MISSION:
Research
Education
Service

MISSION:
POSIBLE

June 1–5, 2013
Hyatt Regency Coconut Point Resort and Spa
Bonita Springs, Florida

Please bring this program with you to the meeting
56th Annual Meeting of the Southerneastern Society of Plastic and Reconstructive Surgeons

MISSION: POSSIBLE

FINAL PROGRAM
Hyatt Regency Coconut Point Resort and Spa | Bonita, Florida | June 1–5, 2013
PLEASE BRING THIS PROGRAM WITH YOU TO THE MEETING.
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Greetings and welcome to Bonita Springs, Florida!

On behalf of the Society, thank you for recognizing that this Annual Meeting is unequaled in combining a first class educational experience with a memorable family vacation.

The Southeastern is proud of its rich history of traditions yet is ever forward thinking.

We extend a very special welcome to the Residents and first time visitors.

And to our long time Members—we are ever grateful to the path you set before us.

We invite you to be a part of something unique and memorable.

Ann Ford Reilley, MD
President
2012–2013
OFFICERS & TRUSTEES

PRESIDENT
Ann Ford Reilley
Baton Rouge, Louisiana

PRESIDENT-ELECT
Harold I. Friedman
Columbia, South Carolina

VICE-PRESIDENT
Henry Vasconez
Lexington, Kentucky

SECRETARY
Braun Graham (2015)
Sarasota, Florida

ASSISTANT SECRETARY
Kevin Hagan
Nashville, Tennessee

TREASURER
Walter Erhardt (2014)
Albany, Georgia

HISTORIAN
Stephen J. Finical
Charlottesville, Virginia

PARLIAMENTARIAN
Mark A. Codner
Atlanta, Georgia

PAST PRESIDENT
AND TRUSTEE
W. Byron Barber
Greensboro, North Carolina

TRUSTEES
Robert J. Allen (2013)
Charleston, South Carolina
William Lineaweaver (2013)
Brandon, Mississippi
C. Scott Hultman (2014)
Chapel Hill, North Carolina
John Lindsey (2014)
Metairie, Louisiana
Albert Losken (2015)
Atlanta, Georgia
John G. Sparrow (2015)
Jackson, Tennessee

Robert J. Allen (2013)
Charleston, South Carolina
William Lineaweaver (2013)
Brandon, Mississippi
C. Scott Hultman (2014)
Chapel Hill, North Carolina
John Lindsey (2014)
Metairie, Louisiana
Albert Losken (2015)
Atlanta, Georgia
John G. Sparrow (2015)
Jackson, Tennessee
Past Presidents

1958 Founding
1959 Neal Owens
1960 Greer Ricketson *
1961 Robert F. Hagerty *
1962 Lorenzo H. Adams *
1963 Clifford C. Snyder *
1964 Samuel E. Upchurch *
1965 McCarthy DeMere *
1966 Charles Horton *
1967 Francis Marzoni *
1968 Andrew M. Moore *
1969 Carter P. Maguire *
1970 James H. Hendrix *
1971 John R. Lewis *
1972 James G. Stuckey *
1973 James B. Cox
1974 William M. Berkeley *
1975 Henry T. Brobst *
1976 John M. Hamilton
1977 Jerome E. Adamson
1978 Byron E. Green
1979 George W. Hoffman *
1980 William E. Huger *
1981 Eugene F. Worthen
1982 Joel W.L. Mattison *
1983 James H. Fleming *
1984 Robert C. Reeder *
1985 Andrew W. Walker *

1986 John R. Reynolds
1987 John R. Royer
1988 James H. Carraway
1990 W. Michael Bryant
1991 Allen H. Hughes
1992 Norman M. Cole
1993 Edward A. Luce
1994 Benjamin H. Wofford
1995 William F. Mullis
1996 Thomas W. Orcutt
1997 J. Barry Bishop
1998 Kenna S. Given
1999 W. Howard Kisner
2000 R. Cole Goodman
2001 L. Franklyn Elliott
2002 Andrew M. Moore, II
2003 Ronald J. Johnson
2004 William H. Wallace
2005 Michael E. Beasley
2006 Anthony J. Pizzo
2007 R. Bruce Shack
2008 Suman K. Das
2009 James W. Wade
2010 James Moore
2011 James C. Grotting
2012 W. Byron Barber

