularly extreme (0g) conditions. Future studies should address the utility of abbreviated closure in the hands of non-surgeons and non-physicians to facilitate potential FFC RDCRLs.

Self Assessment

The most potentially preventable cause of post-traumatic death is;

- A. Pneumothorax
- B. Junctional Hemorrhage
- C. Torso Hemorrhage
- D. Brainstem Laceration

Friday, Nov 11, 8:40 AM Resident Competition Paper
The affordable care act and its effect on length of stay and payer status for trauma patients at a level 1 trauma center

Authors: Vicente J. Undurraga Perl MD, Chris Dodgion, MD, Kyle Hart, MS, Bruce Ham, MD, Martin Schreiber, MD, David Zonies MD, MPH
Presenting Author: Vicente J. Undurraga Perl MD

Closer: Martin Schreiber, MD

Discussant: Andrew Kirkpatrick, MD

Introduction:

Coverage under the Affordable Care Act (ACA) started January 1st, 2014. We hypothesized that the ACA would shorten length of stay and increase numbers of insured patients without a change in outcome in trauma patients.

Methods:

A retrospective review of adult trauma patients admitted to a level I trauma center between 2012-2014 was performed. Data was combined from our trauma registry and financial services dataset. A univariate analysis was performed comparing demographics, length of stay, payer status, discharge disposition, and complications before and after the ACA implementation.

Results:

4,448 trauma patients were admitted during the study period. Patients did not differ by sex, race/ethnicity, ISS, GCS, percentage with critical injury (ISS \geq 25) or severe traumatic brain injury (AIS \geq 3). Patients treated after ACA implementation were older (53 vs 51, p=0.05) with a shorter ICU stay (1.7 vs 1.5 days, p=0.04), but a longer overall hospital stay (3.7 vs 4.1 days, p<0.01). The proportion of self-pay patients decreased from 11% to 3% (p=<0.001), public insurance (MEDICARE & MEDICAID) increased from 24% to 35% (p<0.01), and private insurance remained unchanged (53% vs 52%, p=0.42). A higher proportion of patients were discharged to skilled nursing facilities (SNF, 17.1% vs 19.9%, p=0.02). There was no change in rates of death, readmission, infection, pneumonia or decubiti.

Discussion:

Among trauma patients, there was a decrease in self-pay status and increase in public insurance without change in private insurance after implementation of the ACA. More patients were discharged to SNF and there was no change in reported outcomes.

Self Assessment

Which insurance type decreased most after the implementation of the Affordable Care Act?

1. Public Insurance
2. Private Insurance
3. Self pay
4. Workman's comp

Friday, Nov 11, 9:00 AM Resident Competition Paper

Accuracy of clinical, laboratory test, and computed tomography findings for identifying hollow viscus injury in blunt trauma patients with intraperitoneal free fluid without solid organ injury

Authors: Evan Jost, Derek J Roberts, Todd Penney, Grant Brunet, and Andrew W Kirkpatrick

Presenting Author: Evan Jost, MD

Closer: Andrew Kirkpatrick, MD

Discussant: Bill Morgan, MD

Objective:

To define the accuracy of clinical, laboratory, and computed tomography findings for detecting intra-abdominal hollow viscus injury (HVI) requiring laparotomy in blunt trauma patients who have intraperitoneal free fluid without solid organ injury.

Design:

Retrospective diagnostic accuracy study.

Methods: We used the Southern Alberta Trauma Registry database to identify consecutive hemodynamically stable patients presenting with blunt abdominal trauma to a quaternary care trauma centre between January 2007 and December 2014. Two radiologists in consensus read all CT scans in a blinded fashion to quantify free fluid and identify injury patterns.

Analysis:

We compared the accuracy of several clinical, laboratory, and CT findings for anticipating therapeutic laparotomy for HVI by calculating estimates of sensitivity, specificity, positive (+) and negative (-) likelihood ratios (LRs), and c-statistics (for continuous variables).

Results: 39 predominantly young (median age=34), severely injured (median ISS=25) males (67.5%) were identified. 15 of 24 patients had a therapeutic laparotomy for HVI. Seatbelt sign (+LR approaches infinity),

diffuse peritonitis (+LR approaches infinity), and abdominal distension (+LR=1.73, 95%CI=0.634-4.69) were the physical findings most predictive of HVI. Radiologic findings correlated with likelihood of HVI were mesenteric injury or hematoma (+LR=1.15, 95%CI=0.364-3.63) and number of CT cuts with fluid (c-statistic=0.649). The laboratory finding most predictive of HVI was low arterial pH (c-statistic=0.615). Patients operated on within 24 hours had shorter length of stay than those operated on later (median 9 vs. 14), but had similar complication rates and ICU lengths of stay.

Conclusions:

Our findings suggest that clinical examination combined with surrogate measures of fluid volume and HVI may help identify patients who have HVIs in the setting of intraperitoneal free fluid without solid organ injury. Further study is required to determine if patients lacking these features may be safely observed.

Self Assessment

Which radiologic finding is associated with higher likelihood of a need for therapeutic laparotomy?

1. Bowel wall thickening
2. Number of CT cuts with free fluid
3. Area of largest free fluid pocket
4. Attenuation of free fluid

Friday, Nov 11, 9:20 AM Resident Competition Paper

Farming and Ranching Related Injuries in Southern Idaho

Authors: Jackson Shaver, Drew McRoberts, Brian O'Byrne, Bill Morgan, Christian Surjan, John Mayberry

Presenting Author: Jackson Shaver

Closer: John Mayberry, MD

Discussant: Slate Wilson, MD

INTRODUCTION

Agriculture is a major economic industry in Idaho and places workers at a higher than average risk for injury. This study aims to characterize farm and ranch injury data for use with the newly formed Idaho Time Sensitive Emergency (TSE) system to formulate goals and track system improvements.

METHODS

Trauma registries in southern Idaho were queried for ICD-9-CM diagnoses related to farming and ranching injuries in 2014. Injuries known or likely to have occurred on properties intended for farming, ranching, animal care, or milk production, and relating to those activities were included.

RESULTS

From identified patients (n=62), common injuries were related to horses (34%), machinery (18%), ATVs (16%), and hay bales/haystacks (15%). Average patient age was 46 (3-82), with 79% male and 21% female, and a mean ISS of 11 (1-50). Transportation utilized air (33%) and ground (67%) methods, with an average transport time of 37 minutes (9-132). Average hospital length of stay (LOS) was 5 days (1-36), while ICU LOS was 2 days (1-35). Insurance was 35% commercial, 29% worker compensation, 13% Medicare, 10% other government sources, 8% Medicaid, and 5% self-pay. Upon discharge, 60% of patients went home, 27% went to rehabilitation facilities, and 13% were transferred to other facilities. There was 1 in hospital death.

CONCLUSIONS

Descriptive statistics provide insight into patient and injury information that establishes baseline data for use with the fledgling Idaho TSE system. Future data can be compared with these results to track improvements intended to increase quality of care and outcomes.

Self Assessment

Analysis of agriculture related injuries revealed there are preventable and non-preventable injuries. What is an example of an agriculture related injury that cannot be prevented?

1. All terrain vehicle use
2. Tractors
3. Hay stacks
4. Livestock

ABSTRACTS AND SELF-ASSESSMENT Session 2

Friday, Nov 11, 1:00 PM Resident Competition Paper
Use of a Mock Deposition Program to Improve Resident Understanding of the Importance of Documentation

Authors: Mina Guerges, MD, Yacoub Zayadin, MD, Eliza Slama, BSc, Alicia Kieninger, MD

Presenting Author: Mina Guerges, MD

Closer: Mina Guerges, MD

Discussant: Marc Horton

Introduction:

Accurate medical documentation plays an important role in the quality of health-care and defense against malpractice claims. We hypothesized that a mock deposition exercise involving resident physicians could effectively increase trainee awareness of the importance of medical documentation and potentially reduce medico-legal litigations.

Methods:

An attorney from our institution's legal team conducted a mock deposition which was followed by a lecture explaining the importance of accurate and complete medical documentation. Participants were asked to fill out pre- and post- survey highlighting their knowledge and experience with medical litigation. This also evaluated their perception of the importance of complete and accurate documentation.

Results:

A total of 62 participants attended; 43 and 24 respondents completed the pre- and post-surveys, respectively. From the pre-survey, the majority considered themselves a "novice" in regards to medico-legal medicine and denied experience with malpractice litigations. Most participants felt that accurate documentation was "very important", but only half felt their own documentation was "detailed and accurate". After the mock deposition and lecture, participants felt that they wrote more complete and accurate notes and that their understanding of the importance of documentation improved. Nearly all attendees felt implementing such a course into residency training would be of value, and that they would attend a similar exercise.

Discussion:

We conclude that a mock deposition demonstrating the importance of proper and accurate documentation can be useful in increasing trainee awareness of the impact of the medical record, and therefore implementation of such training into residency programs would be of value.

Self Assessment

You are approached by a resident about some required training that you are responsible for initiating at your institution that is aimed at increasing efficiency and eliminating waste by improving documentation in the medical record. She does not want to go as she has many other projects that she is working on and simply does not have the time. In helping her focus on the importance of this training how many hours would you tell her that this training program might this save her and your legal section in the preparation of the defense of cases that often end up in litigation due to poor documentation that could be spent on other projects and programs?

- A. 10
- B. 20
- C. 30
- D. More than 40

Friday, Nov 11, 1:20 PM

Early Analysis of Laparoscopic Common Bile Duct Exploration Simulation

Authors: Phillip M. Kemp Bohan, Christopher R. Connelly, Jeff D. Crawford, Nathan W. Bronson, Martin A. Schreiber, Chris W. Lucius, John G. Hunter, Laszlo N. Kiraly, & Bruce Ham
Presenting Author: Christopher Connelly, MD
Closer: Laszlo Kiraly, MD
Discussant: Mia DeBarros, MD

Background:

We recently developed a laparoscopic common bile duct exploration (LCBDE) simulation course for resident surgeons (RS) and practicing surgeons (PS). We hypothesized that course completion would provide the skills necessary to perform LCBDEs and increase procedure utilization among PS.

Methods:

RS and PS were prospectively enrolled in the LCBDE course. Pre-course and post-course knowledge and competency were assessed with a written examination and LCBDE simulation. PS completed a pre-course, post-course, and 1-year follow-up survey to assess course impact and LCBDE comfort (5 point Likert-type scale).

Results:

17 RS and 8 PS were enrolled. Among PS, 88% report performance of less than 5 LCBDE procedures before this course. Among all participants, median written test scores improved (70.0% to 80.0%, $p < 0.001$) and the median LCBDE simulation time improved (585 seconds to 314 seconds, $p = 0.001$). Median written assessment pre-course (70.0% vs 72.5%, $p = 0.953$) and post-course (77.5% vs 80.0%, $p = 0.198$) scores were not significantly different between RS and PS. Time improvement to simulated LCBDE completion (seconds) was similar between groups from pre-course (608.0 vs 521.5, $p = 0.885$) to post-course (314.0 vs 373.0, $p = 0.287$). PS comfort level with LCBDE improved following course completion (2 to 4, $p = 0.03$). On the 1-year post-course survey, all PS reported LCBDE utilization (1 to 6 procedures) and would recommend the course to other surgeons.

Conclusions:

This LCBDE course is appropriate for surgical trainees and general surgeons. Both groups demonstrated improvement in knowledge and skills, and PS also report a practice change with increased LCBDE comfort and utilization after course completion.