* Deceased
Samuel Upchurch (1909–1968) was born in Clanton, Alabama on April 13, 1909. He died in 1968 at the age of 59 at University Hospital in Birmingham, Alabama. He started his undergraduate education at the Citadel in Charleston, SC in 1925 and later finished his A.B. degree at Vanderbilt University in 1929. He stayed at Vanderbilt to complete his M.D. degree in 1933 and then began his surgical training at Duke University. He became Chief Resident in Surgery and stayed on the Duke faculty as Instructor in Surgery. He then trained in plastic surgery in St. Louis under Drs. Barrett Brown, Frank McDowell, and Louis Byars.

During World War II, he was ordered to active duty and installed as a Major in the Surgical Division of the 65th General Hospital which was sent to England for the duration of the war. He ultimately became Regional Consultant in Plastic Surgery for the Eighth Air Force. After the war, he returned to St. Louis for an additional year of training with the plastic surgical group, and in 1947 he moved to Birmingham, Alabama and became the pioneer plastic surgeon in Alabama. He was soon made Chief of the Division of Plastic Surgery. He published numerous scientific articles and was an investigator in the use of silicones as a soft tissue substitute. He was President of the Southeastern Society of Plastic and Reconstructive Surgeons in 1964. Upon his death, his wife, Ann (Samford) Upchurch, bequeathed to the Society the funds for the establishment of the Upchurch Educational Fund and the annual Upchurch Lectureship.

The inaugural Samuel E. Upchurch Memorial lecture was given on May 27, 1975 by Ian Jackson entitled, “Reconstruction of the Upper Limb in Rheumatoid Arthritis”.

PAST UPCHURCH LECTURERS
<table>
<thead>
<tr>
<th>Year</th>
<th>Lecturer</th>
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</thead>
<tbody>
<tr>
<td>1975</td>
<td>Ian Jackson, M.D.</td>
</tr>
<tr>
<td>1977</td>
<td>Thomas Cronin, M.D.</td>
</tr>
<tr>
<td>1978</td>
<td>Sal Castanares, M.D.</td>
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<tr>
<td>1979</td>
<td>Kenneth Pickrell, M.D.</td>
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<td>1980</td>
<td>Robert Goldwyn, M.D.</td>
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<tr>
<td>1981</td>
<td>Richard Stark, M.D.</td>
</tr>
<tr>
<td>1982</td>
<td>William Hamm, M.D.</td>
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<td>1983</td>
<td>Reed Dingman, M.D.</td>
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<tr>
<td>1984</td>
<td>Clifford Snyder, M.D.</td>
</tr>
<tr>
<td>1985</td>
<td>John Mustarde, M.D.</td>
</tr>
<tr>
<td>1986</td>
<td>Fernando Ortiz-Monasterio, M.D.</td>
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<tr>
<td>1987</td>
<td>Jack Sheen, M.D.</td>
</tr>
<tr>
<td>1988</td>
<td>Jacques van der Meulen, M.D.</td>
</tr>
<tr>
<td>1989</td>
<td>Thomas D. Rees, M.D.</td>
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<tr>
<td>1990</td>
<td>Paul M. Weeks, M.D.</td>
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<td>1991</td>
<td>Frederick J. McCoy, M.D.</td>
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<td>1992</td>
<td>Simon Fredricks, M.D.</td>
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<td>1993</td>
<td>John Hoopes, M.D.</td>
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<tr>
<td>1994</td>
<td>J.B. Lynch, M.D.</td>
</tr>
<tr>
<td>1995</td>
<td>M.J. Jurkiewicz, M.D.</td>
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<tr>
<td>1996</td>
<td>Milton T. Edgerton, M.D.</td>
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<tr>
<td>1997</td>
<td>Carl R. Hartrampf, M.D.</td>
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<tr>
<td>1998</td>
<td>John B. McCraw, M.D.</td>
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<tr>
<td>1999</td>
<td>D. Ralph Millard, Jr., M.D.</td>
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<td>2000</td>
<td>Burton D. Brent, M.D.</td>
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<td>2001</td>
<td>Jacques Baudet, M.D.</td>
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<tr>
<td>2002</td>
<td>Leonard T. Furlow, Jr., M.D.</td>
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<tr>
<td>2003</td>
<td>Norman M. Cole, M.D.</td>
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<tr>
<td>2004</td>
<td>Michael E. Jabeley, M.D.</td>
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<tr>
<td>2005</td>
<td>P.G. Arnold, M.D.</td>
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<tr>
<td>2006</td>
<td>Luis O. Vasconez, M.D.</td>
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<tr>
<td>2007</td>
<td>Edward A. Luce, M.D.</td>
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<td>2008</td>
<td>Wayne Morrison, M.D.</td>
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<td>2009</td>
<td>Gustavo Colon, M.D.</td>
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<td>2010</td>
<td>Rod Hester, M.D.</td>
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<tr>
<td>2011</td>
<td>William P. Magee, Jr., M.D.</td>
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<tr>
<td>2012</td>
<td>Thomas Biggs, M.D.</td>
</tr>
</tbody>
</table>
Maurice (Josh) Jurkiewicz, M.D. (1923–2011) was born on September 24, 1923 in Claremont, New Hampshire. He died on May 29, 2011. He was the second of five children born to his Polish immigrant parents who passed through Ellis Island before World War I. The family moved to Bellow’s Falls, VT where they operated a family grocery store. After high school, Josh graduated magna cum laude with a D.D.S. from the University of Maryland in 1946. During a brief enlistment in the Navy, he became interested in surgery. After his discharge, he enrolled at Harvard Medical School completing his M.D. studies and stayed for residency training in general surgery.

He received his plastic surgery training at Barnes Hospital in St. Louis under Drs. Brown and Byars. After completing his surgical training in 1959, he was appointed chief of plastic surgery at the University of Florida. He did not take his plastic surgery board exam until 1963. Thus, formal plastic surgery resident training did not occur until 1965 at the University of Florida. In 1971, Dr. Jurkiewicz moved to Atlanta and became the chief of plastic surgery at Emory University. His surgical skills coupled with excellent faculty recruitment and training resulted in Emory’s residency training program becoming renowned throughout the country. After years of national and international contributions to surgery, Dr. Jurkiewicz was selected as president of the American College of Surgeons in 1989. In 2001, the Jurkiewicz Society of Emory University honored him by providing funding for a biannual Jurkiewicz lecture to be presented on odd years during the annual SESPRS meeting. The first Jurkiewicz lecture was presented by Dr. Carl Hartrampf, Jr on June 11, 2001 entitled “Plastic Surgery at Emory Before Jurkiewicz and Plastic Surgery at Emory, 1971–2001.”

Carl R. Hartrampf, Jr., M.D. 2001
Leonard T. Furlow, Jr., M.D. 2003
Luis O. Vasconez, M.D. 2005
T. Roderick Hester, Jr., M.D. 2007
John McCraw, M.D. 2009
John J. Coleman III, M.D. 2011
Jack Fisher, M.D. 2013
AWARD WINNERS

SPECIAL ACHIEVEMENT AWARD

William J. Pitts, M.D. 1977
Robert C. Reeder, M.D. 1979
John R. Lewis, M.D. 1981
Bernard L. Kaye, M.D. 1982
Joel Mattison, M.D. 1985
McCarthy DeMere, M.D. 1987
Greer Ricketson, M.D. 1994
Allen Hughes, M.D. 1995
Richard Hagerty, M.D. 1997
Erle Peacock, M.D. 2001
Andrew Moore II, M.D. 2010
Kenneth L. Pickrell, M.D. (1910–1984) was born on June 6, 1910 in Reading, PA. He died on August 20, 1984 in Durham, NC. He completed his undergraduate studies at Franklin and Marshall College in 1931. He received his MD from Johns Hopkins University in 1935. He completed his general surgery and plastic surgery training under Dr. John Stage Davis (1872–1946) at Johns Hopkins from 1935–1943. He subsequently became Chief of the Division of Plastic Surgery at Duke University where he trained scores of talented plastic surgery residents. The SESPRS honored him posthumously by creating the Pickrell Award given meritoriously to a Southeastern member exemplifying outstanding teaching attributes in plastic surgery. The first recipient of the award was Dr. Andrew Moore from Lexington, KY in 1985.