Self Assessment

What is an advantage of LCBDE when compared to LC+ERCP?

1. Lower morbidity and mortality rates
2. Higher rate of symptom resolution
3. Shorter length of hospital stay
4. Shorter operative time

Friday, Nov 11, 1:40 PM Resident Competition Paper

Improving Intraoperative Family Communication

Authors: Wieck MM, Blake B, Sellick C, Kenron D, DeVries D, Terry S, Krishnaswami S

Presenting Author: Minna Wieck, MD

Closer: Minna Wieck, MD

Discussant: Laszlo Kiraly, MD

Purpose:

Barriers to reliable intraoperative family communication directly impact patient satisfaction. Challenged with crowded waiting rooms, difficulty in locating families, and competing circulator-nurse responsibilities, we examined whether an electronic-medical-record (EMR) integrated paging system could reduce inconsistency in communication, and improve patient and provider satisfaction.

Methods:

We built a process within our EMR's intraoperative nursing screen to send and chronicle text-page communication to families. Standardized, multilingual updates which automatically changed with phase of care could be sent or customized as needed. Preoperatively, families were given pagers, instructions and a hospital map allowing them to leave the waiting area. After 6 months, Press-Ganey™ data and internal surveys from randomly selected families, and all nurses and surgeons were analyzed for satisfaction and effectiveness.

Results:

Press-Ganey data demonstrated 30% improvement (p 90% indicated pagers were easy to use and provided the desired information during surgery. Among nurses, 81% (n=29/36) responded and none reported difficulty reaching families. Over 90% found the system easy to use and believed it improved families' experience, while 75% felt it increased efficiency. Of surgeons, 76% (n=19/25) responded, all of whom reported improved intraoperative communication and ease of finding families postoperatively.

Conclusion:

Intraoperative family communication through EMR-integrated text pagers is easily implemented and optimizes use of existing technology. Furthermore, it is transportable, customizable and results in improved efficiency and family, nurse, and surgeon satisfaction.

Self Assessment

Improving communication with patients' families during surgery improves:

- Operating times
- Patient satisfaction
- Hospital profit margins
- Postop complication rates

Friday, Nov 11, 2:00 PM

Outcome comparisons between high-volume robotic and laparoscopic surgeons in a large healthcare system

Authors: L. Rashidi, J. Lee, C. Neighorn, AL. Bastawrous

Presenting Author: Laila Rashidi, MD

Closer: Amir Bastawrous, MD

Discussant: Eugene Cho, MD

Robotic colorectal surgery has been performed for nearly a decade, but has only begun to be widely adopted over the past few years. There has been criticism toward robotic surgery directed towards supposed higher costs. We sought to assess outcomes of colorectal operations performed by surgeons with higher experience in robotics and laparoscopy across a large health system, utilizing a centralized database.

We performed a retrospective review of colon or rectal resections performed between January 1, 2013 and May 1, 2016 within the Providence Health and Services. Surgeons were only included if they performed 30 or more procedures with an approach per year. Stata v14.0 software was used using Kruskal-Wallis to assess implications of factors including operative time, hospital length of stay, complications, readmission rate, conversion to open rates and total direct costs.

A total of 6 robotic and 58 laparoscopic high-volume surgeons were included in the study. When comparing the two groups, robotics surgery had a decreased length of hospital stay (4.5 vs.5.4 days, $p<0.0001$), lower conversion rate (4% vs.16% $p<0.0001$), and longer operative time (224 vs.148 min, $p<0.001$). There was no statistical difference between complications and rate of readmission. There was no statistically significant difference in total direct cost (\$24473 vs.\$24343, $p=0.3$).

While this study is retrospective, these data do suggest that once the surgeon has passed the learning curve, robotic surgery can carry the benefit of a lower length of stay and lower conversion rate, while providing no significant difference in total cost, complication and readmission rate.

Self Assessment

A 58 year old male presents with a rectal adenocarcinoma without known transmural spread. The traditional "Hybrid" approach to robotic rectal surgery would be:

- A. Complete dissection by laparoscope
- B. Complete dissection by robot

- C. Laparoscopic colon mobilization followed by robotic pelvic dissection
- D. Robotic mobilization of colon followed by laparoscopic pelvic dissection

Friday, Nov 11, 2:20 PM Resident Competition Paper

Validation of a novel surgical presentation assessment tool: The Four-part Assessment

Authors: Justin JJ Watson MD, Phillip M Kemp Bohan BA, Katrina Ramsey MPH, John D Yonge MD, Christopher R Connelly MD, Richard J Mullins MD, Jennifer M Watters MD, Martin A Schreiber MD, Laszlo N Kiraly MD

Presenting Author: Justin Watson, MD

Closer: Laszlo Kiraly, MD

Discussant: John Mayberry, MD

Introduction:

Traditional measures of student performance do not routinely correlate with subsequent performance.

Complex interplay between medical school training assessment and surgical skills warrants validation. Presentation assessment reliability, interrater reliability, and correlation with current clinical performance measures were evaluated.

Methods:

This was a retrospective review of blinded, direct-observation fourth-year trauma and surgical ICU clerkship medical student presentation assessments, from 2013-2015. Faculty rating correlation of student performance was evaluated using four criteria with final exam and course grades. Interrater reliability was analyzed using Likert scales.

Results:

An average of 4.8 assessors/presentation scored 60 presentations on 4 criteria. Scores were not incorporated in course grade, yet questions 1-3 (case presentation, problem definition, and question response) correlated with overall course grade ($r=0.49$ to 0.61 , $p\leq 0.003$). Mean scores for questions 3-4 (question response, use of literature) moderately correlated with final exam scores (0.3 and 0.26 , $p<0.05$). Range for an individual student and question was ≤ 1 point in 122/240 (51%) and ≤ 2 points in 230/240 (96%). Percent of ratings equal to the mode for a given student/goal was 62.5%; 90.3% were within one point of the mode.

Discussion:

Medical student presentation assessment correlated with final course and exam grades. These findings provide evidence for internal validation while measuring domains including interpersonal communication, problem solving, and adaptability not acquired by current standardized testing. These are critical for future success in surgical training and practice. As the paradigm of surgical education evolves beyond knowledge-based assessments, validated performance measures such as this assessment, will be required.

Self Assessment

Existing literature relating medical school assessments to future NBME performance is ____?

- A. Very strong to strong
- B. Strong to Moderate
- C. Moderate to Weak
- D. Very Weak

Friday, Nov 11, 2:40 PM

Improving transitions of care across the spectrum of healthcare delivery: A multidisciplinary approach to understanding variability in outcomes across hospitals and skilled nursing facilities for surgical patients

Authors: Giana Davidson, Elizabeth Austin, Sonya Malashanka, Allison Devlin, Lee Burnside, David Flum

Presenting Author: Giana Davidson, MD

Closer: Giana Davidson, MD

Discussant: Bill Long, MD

INTRODUCTION:

Improving care coordination at transitions of care from the hospital to SNFs is critical for improving quality metrics, clinical outcomes, and decreasing readmissions. In 2014, we formed a multidisciplinary collaborative (Improving Nursing Facility Outcomes using Real-Time Metrics, INFORM) of stakeholders from 10 SNFs and hospitals aimed to improve transitions of care by characterizing variability in clinically important outcomes and fostering stakeholder engagement to understand the underlying structural and process factors that lead to poor outcomes

METHODS:

We conducted a 10 month prospective pilot study of data sharing across collaborative SNFs. We engaged the multidisciplinary INFORM collaborative of stakeholders to review the pilot data and assess the current hospital and system-level challenges in transitions of care. The collaborative met over 2 years to identify the barriers to ideal transitions of care and priority targets for interventions and benchmarking.

RESULTS:

The majority of patients readmitted to the hospital were within 5 days of hospital discharge. The collaborative prioritized interventions that addressed improving the accuracy and timeliness of discharge information to support SNF's ability to provide care during the immediate transition period, improving medication reconciliation accuracy, developing extended care plans, and aligning patients' expectations during transitions.

DISCUSSION:

SNFs are a critical component of the healthcare system for our most vulnerable patients, and there is significant variability in how patients transition from acute care settings to SNFs directly impacting clinical outcomes. The INFORM collaborative established an innovative model for data sharing and improving transitions of care and reducing preventable adverse events and readmissions.

Self Assessment

No questions submitted

ABSTRACTS AND SELF-ASSESSMENT
Session 3

Saturday, Nov 12, 8:00 AM Resident Competition Paper
Specific Gene Expression Profiles are Associated with a Pathologic Complete Response to Neoadjuvant Therapy in Esophageal Adenocarcinoma

Authors: Patrick J McLaren MD 1, A Paul Barnes PhD 2, Willy Z Terrell BS 1, Gina M Vaccaro MD 3, Jack Wiedrick MS 4, John G Hunter MD 1, James P Dolan MD, MCR 1

Presenting Author: Patrick McLaren, MD

Closer: James Dolan, MD

Discussant: Flavio Rocha, MD

Introduction:

Predicting prognosis in esophageal cancer remains an unrealized goal despite studies linking constellations of genes to therapeutic response. In this study, we analyzed specific predictor genes expressed in tumor specimens from our institutional repository. Our aim was to determine if specific gene expression profiles are associated with pathologic complete response (pCR) after neoadjuvant chemo-radiotherapy (CRT).

Methods:

We investigated eleven genes identified from prior studies (CCL28, SPARC, S100A2, SPRR3, SIRT2, NOV, PERP, PAPSS2, DCK, DKK3, ALDH1) that have significant association with esophageal cancer progression. Patients with esophageal adenocarcinoma treated with neoadjuvant CRT followed by esophagectomy at our institution between January 2011 and July 2015 were included. Quantitative real-time polymerase chain reaction was conducted on pre-treatment biopsy specimens to determine gene expression. Patients were classified into two groups: 1) pCR and, 2) no or poor response (NR) after CRT based on final pathology report. An omnibus test using Mahalanobis distance was applied to evaluate overall genetic expression differences between groups. Log-rank tests compared the differential expression of individual genes.

Results:

29 patients (11 pCR and 18 NR) were analyzed. Overall, gene expression profiles were significantly different between pCR and NR patients ($p < 0.01$). In particular, CCL28 was over-expressed in pCR (Log-

HR: 1.53, 95%CI: 0.46-2.59, p=0.005), and DKK3-was under-expressed in pCR patients (Log-HR: -1.03 95%CI: -1.97, -0.10, p=0.031).

Discussion:

Esophageal adenocarcinoma patients with a pCR after neoadjuvant therapy have genetic profiles that are significantly different from typical NR profiles. In our population, the genes CCL28 and DKK3 are potential predictors of treatment response.

Self Assessment

A 67 year old man with a history of smoking and heavy alcohol intake was found to have a T3 Nx Mx esophageal tumor in the distal third of his esophagus. Based on the information provided in this presentation, which of the following modalities might add to the prediction of response to neoadjuvant therapy for this man's treatment? The efficacy of neoadjuvant chemotherapy for esophageal adenocarcinoma may be evaluated by:

- A. Serial PET imaging
- B. Assessing specific tumor genetic profiles via PCR
- C. Routine assessment of histopathology
- D. There is no correlation between neoadjuvant chemotherapy and gene expression

Saturday, Nov 12, 8:20 AM Resident Competition Paper

Is Pelvic Sentinel Node Biopsy Necessary for Lower Extremity and Trunk Melanomas?

Authors: Darryl Schuitevoerder MBBS, Stanley P L Leong MD, Jonathan S Zager MD, Richard L White MD, Eli Avisar MD, Heidi Kosiorek MS, Amylou Dueck PhD, Jeanine Fortino HIMA, Kyle Hart MS, John T Vetto MD

Presenting Author: Darryl Schuitevoerder, MD

Closer: John Vetto, MD

Discussant: Vance Sohn, MD

Introduction:

Clinicians are reluctant to perform pelvic sentinel lymph node (PSLN) biopsy for melanoma given it's technically challenging nature, potential for complications, and uncertainty as to whether the results will alter management. Our objectives were to identify the incidence and clinical impact of PSLNs.

Methods:

Retrospective review of a prospectively collected, IRB approved, multi-institutional melanoma database (Sentinel Lymph Node Working Group).

Results:

Of 2476 cases of lower extremity and trunk melanomas, 1086 had drainage to superficial (inguinal or femoral) sentinel lymph nodes (SSLN) and 227 (9%) drained to PSLNs (181 to both PSLNs and SSLNs and 46 to PSLNs only). Seventeen (7.5%) of 227 PSLN cases were positive for nodal metastasis, 8 with drainage to PSLNs only. The remaining 9 cases had drainage to both PSLNs and SSLNs with only one having negative SSLNs. Complication rates between PSLN and SSLN biopsy were similar (15 vs. 14% respectively, $p=0.82$). Eight of the 17 positive PSLN cases had completion pelvic node dissection, 2 (25%) having disease in non-sentinel nodes, both of which also had positive non-sentinel inguinal or femoral lymph nodes. Thus, in 181 cases with drainage to both SSLNs and PSLNs, PSLN biopsy upstaged one patient (0.6%), and completion dissection based on a positive PSLN did not upstage any.

Discussion:

PSLN biopsy is safe, with an equivalent complication rate to SSLN biopsy. However, in the face of drainage to both SSLNs and PSLNs, there is minimal clinical impact. We therefore recommend PSLN biopsy only in the absence of drainage to SSLNs.

Self Assessment

What is the incidence of drainage to external iliac or obturator sentinel lymph nodes for melanoma of the trunk or lower extremity?

- A. <1%
- B. >50%
- C. 9%
- D. 25%

Saturday, Nov 12, 8:40 AM Resident Competition Paper
More is Better: Lymph Node Harvesting in Colorectal Cancer

Authors: O'Boyle ST and Stephenson KR

Presenting Author: Keith Stephenson, MD

Closer: Keith Stephenson, MD

Discussant: John Vetto, MD

Introduction:

Previous studies have demonstrated the efficacy and safety of laparoscopic resections for colorectal cancer (CRC) in large referral centers. We sought to determine if mesenteric lymph node harvesting and survival for CRC were comparable between laparoscopic and open resections in a community hospital setting.

Methods:

A retrospective chart review of patients at two community hospitals who underwent open or laparoscopic resection for CRC between January 2008 and September 2013 was performed. Data extracted included information such as age, pathologic stage, surgical approach, the number of lymph nodes removed, and date and cause of death.

Results:

Three hundred seventy-one patients had open (mean age 67.9 years) and 110 had laparoscopic resections (age 64.3 years). There was no difference between open (17.85) and laparoscopic (18.91) approaches ($p=0.171$) in the number of lymph nodes harvested. Patients who had more nodes removed tended toward improved survival, independent of stage ($p=0.52$), an effect that was more pronounced in the open resection group ($p=0.031$). There was no difference in survival between the open and laparoscopic groups overall (HR 1.52, $p=0.208$).

Discussion:

No survival advantage was found between the open and laparoscopic resection groups, affirming that the choice of operative approach for CRC does not affect the quality of the oncologic procedure in a community hospital setting. Patients who had more lymph nodes removed tended toward improved survival. The explanation for this effect, which may change the recommendation for minimum numbers of nodes harvested in surgery for CRC, remains unclear.

Self Assessment

Laparoscopic resections resulted in ___ mesenteric lymph nodes being removed than in open procedures.

- A. slightly more
- B. slightly fewer
- C. substantially fewer
- D. exactly the same number of

Saturday, Nov 12, 9:00 AM

Completeness of ultrasound reporting is associated with time to biopsy and operation for benign and malignant thyroid nodules

Authors: Alexandra Inman, MD¹; Kaidi Liu, BKin²; Kaye Ong, MSc²; Pari Tiwari, MD³; Patrick Vos, MD³; Adam White, MD¹; Sam M. Wiseman, MD, FRCSC²

Presenting Author: Sam M. Wiseman, MD, FRCSC

Closer: Sam M. Wiseman, MD, FRCSC

Discussant: Adnan Alseidi, MD

Background:

The thyroid ultrasound (US) report is critical for communication of imaging characteristics between the ultrasonographer and treating physicians. We aimed to study the frequency of inclusion of guideline recommended elements for thyroid ultrasound reporting of nodular disease, and whether element reporting was associated with the time to cytological and surgical diagnosis.

Methods:

US reports of adults who underwent thyroid surgery for benign (n=106) or malignant (n=105) thyroid nodules between 2009 and 2014 were retrospectively reviewed for their inclusion of guideline recommended elements.

Results:

On average 5.1 elements of 11 (46.4%) were included in ultrasound reports of all nodules. An average of 4.9 elements were reported for benign nodules, and 5.3 for cancers ($p=0.012$). The setting of the US (academic versus community center) influenced the number of elements reported (6.3 in academic versus 4.9 in community, $p<0.001$). The average time from US to FNAB and to operation, was 62 days (range 0-413 days) and 298.5 days (range 35-2591 days), respectively. Academic centers had shorter wait times from US to biopsy compared to community centers. Malignant nodules had shorter wait times from US to operation compared to benign nodules. A higher number of reported elements was significantly associated with fewer days between US and FNAB, and US and thyroid operation ($p=0.00039$ and $p=0.00060$, respectively).

Discussion:

Under-reporting of guideline-recommended US elements should be avoided because it is associated with delayed cytological diagnosis, and

surgical treatment, of thyroid nodules and cancer.

Self Assessment

A 55 y/o male with a solitary thyroid nodule presents to a community hospital for evaluation by his primary care physician who orders a thyroid ultrasound. Increased time to cytological diagnosis and surgical treatment for this thyroid nodule is associated with all of the following except:

- A. Decreased number of reported elements on ultrasound report
- B. Benign pathology
- C. Initial care at a community hospital
- D. Specialty of treating surgeon

Saturday, Nov 12, 9:20 AM Resident Competition Paper

Evaluation of Endorectal Ultrasound (ERUS) and MRI for Prediction of Circumferential Resection Margin (CRM) for Rectal Cancer

Authors: Catherine Tsai, Manoj Raval, Carl Brown, Ahmer Karimuddin, P Terry Phang

Presenting Author: Catherine Tsai, MD

Closer: P. Terry Phang, MD

Discussant: Yarrow McConnell, MD

ERUS and MRI are used for preoperative imaging of rectal cancer. Here, we compare ERUS and MRI for accuracy of CRM prediction at mid- and distal rectal locations.

Eighteen rectal cancer patients had ERUS and MRI preoperatively; 9 were mid- and 9 were distal rectum. ERUS and MRI were assessed for CRM prediction and compared to final TME pathology.

Overall, predicted CRM was 6.7 ± 3.3 mm by ERUS, 4.5 ± 4.6 mm by MRI, and 5.9 ± 3.6 mm by pathology. MRI did not clearly identify T1 lesions. Overall, correlation coefficients to pathology were 0.783 ($p = 0.037$) for ERUS and 0.790 ($p = 0.035$) for MRI. In mid rectum, correlation coefficients were 0.992 ($p = 0.081$) for ERUS and 0.997 ($p = 0.052$) for MRI. In distal rectum, correlation coefficients were 0.867 ($p = 0.133$) for ERUS and -0.144 ($p = 0.856$) for MRI.

CRM predictions by ERUS and MRI had high correlations to pathology. MRI did not identify T1 lesions and had negative correlation in distal rectum. While MRI is used routinely for preoperative rectal cancer imaging, ERUS can provide additional assessment for T1 and distal

rectal lesions. Further investigation is warranted to support these preliminary ERUS findings in distal rectum.

Self Assessment

The rectal location that ERUS may provide staging information complementary to MR.

- A. distal rectum
- B. mid rectum
- C. upper rectum
- D. rectosigmoid junction

Saturday, Nov 12, 9:40 AM Resident Competition Paper

Comparison of three caval reconstruction techniques in orthotopic liver transplantation: a retrospective review

Authors: T Chan, K DeGirolamo, MS Bleszynski, AK Buczkowski

Presenting Author: Tiffany Chan, MD

Closer: Andrzej Buczkowski, MD

Discussant: Terry Phang, MD

Introduction:

Classic description of caval reconstruction during orthotopic liver transplantation involves complete cross-clamping of the recipient inferior vena cava (IVC) and interposition of the donor IVC. Other techniques involve complete recipient hepatectomy with preservation of the IVC, followed by piggyback (PB) to the hepatic veins, or side-to-side (SS) caval anastomosis. All three techniques are practiced in parallel at our centre. Avoidance of complete cross-clamping may carry benefits for hemodynamic stability, blood loss, and transfusion requirements. The primary objective was to compare intraoperative resuscitation requirements between caval reconstruction techniques.

Methods:

Retrospective review of a provincial transplant database (2007-2011) and patient charts. Groups were categorized by caval reconstruction technique. Pre-transplant Model of End Stage Liver Disease (MELD) score was used as measure of disease severity. Intraoperative blood loss, transfusion requirements, and volume resuscitation were corrected for operative duration and compared using ANOVA (sig $p < 0.05$). Results: 200 deceased-donor transplants (Classic: 58, PB: 72, SS: 70) performed in 191 patients were included. Baseline disease severity was equal between groups (MELD: Classic:18.3, PB:18.7, SS:20.3, $p=0.22$). No significant differences were observed in time-corrected intra-

operative blood loss (Classic:34.2, PB:32.3, SS:34.4 mL/min, p=0.69) or crude resuscitation volume (Classic:15.2, PB:15.2, SS:15.3 mL/min, p=0.99). Sub-analysis of individual resuscitation components (pRBC, cell saver, FFP, plts, crystalloid, colloid) was not significantly different between groups.

Discussions:

There does not appear to be a superior technique in terms of minimizing intraoperative blood loss or volume resuscitation. Availability of different caval reconstruction techniques allows for a breadth of options in difficult cases.

Self Assessment

The piggyback technique to liver transplant involves:

- A. complete cross clamping of the recipient vena cava
- B. routine construction of portocaval shunt
- C. recipient hepatectomy preserving the vena cava
- D. veno-veno bypass

Saturday, Nov 12, 10:00 AM

PET Diagnosed Thyroid Incidentalomas Management of British Columbia Canada: Critical Importance of the PET Report

Authors: Jordan Wong, MD^{1,2}; Kaidi Liu, BKin³; Celia Siu, MSc^{4,5}, Marlise Sovka²; Don Wilson, MD, FRCPC^{1,6}; Sam M. Wiseman, MD, FRCSC^{3,7}

Presenting Author: Sam M. Wiseman, MD, FRCSC

Closer: Sam M. Wiseman, MD, FRCSC

Discussant: Nathalie Johnson, MD

Background:

The aim of this study was to review physician management and outcomes for PET diagnosed thyroid incidentalomas in British Columbia (BC) Canada.

Methods:

All PET scans performed in BC, for non-head and neck indications, between 2011 and 2014 were reviewed, and patients with incidental thyroid findings were identified. Patient characteristics, investigations, and management were reviewed from patient records. Surveys were sent to the physician who ordered the PET scans for patients with limited records available.

Results:

899 of 19,270 PET scans (4.67%) identified focal or diffuse thyroid findings in 802 patients. In those with diffuse findings (n=286), 32.4% (n=134) were included on the PET scan report impression and 4.86% (n=28) underwent an ultrasound (US) or fine needle aspiration biopsy (FNAB). Of those cases investigated, 10.7% (n=3) were found to have cancer. In patients with focal findings (n=440), 85.7% (n=377) were included on the PET scan report impression and 46.1% (n=203) underwent an US or FNAB. Of those cases investigated, 21.2% (n=43) were found to have cancer. Inclusion of the thyroid incidentaloma finding in the PET report impression, and recommending further workup within the PET report, are significant factors in predicting further evaluation (p-value <0.05). For focal findings, SUVmax and having undergone multiple PET scans with similar findings are additional factors associated with nodule work up (p-value <0.05).

Discussion:

Patients with focal incidental thyroid findings diagnosed by PET scan are being under-investigated in BC. The most significant factors associated with undergoing further thyroid incidentaloma workup are PET scan report related.

Self Assessment

A 51 year old woman with a history of lymphoma undergoes a surveillance PET. What finding in the radiology report is most associated with further work-up of an incidental thyroid nodule?

- A. Diffuse FDG uptake.
- B. Focal FDG uptake with SUVmax of 2.0
- C. Nodule greater than 7 mm.
- D. Focal FDG uptake with a SUVmax of 6.0

ABSTRACTS AND SELF-ASSESSMENT
Session 4

Saturday, Nov 12, 1:00 PM

Outcomes of Bedside Sutureless Umbilical Closure Without Endotracheal Intubation For Gastroschisis Repair in Surgical Infants

Authors: Gillian Pet, Rebecca A. Stark, John J. Meehan, Patrick J. Javid
Presenting Author: Patrick J. Javid, MD
Closer: Patrick J. Javid, MD
Discussant: Kenneth Azarow, MD

Introduction:

Newborns with gastroschisis have historically undergone urgent surgical repair under general anesthesia. Our institution recently transitioned to a sutureless umbilical closure technique for gastroschisis performed at the bedside. The aim of this study was to evaluate the feasibility of performing bedside gastroschisis repair using light sedation only and avoiding endotracheal intubation.

Methods:

A retrospective chart review was performed of neonates with gastroschisis who underwent sutureless umbilical closure from 2011 to 2015. The decision to attempt closure without intubation was made by the attending surgeon. Clinical characteristics and outcomes between groups were compared.

Results:

In total, 53 infants underwent sutureless umbilical closure for gastroschisis. Closure without endotracheal intubation was attempted in 23 (43%) babies and was successful in 15 (65%) infants in this cohort. The success rate improved over time; the last 7 consecutive closures without intubation were successful. Two of the 8 patients who ultimately required intubation could not be closed primarily and needed a temporary silo closure. Neonates successfully repaired without intubation were more premature (35 vs 38 weeks gestation, $p<0.01$), smaller at birth (2.2 vs 3.1 kg, $p=0.01$), and repaired nearly a full hour sooner ($p<0.01$). There were no differences in time to full enteral nutrition, length of stay, bowel ischemia, or sepsis.

Conclusion:

Bedside sutureless umbilical closure without intubation using light

sedation is safe and effective in newborns with gastroschisis. The procedure decreases overall time to gastroschisis closure. In our experience, smaller and more premature neonates were more likely to be successfully closed without intubation.

Self Assessment

Which of the following factors is associated with an improved chance of success in bedside sutureless umbilical closure for gastroschisis using light sedation only?

- A. Larger birth weight
- B. Smaller birth weight
- C. Later gestational age at birth
- D. Complicated gastroschisis

Saturday, Nov 12, 1:20 PM Resident Competition Paper

Bariatric Surgery is Safe in General Surgery Training

Authors: John Kuckelman DO, Jason Bingham MD, Morgan Barron MD, Michael Lallemand MD,

Presenting Author: John Kuckelman, MD

Closer: Vance Sohn, MD

Discussant: Karen Deveney, MD

Introduction:

As a reflection of the world-wide obesity epidemic, an increasing percentage of a surgical resident's cumulative operative experience is in bariatric surgery. As these are often complex cases, the impact of resident involvement on patient safety has been questioned. Our aim was to review patient outcomes in resident-associated bariatric procedures.

Methods:

We reviewed patients undergoing a bariatric procedure from July 2007 to July 2014 in a tertiary care single center. All procedures were performed primarily by a general surgery resident and proctored by an attending general surgeon. Primary outcomes were operative volume and leak rate.

Results:

A total of 1,649 bariatric procedures were performed with resident involvement from July 2007 to July 2014. Bariatric operations studied included laparoscopic sleeve gastrectomy (959) and laparoscopic bypass (690). Eighteen leaks were identified with an overall leak rate of

0.67%. Average operating times over all resident levels was 136 minutes. The average number of bariatric procedures performed by graduating chief residents is 89. The number of leaks and operative duration between resident year groups were not statistically significant ($p = .54$ and $p = .97$), respectively.

Conclusions:

Involvement of general surgery residents does not have a negative impact on outcomes in bariatric surgery. Furthermore, these operations can safely be performed with staff supervision at the junior resident level without a significant difference in leak rate.

Self Assessment

What percentage of a general surgery resident's cases are made up of advanced laparoscopic bariatric surgery?

- A. 3%
- B. 25%
- C. 10%
- D. 1%

Saturday, Nov 12, 1:40 PM Resident Competition Paper

CHIVA vs vein stripping; a prospective study.

Authors: Marta Zmudzinski, Pierre Malo, Allen Hayashi, Christine Hall

Presenting Author: Marta Zmudzinski, MD

Closer: Allen Hayashi, MD

Discussant: Kaj Johansen, MD

OBJECTIVE:

This prospective cohort study documents the outcome of varicose vein surgery using a vein sparing approach (CHIVA) compared to literature reported outcomes for traditional stripping of the great saphenous vein (GSV) and/or anterior accessory of the GSV.

CONTEXT:

Varicose vein disease (VVD) affects approximately 23% of adults. Varicose vein stripping remains a common treatment modality, is invasive and has significant recurrence rates (35-53%). CHIVA, a minimally invasive technique, uses portable ultrasound to target venous pathology and enables accurate ligation while sparing the GSV.

METHODS:

We prospectively assessed patients who underwent CHIVA (150 legs;

111 patients) between October 1, 2014 and April 30, 2015. Patients were examined pre and post procedure using duplex ultrasound. Successful treatment was defined as cessation of reflux in the diseased vessel at the saphenofemoral junction. Early follow-up was completed within 3 months for all patients, later follow-up was scheduled >1 year post op.

RESULTS:

Of the 111 patients (150 legs), there was no documented recurrence at early follow-up (0%, 99.75% CI 0%, 2.4%). To date, 34/150 legs (30/111 patients) have achieved >1 year follow-up. Mean follow-up was 15.6 months (shortest was 12.2 months; longest 18.4 months; SD 1.6 months). Duplex ultrasound evaluations found recurrence in 3/34 legs; an 8.8% failure rate (95% CI 1.9%, 23.7%). In those who recurred, there was significantly less reflux than at their initial assessment.

CONCLUSIONS:

Historic recurrence rates following traditional stripping are high. In our cohort to date, CHIVA is a more effective technique for treatment of VVD than stripping.

Self Assessment

A 50 year old female has varicose veins symptomatic of pain and leg swelling that is aggravated by her job of pedestrian crossing guard.

She is asking about less invasive surgery for varicose vein surgery. You advise that the benefits of CHIVA include all of the following EXCEPT:

- A. Minimally invasive surgery
- B. Can be performed regardless of co-morbidities
- C. Is cost-effective
- D. Has better outcomes

Saturday, Nov 12, 2:00 PM

Conversion of Sleeve Gastrectomy to Roux-en-Y Gastric Bypass: a Canadian Experience

Authors: Ekua Yorke, Caroline Sheppard, Noah Switzer, David Kim, Daniel Birch, Christopher de Gara, Aliyah Kanji, Shahzeer Karmali
Presenting Author: Ekua Yorke, MD

Closer: Daniel Birch, MD

Discussant: Cliff Deveney, MD

Introduction:

Sleeve gastrectomy (SG) can be associated with inadequate weight loss, insufficient resolution of co-morbidities and severe reflux. Conversion to

Roux-en-Y Gastric Bypass (RYGB) is a potential solution. The aim of this study was to determine the common indications for conversion from SG to RYGB at our centre, and evaluate patient outcomes with respect to weight loss and co-morbidity resolution.

Methods:

A retrospective review of patients who underwent conversion from SG to RYGB between 2008 and 2015.

Results:

273 SGs were performed of which 6.6% (n=18) were converted to RYGB most commonly due to inadequate weight loss (65.3%) and severe reflux (26.1%). Two patients were converted as a planned two-stage approach to RYGB. Patients went from a mean preoperative BMI of 50.5 to a mean BMI of 40.5 post-SG on average by 20.9 months. The mean time to conversion was 41.8 months. There was no relationship between pre-SG BMI and time to conversion (p=0.040). The mean BMI after conversion was 36.4, but the mean additional weight lost was not significant (p = 0.057). After conversion, four of the five diabetic patients are now medication free and 75% of patients no longer have reflux symptoms. All patients had complete resolution of their hypertension and obstructive sleep apnea. There were no immediate postoperative complications. Two patients developed new onset iron deficiency anemia.

Conclusion:

Conversion to RYGB is a safe option for SG failure and resulted in significant benefits from co-morbidity resolution. Hospital length of stay and operative time implications are discussed.

Self Assessment

What were the two most common reasons for conversion to RYGB in our study?

- A. Inadequate weight loss and severe reflux
- B. Inadequate weight loss and sleep apnea
- C. Severe reflux and sleep apnea
- D. Severe reflux and diabetes

Saturday, Nov 12, 2:20 PM

Fascicle counts in ilioinguinal nerves from primary open inguinal hernia correlate with increased preoperative hernia pain

Authors: Robert Wright, M.D. , Donald Born, M.D., PhD, Natasha D'Souza, BS, Daniel Wright, MS, Rachel Gill, Larisa Hurd, BS, Matthew Cunningham, PhD

Presenting Author: Robert Wright, MD

Closer: Robert Wright, MD

Discussant: Mark Hardin, MD

Enlargement of the ilioinguinal nerve at the external inguinal ring occurs in 34% of patients in primary open inguinal hernia. Fascicle counts in these enlarged nerves have not yet been studied in relation to incidence of preoperative hernia pain.

In this prospective study, 35 patients completed Visual Analog Scale (VAS) and Carolina Comfort Scale questionnaires. Open primary inguinal herniorrhaphy and routine ilioinguinal neurectomy was performed. All nerves were sampled proximal to the external inguinal ring. Any nerves grossly thickened at the external ring were additionally sampled in the thickened portions. Each proximal segment was analyzed with its distal matched-pair. A neuropathologist performed blinded histologic evaluation of H&E stained cross and longitudinal sections.

Of the 35 patients, 4 had no identifiable ilioinguinal nerves, 1 had traumatic neuroma and 8 had uniform nerve diameters, yielding 22 thickened nerves (63% of total) with proximal and distal specimens for examination. A quantitative description of various histological indicators was undertaken (including renaut bodies, fascicle count, and epineurium content).

The results demonstrate that fascicle count is the only histological indicator correlated with increased VAS pain measures. Higher fascicle counts are positively correlated with increased pain in eight of eleven pain measures (pain laying down ($p < .016$), sitting up ($p < .008$), during daily living activities ($p < .022$), walking ($p < .006$), walking up stairs ($p < .0028$), most intense ($p < .016$), most of the time ($p < .018$), and while resting ($p < .004$). In primary inguinal hernia, higher fascicle counts within enlarged ilioinguinal nerves significantly correlate with increased preoperative pain.

Self Assessment

Sharp pre operative inguinal pain with primary hernia:

- A. Does not correlate with nerve histology
- B. Correlates with fascicles as much as burning pain does
- C. Correlates with increased fascicle counts in the distal and proximal ilioinguinal nerve
- D. Correlates with gross nerve enlargement

ABSTRACTS AND SELF-ASSESSMENT
Session 5

Saturday, Nov 12, 2:40 PM Resident Competition Paper
Circumferential pedicled omental flap for protection of portal venous reconstruction (PVR) and gastroduodenal artery (GDA) stump following pancreatoduodenectomy

Authors: Angelena Crown MD, Adnan A. Alseidi MD, Thomas R. Biehl MD, W. Scott Helton MD, and Flavio G. Rocha MD
Presenting Author: Angelena Crown, MD

Video Submission:

Background: Up to one third of patients undergoing resection of locally advanced or borderline resectable pancreatic adenocarcinoma will require a PVR for tumor clearance. Pancreatic leak from anastomotic failure can cause significant morbidity with potentially disastrous consequences in the presence of a vascular suture line or graft. Herein we describe a technique for creation of an omental tissue barrier to protect a PVR or GDA stump.

Technique:

Following routine pancreatoduodenectomy reconstruction, the omentum is mobilized off the transverse colon ensuring to preserve the feeding branches from the left gastroepiploic artery. The omentum is then passed behind the pancreatojejunostomy (PJ) above the PVR. It is grasped superiorly and passed anterior to the PJ to exclude the GDA stump. The flap is then secured to the blind end of the jejunum with suture thereby completing the circumferential wrap. Care must be taken in obese patients to trim the flap to fit behind the pancreas without devascularizing it or causing tension on the PJ. If a closed suction drain is desired, it can be passed from the patient's right either in front or behind the hepaticojejunostomy and placed around the flap.

Application: Patients with moderate to high risk of pancreatic fistula after undergoing PD with PVR with an intact omentum. Post-operative computed tomography demonstrates viable fat tissue between the pancreas and portal vein.

Results:

This circumferential, pedicled omental flap is an easy, reproducible, and durable method to protect vascular structures and repairs from pancreatic fistulas in high-risk glands.

Self Assessment

The following group of patients will most likely benefit from an omental flap:

- A. Morbidly obese patients
- B. Patients requiring a portal venous reconstruction
- C. Patients with a firm pancreas
- D. Diabetic patients

Saturday, Nov 12, 2:55 PM Resident Competition Paper ***“The Missing Linx” for Gastroesophageal Reflux Disease?***

Authors: John Kuckelman, Matthew Martin

Presenting Author: John Kuckelman, MD

Introduction:

In 2012 the FDA approved a magnetic implant (Linx, Torax Medical, Inc) around the lower esophageal sphincter as an alternative approach to fundoplication for gastroesophageal reflux disease (GERD). Since the Linx device has become available, it has proven to be a safe and highly effective option for appropriately selected candidates, and has an excellent short and mid-term outcomes profile. The original indications are for patients with GERD who have normal esophageal motility, and either no hiatal hernia or a small (up to 3 cm) defect. However, many surgeons have extended these indications to patients with larger hiatal hernias or other unique situations.

Video Case:

This video will highlight the important techniques and technical points with the Linx device in two separate scenarios: First will be placement in a standard indications setting of uncomplicated GERD with no hiatal hernia. Second will be placement with complicated anatomy characterized by a large para-esophageal hernia. Operative technique will be highlighted, as well as the alterations that are required in the setting of more complicated anatomy. Dissection of the posterior esophagus, identification and exclusion of the posterior vagus nerve, sizing and placement, locking of the device, and a review of postop imaging studies is included.

Conclusions:

The Linx device can be placed safely in patients with normal or significantly altered anatomy but requires adherence to several key principles and technical maneuvers. This procedure offers a new and technically unique option that effectively provides a safe and effective

less invasive alternative for symptomatic reflux disease.

Self Assessment

What crucial step of the operation prevents slippage of the magnetic device?

- A. Dissection of the gastrohepatic ligament
- B. Repair of the hiatal hernia
- C. Identification and dissection of the posterior vagus nerve
- D. Sizing of the device

Saturday, Nov 12, 3:10 PM Resident Competition Paper *Constructing a Video Tutorial to Educate the Layperson on Assessment of the Critical View of Safety in Laparoscopic Cholecystectomy*

Authors: Shanley B. Deal MD, Adnan Alseidi MD MEd, L. Michael Brunt MD, and Dimitrios Stefanidis MD PhD

Presenting Author: Shanley B. Deal, MD

Our work group created a video tutorial constructed to educate the layperson on assessment of the critical view of safety in a laparoscopic cholecystectomy. The video has been developed through an iterative review process involving content experts from the SAGES Safe Cholecystectomy Project, use of Strasberg's doublet criteria, laypersons, and feedback from Amazon Mechanical Turk crowd-workers. We intend to present this 8 minute video reviewing gallbladder disease, basic hepatobiliary anatomy, overview of the operative steps in a laparoscopic cholecystectomy, definitions of the critical view of safety including photo and video of ideal examples, and present criteria used to assess a surgeon's demonstration of the critical view of safety as seen in intra-operative video. This video will highlight the feasibility of developing a video to educate non-surgeons, as well as novice healthcare professionals, on complex intra-operative anatomy and tasks.

Self Assessment

What are the three components of the critical view of safety in a laparoscopic cholecystectomy?

- A. Cystic plate clearance, hepatocystic triangle clearance and demonstrating the cystic duct and cystic artery connected to the gallbladder.
- B. Cystic plate clearance, Calot's triangle clearance, and demonstrating the common bile duct and cystic artery connected to the gallbladder.

- C. Cystic plate clearance, hepatocystic triangle clearance, and demonstrating the common bile duct and cystic artery connected to the gallbladder.
- D. Cystic plate clearance, Calot's triangle clearance, and demonstrating the extrahepatic bile duct and cystic artery connected to the gallbladder.

Saturday, Nov 12, 3:25 PM

Seamguard Preserves Staple Line Histology for Pathological Analysis

Authors: Nathaniel Paull, MD; Eugene Cho, MD; Brian Folz, MD
Presenting Author: Nathaniel Paull, MD

Adequate surgical resection of GIST tumors requires a pathologically negative margin. Surgical staplers tend to crush tissue when deployed in a way that renders evaluation of the true specimen margin impossible. As a result, what is reported as the "margin" is in fact usually tissue at least several millimeters away from a true margin. We report a case of resection of a gastric GIST in which the use of Seamguard at the staple line preserved histology of the stapl line (the true margin), which allowed its pathological analysis. The preserved histology ultimately changed the pathology report from a positive margin to a negative margin and spared the patient further resection. If further corroborated, this finding could usefully be applied to operations in which anatomy forces a close resection margin, by allowing the true margin within the staple line to be assessed microscopically.

Self Assessment

The seamguard staple line may change the pathology to which of the following:

- A. R2 Margin
- B. R1 Margin
- C. R0
- D. Tumor perforation

North Pacific Surgical Association

CONSTITUTION BYLAWS DIRECTORY

The North Pacific Surgical Association was organized in 1912. The first meeting for the purpose of organization was held in Portland on March 6, 1912, and the second meeting at which organization was completed, was held in Seattle on May 12 of the same year.

The By-laws allow an active membership of 150, now 123, distributed as follows:

Portland.....	43
Seattle	23
Vancouver.....	16
Tacoma	8
Spokane	11
Victoria/Alberta.....	22

There are 82 senior non-retired, 105 senior retired and 44 non-resident members.

Honored in our memory are members who died recently.

Stanley W. Jacob, MD.....	Joined 1963
Robert T. Schaller Jr., MD.....	Joined 1978

North Pacific Surgical Association

CONSTITUTION

ARTICLE 1. NAME

The name of this Corporation is the North Pacific Surgical Association (hereinafter 'the Association').

ARTICLE 11. PURPOSE

The purpose of the Association is to bring together persons residing in the States of Oregon and Washington and the Provinces of British Columbia and Alberta who desire to enhance the science and art of surgery and the quality of surgical practice through scientific meetings and professional discussions.

ARTICLE 111. MEMBERSHIP

Section 1. The membership of the Association shall consist of surgeons who either fulfill the qualifications specified in Section 4 below, or both fulfill the qualifications specified in Section 3 below and who are admitted to membership pursuant to the procedure specified in the Bylaws.

Section 2. There shall be five (5) types of membership: Active, Senior, Non-resident, Honorary, and Retired, as defined in the Bylaws.

Section 3. A candidate for active membership must:

- a. Be a diplomate of the American Board of Surgery or a Fellow of the Royal College of Physicians and Surgeons of Canada, or possess equivalent qualifications.
- b. Reside and practice within the geographic limits of the Association, which are the states of Oregon and Washington and the Provinces of British Columbia and Alberta.
- c. Have been recognized by peers for achievements in surgery as a practitioner, investigator, teacher, or
- d. author, and have published two or more scientific articles.

- e. Have obtained the sponsorship of an active or senior member of the Association as provided in the Bylaws.

Section 4. All members in good standing of the North Pacific Surgical Association in September 1985 shall become members of the Association.

Section 5. The privilege of continuing membership shall be subject to adherence to the provisions of the Constitution and Bylaws of the Association.

ARTICLE IV. OFFICERS

Section 1. The officers of the Association shall be a President, a First Vice-President, a Second Vice-President, a Senior Councilor, a Junior Councilor, a Councilor Ex-Officio, a Secretary-Treasurer, and a Recorder, and an Historian.

Section 2. The term of office of the officers shall be as defined in the Bylaws.

Section 3. Neither the Secretary-Treasurer nor the Recorder may serve concurrently as the President.

Section 4. The officers shall be elected at the Annual Meeting of the Association in accordance with the procedures set forth in the Bylaws.

ARTICLE V. COUNCIL

Section 1. The governing body of the Association shall be the Council and its composition shall be as provided in the Bylaws.

ARTICLE VI. MEETINGS

Section 1. The Association shall hold annual business and scientific meetings, the time and place to be determined by the Council. Only members of the Association may attend the Business Meetings.

Section 2. Special meetings of the Council or of the membership may be called as provided in the Bylaws.

ARTICLE VII. AMENDMENTS

Proposed amendments to the Constitution shall be submitted in writing to the members at least 30 days prior to a regular business meeting at which the proposed amendments shall be presented to the membership for a vote. An affirmative vote of two-thirds of the members present is required to adopt an amendment to the Constitution.

Constitution revised November 2002

North Pacific Surgical Association

BYLAWS

ARTICLE 1. GEOGRAPHIC ORGANIZATION

Section 1. Regions. The Association shall be organized on the basis of four regions: the State of Washington, the State of Oregon, the Province of British Columbia, and the Province of Alberta.

Section 2. Districts. Each region shall consist of one or more districts which shall be identified as the cities in which a plurality of the members in the district practice. Such districts shall be Vancouver, British Columbia; Victoria/Alberta, Seattle, Spokane, Tacoma and Portland..

Section 3. District Membership. Each member of the Association shall be a member of one district based on either proximity to the district city or invitation by the district caucus.

ARTICLE II. APPLICATION FOR ACTIVE MEMBERSHIP

Section 1. Applicant. Any properly qualified surgeon may apply for membership by obtaining the sponsorship of an Active or Senior member who, attesting to the applicant's professional competence and ethical behavior, shall propose his candidacy in writing to the district Councilor.

Section 2. Candidate. An applicant shall become a candidate for membership following: 1) the presentation of his or her name, recommendations, and credentials by the district Councilor to the district caucus meeting, 2) a determination that a vacancy exists in the Association, and 3) an affirmative vote of three-fourths of the members present at the district caucus meeting. Candidates shall be reviewed by the Council and those approved shall be submitted to a vote at the Annual Business Meeting.

Section 3. Election to Membership. Election to active membership shall require an affirmative vote of two-thirds of members present at the Annual Business Meeting.

Section 4. Notice of Election. Every newly elected member shall be furnished by the Secretary-Treasurer with an official notice of election accompanied by a copy of the Constitution and Bylaws.

Section 5. Initiation Fee. Every member shall, on admission, pay an initiation fee by which act he acknowledges and accepts the Constitution and Bylaws of the Association. Following receipt by the Secretary-Treasurer of the initiation fee, the newly elected member shall be furnished with a Certificate of Membership signed by the President and the Secretary-Treasurer and bearing the Seal of the Association. A newly elected member is expected to submit the title of a paper for presentation the year following his election.

Section 6. Candidates not elected. The Secretary-Treasurer shall notify candidates not elected and their sponsors.

ARTICLE 111. MEMBERS

Section 1. Active Members.

a. Duties and Rights. It shall be the duty of each active member to attend regularly the meetings of the Association, to participate in the Scientific Programs, and to submit a paper to the secretary for presentation or be the primary discussant of a paper at the Annual Meeting every four years, and to uphold the ideals and objectives of the Association. Each active member shall be entitled to one vote and may hold any office in the Association. Active members who are due to become senior members and who are delinquent for attendance or submission of an abstract (or acting as a primary discussant) by no more than one year shall be excused from that requirement and shall become senior members in good standing. The membership of any member who fails to participate as described in this paragraph shall be subject to termination pursuant to Section 1 (f) , unless such non-participation is excused by the Council for adequate cause.

b. Dues. All active members shall pay dues. The amount of dues may be changed upon the recommendation of the Council and approval of a majority of the members present at the Annual Business Meeting. Dues shall be payable not later than the first day of the Annual Meeting. Members may not attend a meeting unless their dues are current.

c. Number of members. The number of active members residing within the geographic limits of the Association shall be limited to one hundred and fifty (150).

d. Delinquency. Members failing to pay dues by the time of the Annual Business Meeting shall be considered delinquent, and notice of such delinquency shall be mailed to each such member at the address recorded in the records of the Association by the Secretary-Treasurer. If the delinquency is not made good within two (2) months of the mailing of such notice, the name of the delinquent member shall be reported to the Council which may excuse the delinquency for adequate cause or may discipline the delinquent member pursuant to Section 1 (f) below.

e. Non-attendance. The membership of any member who fails to attend three (3) consecutive Annual Meetings of the Association, unless such nonattendance is excused by the Council for adequate cause, shall be subject to termination pursuant to Section 1 (f) below.

f. Discipline. Members of the Association who violate the provisions of the Constitution and Bylaws become subject to disciplinary action by the Council. Such disciplinary action is either reprimand, suspension, or termination of membership. Any member whose membership has become subject to disciplinary action shall be given written notice of such prospective action not less than forty (40) days before the effective date of such action. Any member who is subject to disciplinary action may apply for reconsideration by filing a written request with the Council, addressed to the Secretary-Treasurer, within sixty (60) days following the mailing of notice of such action, which shall state the reasons why such action should not be taken. If such a request is received within the requisite period, the action will be delayed until after the next Council meeting. If the Council finds the reasons given in the request to be adequate, action shall not be taken, conditional upon payment of any arrears, where applicable. If the Council finds the reasons given in the request not to be adequate, the action shall become effective on the sixth day after the Council meeting.

g. Disability. A member who becomes disabled may petition the Council for retired member status and the Council may grant such request for a period of time until the member can return to practice.

h. Resignation. A member may resign from the Association at any time by tendering a resignation in writing and paying in full any dues or obligations owing the Association at the time.

Section 2. Non-resident Members. Active members who move outside the geographic limits of the Association automatically become non-resident members. They shall retain their rights as active members, except that of voting and holding office, and they shall pay no dues and have no requirement for attendance at meetings or submission of papers. They shall not be limited in number.

Section 3. Senior Members. An active member will become a senior member automatically at age sixty, or 15 years after election to active membership. Senior members shall have the same duties, rights, and privileges as active members, except that they shall be exempt from meeting attendance requirements and submission of papers for presentation at the Annual Meeting. They shall not be limited in number.

Section 4. Honorary Members. The honorary members shall be the Founders' Lecturers and other surgeons of distinction nominated by the Council. They shall be surgeons who have attained eminence in their profession. They shall have all the rights of active members, except that of voting and holding office, and they shall pay no fees nor dues and have no meeting attendance requirements.

Section 5. Retired Members. Active or senior members who retire from the active practice of surgery may apply to the secretary for retired membership. Such members shall pay in full any dues or obligations owing the Association at that time. Retired members will have no meeting or paper submission requirements. They shall not vote or hold office and shall pay no dues.

ARTICLE IV. OFFICERS

Section 1. District Representation. A member from each district shall hold at least one office in the Association. There shall be annual

progression through the following offices: The Junior Councilor shall become the Senior Councilor, the Senior Councilor shall become the Second Vice-President, the Second Vice-President shall become the First Vice-President, and First Vice-President shall become the President, the President shall become the Councilor Ex-Officio, and the Councilor Ex-Officio shall yield his position to a Junior Councilor who is a member from the same district as the Councilor Ex-Officio.

Section 2. Nomination and Election. Nomination of members for an office shall be made by the Council and submitted to the Association for a vote at the Annual Business Meeting. Nominations from the floor shall be permitted, providing that all nominees for a single office be members from the same district excepting the nominees for the offices of Secretary-Treasurer, Recorder, and Historian who may be from different districts. An affirmative vote of a majority of members present at the Annual Business Meeting is required to elect.

Section 3. Terms of Office. The officers-elect shall enter upon their duties at the conclusion of the Annual Meeting at which they were elected and shall hold office for one year, except for the Secretary-Treasurer and Recorder who shall hold office for six years, and the Historian who shall hold office for three years.

Section 4. Vacancies. A vacancy occurring among the officers of the Association during the year shall be filled by appointment by the Council.

Section 5. Duties of the President. The President shall be the chief executive officer of the Association and shall have general supervision over the business of the Association, subject to the control of the Council. He shall preside at all meetings and generally shall perform all duties incident to the office of President, together with such other duties as may from time to time be delegated to him by the Council. The President may select a guest speaker for the Annual Meeting who will be recognized as a Founders' Lecturer and hence as an honorary member.

Section 6. Duties of the First Vice-President The First Vice-President shall perform the duties of the President in the absence or inability to act of the President, and such other duties as set forth in these Bylaws or as may from time to time be delegated to him by the Council.

Section 7. Order of Precedence. In the event of the absence of both the President and the First Vice-President, the order of precedence for the chair is as follows: The Councilor Ex-Officio, the Second Vice-President, the Senior Councilor, the Junior Councilor.

Section 8. Duties of the Secretary-Treasurer. The Secretary-Treasurer shall maintain the records of the Association, including a copy of the Constitution and Bylaws, together with any amendments thereto, the seal of the Association, and a record of the names, classifications, and addresses of the members. The Secretary-Treasurer shall keep minutes of the meetings of the Association and Council; shall notify members and officers of their election; shall issue, at least four months prior to the Annual Meeting, a preliminary notice of the time and place of the meeting; shall issue a final program at least one week before the Annual Meeting together with a brief history of the Association, giving places of former meetings and a directory of membership including dates of joining; and shall present at the Annual Meeting the names of candidates for election to membership. The Secretary-Treasurer shall receive and have charge of all funds of the Association, subject to the direction of the Council. He shall correct dues and assessments, pay the Association's bills and obligations as approved by the Council, and file all reports required by law and send all notices required by law, these Bylaws, or by direction of the Council. He shall prepare and submit to the Council and present to the members an annual financial report, including any that may be required by statute. He shall perform such other duties as may be assigned by the Council. The Secretary-Treasurer shall be bonded in an amount sufficient to safeguard the financial statements of the Association. The financial affairs and the financial statements of the Association shall be audited by an Audit Committee of members, or by an outside auditor as determined from year to year by the Council.

Section 9. Duties of Recorder. The Recorder shall receive, review, and edit manuscripts for publication.

Section 10. Duties of Historian. The Historian shall assemble, store and preserve the archives of the Association, keep the archives available for reference and research, and shall collect and display suitable photographs of the members and of the Annual Meetings.

Section 11. Compensation of Officers. No officer of the Association shall receive any compensation for his services, but may be reimbursed for expenses when authorized by the Council.

ARTICLE V. COUNCIL

Section 1. Composition of the Council. The Council shall be composed of the President, First Vice-President, Second Vice-President, Senior Councilor, Junior Councilor, Councilor Ex-Officio, Secretary-Treasurer, Recorder and Historian.

Section 2. Duties of the Council. The Council shall exercise all corporate powers, except as otherwise provided in the Bylaws. It shall receive all proposals for membership and approve for presentation to the Association for election to membership only those candidates who fulfill the requirements and conditions set forth in the Constitution and Bylaws and also receive its favorable recommendation. It shall control the investment of surplus funds of the Association and shall authorize the expenditure of funds by the Secretary-Treasurer. It may arrange for publication of the papers and transactions of the Association. It shall act when necessary to impose discipline upon members of the Association pursuant to Article III, Section 1 (f), of the Bylaws.

Section 3. Liability of Councilors. A Councilor shall have no liability based upon any alleged failure to discharge his obligations as a Councilor, except for any self-dealing transaction prohibited by law.

Section 4. Council Meetings.

- a. Regular and Special Meetings. The Council shall hold regular meetings just before the beginning of the Annual Meeting of members, and shall hold such additional meetings as shall be called from time to time by the President or by any two members of the Council.
- b. Quorum. The presence of five (5) members of the Council shall constitute a quorum for a Council meeting.
- c. Telephone Conference. Council members may participate in a meeting through the use of a conference telephone or similar communications equipment, so long as all members

participating in such a meeting can hear one another.
Participation in a meeting pursuant to this section constitutes presence in person at such meeting.

ARTICLE VI. COMMITTEES

The Council from time to time may create such committees and appoint the chairman and members thereof as it deems appropriate for carrying out the purposes and activities of the Association.

ARTICLE VII. MEETINGS

Section 1. District Caucus Meeting. An annual meeting of each district caucus shall be held not less than two months before the Annual Meeting of the Association. The time and place of such meeting shall be determined by the district councilor who shall provide written notice to the district members at least fourteen (14) days prior to the date thereof. The members present at such meeting shall constitute a quorum. The district councilor or his designee shall act as chairman of the meeting. The caucus may make proposals concerning the operation or policies of the Association or the Council, and may recommend candidates for membership in the Association to the Council. During the year in which the district councilor holds the office of Councilor Ex-Officio, the district caucus shall nominate one of its members for the office of Junior Councilor. Approval of a proposal or nomination shall require the affirmative vote of a majority of the members present at the meeting.

Section 2. Special Meetings. Special meetings of the members may be called by the President or by five (5) percent or more of the members.

Section 3. Annual Meeting. The Annual Meeting of the Association shall be held at such a time and place as shall be designated by the Council.

Section 4. Notice of Meetings. Notice of each annual or special meeting shall be given appropriately to each member by the Secretary in writing at least four (4) months prior to the date thereof.

Section 5. Quorum. No fewer than thirty (30) members shall constitute a quorum for the transaction of the business of the Association at any annual or special meeting. However, if fewer than

one-third (1/3) of the members are present at the meeting, the only matters which may be voted upon are those matters as to which proper notice was given.

Section 6. Proxies. Attendance or voting at a meeting of members by proxy is prohibited and shall be invalid and of no effect.

Section 7. Reports and Papers. All reports and papers read before the Association at the Annual Meeting shall be deposited with the Recorder at the time of their presentation.

Section 8. Assessment for the Annual Meeting. A registration fee, the amount to be established by the Council, shall be assessed on all active, nonresident, and senior members attending the Annual Meeting substantially to defray expenses for the meeting. The remaining expenses of the Annual Meeting shall be born by the Treasury of the Association.

ARTICLE VIII. GENERAL.

Section 1. Operation of the Association. The Association shall operate as set forth in its Articles of Incorporation, Constitution and Bylaws, and its funds, both income and principal, shall be used solely for the purposes therein set forth, no part of the same being available for the benefit of any member or other person, firm or society.

Section 2. Annual Financial Report. The Secretary-Treasurer's financial report referred to in Article IV, Section 8, shall be considered the Annual Financial Report of the Association, and the Council shall have no duty to cause any other annual financial report to be prepared. The financial report shall be available in writing at the Annual Meeting and shall be provided to members on request.

Section 3. Fiscal Year. The fiscal year of the Association shall be from January 1 through December 31 of each year.

Section 4. Order of Business at the Annual Meeting. The order of business ordinarily is:

1. Call to Order
 2. Scientific Program
 3. Annual Business Meeting
 1. Introduction of new members and guests.
 2. Minutes of the last Annual Business Meeting.
 3. Announcement of deaths of members.
 4. Report of the Secretary-Treasurer.
 5. Report of the Audit Committee.
 6. Report of the Recorder.
 7. Report of the Historian.
 8. Unfinished business.
 9. New business.
 10. Report of the Governor to the American College of Surgeons.
 11. Election of new members.
 12. Election of officers.
 13. Adjournment of the Annual Business Meeting.
 4. Continuation of the Scientific Program
 5. Adjournment
- The Council or the President may alter the order of business.

Section 5. Parliamentary Procedure. The meetings of the members and Council, excepting as otherwise provided in the Bylaws, shall be conducted pursuant to Robert's Rules of Order of Parliamentary Procedure, as set forth in the then current edition of said work.

ARTICLE IX. ASSESSMENTS

If, in the judgment of the Council, special needs of the Association so require, it may propose an assessment of a specified amount to be charged to each member. Notice of such proposal shall be mailed to the members at least thirty (30) days in advance of the meeting at which the vote is to be taken, and shall be effective if approved by two-thirds (2/3) of the members present at such meeting.

ARTICLE X. GUESTS

Section 1. At Scientific Sessions. Members may invite guests to the scientific sessions of the Annual Meeting. A registration fee, set by the Council, will be charged, unless the guest is a resident or fellow in surgical training. The President may invite guests to participate in discussions. Co-authors who are invited guests may read papers at the

scientific sessions provided that a member (or a guest designated by the President) is a co-author, is present at the meeting, and acts as a closing discussant of the paper. The name of the guest appearing in the program shall be followed by '(by invitation)'.

Section 2. At Social Sessions. Members may invite guests to the social functions of the Association only with the concurrence of the President or Secretary-Treasurer. All expenses incurred by such guests at social functions shall be born by the inviting members unless otherwise determined by the Council or paid by the guest.

Section 3. At the Annual Business Meeting. Guests shall be expected to withdraw when the business of the Association is to be conducted, as announced by the President, unless otherwise authorized by the Council.

ARTICLE XI. INDEMNIFICATION

The Association shall indemnify any person who is or was an officer, employee, or other agent of the Association, to the extent allowed by law, so long as such person acted in good faith, in a manner such person believed to be in the best interests of the Association and with such care, including reasonable inquiry, as an ordinarily prudent person in a like position would use under similar circumstances.

ARTICLE XII. DISSOLUTION

Section 1. Voting. The Association shall not be dissolved except by the affirmative vote of two-thirds (2/3) of the members entitled to vote.

Section 2. Conditions. In the event of dissolution of the Association in any manner and for any cause, after the payment or adequate provision being made for the payment of all its debts and liabilities, all of the remaining funds and assets of the Association shall be transferred to a non-profit fund, foundation or corporation which is organized and operated exclusively for educational or scientific purposes related to the purpose of the Association, and which has established its tax exempt status under Section 501 (c) (3) of the Internal Revenue Code, or equivalent statute then in effect.

ARTICLE XIII. AMENDMENTS

Proposed amendments to the Bylaws shall be submitted in writing to the members at least thirty (30) days prior to a regular business meeting at which the proposed amendments shall be presented to the membership for a vote. An affirmative vote of two-thirds (2/3) of the members present is required to adopt an amendment to the Bylaws.

FOUNDERS

In order that those individuals who were active in founding this Association may hold their identity as a group, their names have been listed together as founders.

*Baird, A.W.	Portland, Oregon
*Boyle, R.C.	Vancouver, B.C.
*Brown, E.M.	Spokane, Washington
*Catterson G.I.	Spokane, Washington
*Coffey, R.C.	Portland, Oregon
*Dolbey, R.V.	Vancouver, B.C.
*Eagleson, J.B.	Seattle, Washington
*Eikenbary, C.F.	Spokane, Washington
*Hamilton, L.H.	Portland, Oregon
*Horton, G.M.	Seattle, Washington
*Jones, E.O.	Seattle, Washington
*Jones, O.M.	Victoria, B.C.
*Jones, W.	Portland, Oregon
*Lockett, V.G.	Vancouver, B.C.
*Luhn, H.B.	Spokane, Washington
*MacKenzie, K.A.J.	Portland, Oregon
*MacKenzie, W.W.	Spokane, Washington
*McKechnie, R.E.	Vancouver, B.C.
*Munro, A.S.	Vancouver, B.C.
*Mowers, S.W.	Tacoma, Washington
*Neff, J.M.	Spokane, Washington
*Raymond, A.	Seattle, Washington
*Rich, E.A.	Tacoma, Washington
*Robertson, H.M.	Victoria, B.C.
*Rininger, E.M.	Seattle, Washington
*Rockey, A.E.	Portland, Oregon
*Sharples, C.C.	Seattle, Washington
*Smith, A. C.	Portland, Oregon
*Sturgis, M. G.	New York, N.Y.
*Thyng, D.K.	Tacoma, Washington
*Tucker, E. G.	Portland, Oregon
*Wilson, G.F.	Portland, Oregon
*Willis, P.W.	Seattle, Washington
*Wight, O. B.	Portland, Oregon
*Yocum, J.R.	Tacoma, Washington

HONORARY FOUNDER MEMBERS

- *Sturgis, Milton G New York, N.Y.
*Wight, Otis B. Portland, Oregon
*Willis, Park W. Seattle, Washington

*Deceased

DECEASED MEMBERS

- Adams, John C Joined 1939
Ahlquist, Richard E Joined 1936
Anderson, Howard N Joined 1975
Anderson, Richard P Joined 1971
Andres, R.G Joined 1939
Asbury, G. Frank Joined 1968
Baird, Alvin W Charter Member
Baker, Harvey W Joined 1955
Baker, Joel W Joined 1938
Bill, Alexander H., Jr Joined 1953
Blackman, James Joined 1948
Blair, Harry C Joined 1939
Bogardus, George M Joined 1963
Boyden, Allen M Joined 1962
Boyle, R.C Charter Member
Brant-Zawadski Bolek Joined 1974
Brodie, Frederick Joined 1915
Brunkow, Clarence Joined 1934
Bryant, Frank M Joined 1933
Buckner, Hubbard T Joined 1923
Brown, E.M Charter Member
Burnett, William B Joined 1926
Campbell, Timothy J Joined 1980
Cantrell, James R Joined 1961
Carrico, C. James Joined 1978
Cavanagh, Charles R Joined 1959
Chauncey, L.R Joined 1948
Chuinard, E.G Joined 1942
Cleveland, H.E Joined 1926
Coffey, Robert C Charter Member
Colver, Hugh D Joined 1962
Corbett, Donald Joined 1939

Crystal, Dean K.....	Joined 1949
Cunningham, Arthur F.....	Joined 1946
Cunningham, A.T.R.....	Joined 1916
Davidson, J. Ross.....	Joined 1941
Dawson, John H.....	Joined 1967
Day, Sherman W. Jr.....	Joined 1952
Diefendorf, Richard O.....	Joined 1958
Dillard, David.....	Joined 1963
Dillehunt, Richard B.....	Joined 1924
Dodson, Ralph M.....	Joined 1935
Doland, C.M.....	Joined 1920
Dolbey, Robert V.....	Charter Member
Dudley, Homer D.....	Joined 1920
Duncan, John.....	Joined 1947
Dunphy, J. Englebert.....	Joined 1959
Eagleson, J.B.....	Charter Member
Edmark, K. William.....	Joined 1962
Eikenbary, Charles F.....	Charter Member
Elliott, John A.....	Joined 1955
Ellis, Robert H.....	Joined 1926
Else, J. Earl.....	Joined 1920
Evoy, Matthew.....	Joined 1953
Finley, John W.....	Joined 1963
Fletcher, William S.....	Joined 1963
Flothow, Paul.....	Joined 1934
Forbes, Robert D.....	Joined 1912
Ford, C.B.....	Joined 1912
Ford, Hugh.....	Joined 1955
Frost, John.....	Joined 1950
Gambee, Louis P.....	Joined 1932
Garnjobst, William M.....	Joined 1965
Gerein, Alfred N.....	Joined 1966
Gibson, Robert H.....	Joined 1952
Gilbert, Allan E.....	Joined 1971
Gillespie, James T.....	Joined 1978
Gillies, George.....	Joined 1934
Goering, W. H.....	Joined 1940
Gordon, George S.....	Joined 1914
Gourlay, Henry.....	Joined 1921
Gourlay, Robert H.....	Joined 1962
Griffith, Charles A.....	Joined 1966
Groshong, LeRoy E.....	Joined 1967

Gullikson, John W	Joined 1946
Gunby, Paul C.....	Joined 1933
Gustafson, Jack R	Joined 1965
Gustavson, Russell G	Joined 1964
Hall, Edward	Joined 1950
Hamblen, R.N	Joined 1929
Hamilton, Luther H.....	Charter Member
Hand, John R.....	Joined 1939
Hardwick, Clifford.....	Joined 1953
Harkins, Henry N.....	Joined 1947
Haven, Hale	Joined 1947
Hayes, John F.....	Joined 1980
Hearne, Rodney B.....	Joined 1955
Henry, A. Taylor.....	Joined 1941
Henry, Frank C.	Joined 1953
Hepler, Alexander.....	Joined 1927
Herrmann, S. F.....	Joined 1939
Higginson, John F.....	Joined 1954
Hildebrand, Henry D	Joined 1969
Hill, Lucius III	Joined 1959
Holden, William M	Joined 1912
Holubitsky, I.B.....	Joined 1967
Hough, John D	Joined 1963
Horton, George M.....	Charter Member
Howard, Martin.....	Joined 1946
Hoyer, Louis P. Jr	Joined 1948
Hunt, John.....	Joined 1920
Hunter, C.D.....	Joined 1916
Hutchinson, William B	Joined 1948
Jackson, Paul P	Joined 1957
Jacob, Stanley W.....	Joined 1963
Jacobson, Conrad.....	Joined 1927
Jennings, E.S.....	Joined 1924
Johnson, Murray L.....	Joined 1951
Johnsrud, Russell L.....	Joined 1953
Johnston, Edward V	Joined 1962
Johnston, Gordon C	Joined 1950
Johnstone, Frederic R.C.....	Joined 1959
Jones, E.O	Charter Member
Jones, Thomas M.....	Joined 1942
Jones, William	Charter Member
Joyce, Thomas M.....	Joined 1932

Kanar, Edmund A	Joined 1962
Kellogg, Howard, B	Joined 1947
Kellogg, Howard Jr.....	Joined 1968
Kenning, Gordon	Joined 1932
King, Brien T	Joined 1932
Kiriluk, Lawrence	Joined 1959
Klatt, Gordon R.....	Joined 1981
Kliman, Murray A.....	Joined 1970
Kranz, Jay M.....	Joined 1969
Krippaehne, William M	Joined 1959
Labbe, E. J	Joined 1928
Lamson, Otis F.....	Joined 1913
Langston, Robert G	Joined 1950
Lasher, Earl P.....	Joined 1949
Lawrence, G. Hugh	Joined 1962
Lennie, Theodore H	Joined 1928
Leyse, Robert.....	Joined 1968
Lobb, Allan W	Joined 1959
Loe, Ralph H.....	Joined 1939
Lovezzola, Michael.....	Joined 1972
Luhn, Henry B	Charter Member
Lundmark, Vernon.....	Joined 1952
Lyle, Francis M.....	Joined 1951
Lyman, John C.....	Joined 1933
Lynch, Joseph W.....	Joined 1937
MacDougall, J.A	Joined 1966
Mack, Robert M.....	Joined 1971
MacKay, Albert E	Joined 1926
MacKay, A.R	Joined 1951
MacKay, Malcolm I	Joined 1959
MacKenzie, K.A.J.....	Charter Member
MacKenzie, W.W	Charter Member
MacLachlan, Alexander J	Joined 1927
MacMahon, Charles E	Joined 1948
Manson, Arthur B.	Joined 1951
Marchioro, Thomas L	Joined 1985
Marshall, Herman P	Joined 1915
Martzloff, Karl H	Joined 1927
Mason, James Tate.....	Joined 1924
Massey William H	Joined 1977
Matthews, A. A.....	Joined 1916
Martinis, Andrew J	Joined 1970

May, Karl J Jr.....	Joined 1969
McCreery, Charles.....	Joined 1929
McElmoyle, W.A.....	Joined 1947
McKechnie, R.E.....	Charter Member
McKechnie, R.E., II.....	Joined 1940
McKenzie Allan D.....	Joined 1954
McKirdie, Matthew.....	Joined 1947
McLennan, Peter A.....	Joined 1913
McNerthney, John B.....	Joined 1916
McPherson, Thomas.....	Joined 1936
Metheny, David.....	Joined 1939
Moe, Roger.....	Joined 1979
Moen, Chester.....	Joined 1973
Moloney, Patrick J.....	Joined 1970
Monro, Alexander S.....	Charter Member
Morgan, Edward S.....	Joined 1958
Moseley, H. Stephens.....	Joined 1979
Mosiman, Roscoe E.....	Joined 1929
Mowers, Saxe W.....	Charter Member
Mullen, Bernard P.....	Joined 1939
Murphy, Thomas O.....	Joined 1959
Musgove, James E.....	Joined 1958
Nadal, Joseph.....	Joined 1951
Neff, James M.....	Charter Member
Neilson, J. Russell.....	Joined 1935
Nelson, Millard T.....	Joined 1929
Nelson, James M.....	Joined 1937
Nichols, Herbert S.....	Joined 1914
Nisbet, Oliver M.....	Joined 1941
Nixon, Edward A.....	Joined 1939
Novack, Alvin J.....	Joined 1971
Olson, Hilding H.....	Joined 1955
O'Shea, John H.....	Joined 1913
O'Shea, Richard J.....	Joined 1920
Patterson, F.P.....	Joined 1925
Peacock, Alexander H.....	Joined 1922
Pease, George N.....	Joined 1913
Pedlow, W. L.....	Joined 1935
Pennock, W. J.....	Joined 1925
Perrett, Thomas S.....	Joined 1962
Pettit, Joseph A.....	Joined 1919
Peterkin, Guy S.....	Joined 1913

Peterson, Clare G	Joined 1951
Pinkham, Roland.....	Joined 1949
Porter, John.....	Joined 1973
Querna, Milburn H.....	Joined 1953
Raaf, John E.....	Joined 1939
Radke, Hubert M.	Joined 1974
Ramsay, J. Finlay.....	Joined 1947
Raymond, Alfred	Charter Member
Read, Jess W.....	Joined 1946
Reed, Daniel L.....	Joined 1972
Reid, Andrew N.....	Joined 1952
Rich, Edward A.....	Charter Member
Richardson, John P	Joined 1948
Riggs, H.W.....	Joined 1913
Rininger, E.M.....	Charter Member
Roberts, Joseph M.....	Joined 1950
Robertson, H.M.....	Charter Member
Robertson, Ralph D.....	Joined 1968
Robertson, Ross.....	Joined 1947
Robins, Richard E.....	Joined 1959
Rockey, A.E.....	Charter Member
Rockey, Eugene W.....	Joined 1919
Rockey, Paul.....	Joined 1915
Rockwell, George	Joined 1973
Rosenblatt, Millard S	Joined 1941
St. Pierre, E.W.....	Joined 1937
Sanderson, Eric R.....	Joined 1951
Sanford, Gilman.....	Joined 1958
Sargeant, T.R.....	Joined 1955
Sauntry, J. Phillip.....	Joined 1969
Schaller, Robert T. Jr.....	Joined 1978
Schilling, John A.....	Joined 1975
Schinbein, A.B.....	Joined 1933
Schlicke, Carl P.....	Joined 1951
Schnug, G. Edward	Joined 1949
Seabrook, Dean B.....	Joined 1941
Sharples, Casper W.....	Charter Member
Sikkema, Wesley W.....	Joined 1993
Sloop, Richard D.....	Joined 1969
Smith, Andrew C.....	Charter Member
Smith, J. Lawrence.....	Joined 1980
Smith, Lee.....	Joined 1936

Sommer, E.A.....	Joined 1912
Sparks, Charles H	Joined 1966
Speir, Edward B.....	Joined 1947
Stenstrom, John.....	Joined 1948
Stevenson, John K.....	Joined 1963
Stone, Caleb S. Jr.....	Joined 1941
Storrs, H.R.....	Joined 1915
Strandness, Eugene	Joined 1970
Stringer, Brian.....	Joined 1972
Sturgis, Milton G	Charter Member
Sullivan, Eugene S.....	Joined 1974
Sweetman, William R.....	Joined 1963
Tapper, David	Joined 1985
Taylor, A.W.....	Joined 1933
Thomson, Frank B	Joined 1956
Thyng, D.K.....	Charter Member
Trommald, John P.....	Joined 1950
Trueblood, Donald V.....	Joined 1923
Tucker, Ernest F.....	Charter Member
Tuell, Stanley W	Joined 1957
Turnbull, Walter S	Joined 1926
Vadheim, James	Joined 1946
Vetto, Roy R.....	Joined 1971
Wagner, Clyde, L.....	Joined 1956
Watson, Wilbur E	Joined 1952
Wayson, Edward E	Joined 1958
Welty, Robert F.....	Joined 1950
Whitacre, H.J	Joined 1919
White, Roy A	Joined 1971
White, Thomas T	Joined 1956
Whiteside, George S	Joined 1912
Wickstrom, Arthur P.....	Joined 1962
Wight, Otis B.....	Charter Member
Wilder, Thomas C.....	Joined 1959
Willard, H.G	Joined 1922
Willis, P.W.....	Charter Member
Whiteside, George S	Joined 1912
Wickstrom, Arthur P.....	Joined 1962
Wight, Otis B.....	Charter Member
Wilder, Thomas C.....	Joined 1959
Willard, H.G	Joined 1922
Willis, P.W.....	Charter Member

Wilson, G.F.....	Charter Member
Wilson, Roger	Joined 1951
Wilson, William M	Joined 1933
Wiltsie, Sherold F	Joined 1913
Wise, Robert A	Joined 1950
Wride, R. J	Joined 1950
Wilson, G.F.....	Charter Member
Wilson, Nat	Joined 1959
Wilson, Roger	Joined 1951
Wilson, William M	Joined 1933
Wiltsie, Sherold F	Joined 1913
Wise, Robert A	Joined 1950
Wride, R. J	Joined 1950
Yocum, J. R	Charter Member
Zech, Raymond L	Joined 1935
Zeller, Werner E	Joined 1950

IN REMEMBRANCE

Bolek Brant-Zawadzki

November 26, 1940 – June 2, 2016

Boleslaw Emiljan Zawadzki was born in Warsaw, Poland to Michael and Hallina Zawadzki. Because of the instability of Poland during and after World War II, the family escaped from Poland and ultimately found asylum in France for a brief time, then immigrated to the United States in 1959, settling in New York City. He changed his name to Bolek Brant, learned English and attended Hunter College in New York City, graduating in two years. He then went to medical school at the University of Rochester in upstate New York, graduating in 1965.

Bolek interned at the University of Washington where he met his wife, Bonnie. They married in 1967 and had 3 children, Halina (1970), Peter (1974) and Kayla (1978). He did his General Surgery residency at Oregon Health & Science University and was on the staff briefly before entering the U.S. Airforce where he was stationed at Fairchild Air Base near Spokane. On completion of his military service, he returned to Portland and joined the faculty at OHSU and the Portland VA Hospital before joining a successful surgical practice at Providence Portland Medical Center. He was active on the medical staff, serving as chief of staff. He joined the North Pacific Surgical Association in 1974 and was president of the North Pacific Surgical Association in 1997. He was also a member of several other prominent surgical associations.

Bolek retired from clinical practice in 2003. He and his family travel extensively and Bolek and Bonnie participated in their many favorite activities including bridge, music, fishing and visiting with their many friends. They were both knowledgeable about and enjoyed food and wine. Sadly, Bonnie passed away in 2010.

Bolek died unexpectedly while fishing on the Clackamas River on June 2, 2016. He is missed by his family, fellow surgeons and the many friends that he had. He was truly a remarkable man, a great surgeon and a very special colleague.

-- James and Mary Ann Asaph