Charles E. Horton, M.D.  1986  Joel Mattison, M.D.  1999

James W. Davis, M.D.  1987  John Bostwick, III, M.D.  2001


M. J. Jurkiewicz, M.D.  1989  Luis Vasconez, M.D.  2005

Carl R. Hartrampf, M.D.  1990  Michael E. Jabaley, M.D.  2006


Hal G. Bingham, M.D.  1993

Norman Cole, M.D.  1994

John McCraw, M.D.  1996

Robert F. Hagerty, M.D.  1997
GLANCY AWARD

General Alfred Robinson Glancy, a former vice president of General Motors Corporation, was appointed by Franklin Roosevelt in 1942 to become Brigadier General in charge of running the automotive combat division of Army Ordnance in Detroit. In 1944, Gen and Mrs. Glancy donated funds at the request of their daughter, Nora, to help build a hospital in Duluth, GA. The hospital was named the Joan Glancy Memorial Hospital in memory of their other daughter, Joan, who died as a child of pneumonia. While visiting Georgia long after his retirement, General Glancy had a successful surgical encounter with Southeastern member Dr. Billy Huger of Atlanta. When the General asked what he could do for Dr. Huger in gratitude for medical services rendered, he was politely asked to fund a residency competition award for the SESPRS. Hence, the Glancy Competition and the Glancy Award were founded. This award is given every year to the resident judged to have the best paper presented in the resident’s competition. The winning resident’s program director is allowed to retain the coveted Glancy Bowl and display it at their institution for the following year until a new resident winner is named. The first award was presented to Dr. Foad Nahai in 1977 for the paper “Facial Reconstruction with Microvascular Free Omental Transfer and Split Rib Grafts”.

Foad Nahai, M.D.  
Emory University  
1977

Larry Nichter, M.D.  
University of Virginia  
1983

H. Louis Hill, M.D.  
Emory University  
1978

Leonard Miller, M.D.  
Emory University  
1984

E.D. Newton, M.D.  
University of Tennessee  
1979

Richard Sadove, M.D.  
Eastern Virginia Medical School  
1984

E.D. Newton, M.D.  
University of Tennessee  
1980

Mason Williams, M.D.  
Eastern Virginia Medical School  
1986

Dan H. Shell, M.D.  
University of Tennessee  
1981

David Hurley, M.D.  
University of Virginia  
1987

Donato Viggiano, M.D.  
University of Tennessee  
1982

J.D. Stuart, M.D.  
University of Virginia  
1988
James H. Schmidt, M.D.
University of Florida
1989

Paul A. Watterson, M.D.
Emory University
1990

Michael G. Kanosky, M.D.
University of Mississippi
1991

Joseph M. Woods, IV, M.D.
Vanderbilt University
1992

David Brothers, M.D.
University of N.C. at Chapel Hill
1993

Scott N. Oishi, M.D.
University of Kentucky
1994

Gregory Mackay, M.D.
Emory University
1995

R. C. High, M.D.
Bowman Gray School of Medicine
1996

Henry F. Garazo, M.D.
Medical College of Georgia
1997

Kim Edward Koger, M.D.
Duke University
1998

J. Timothy Katzen, M.D.
Vanderbilt University
1999

Richard Rosenblum, M.D.
Vanderbilt University
2000

Colin Riordan, M.D.
Vanderbilt University
2001

Julia MacRae, M.D.
University of Virginia
2002

Julia MacRae, M.D.
University of Virginia
2003

M.I. Okwueze, M.D.
Vanderbilt University
2004

Robert E.H. Ferguson, Jr., M.D.
Kentucky Clinic
2005

Dean DeRoberts, M.D.
Wake Forest
2006

Howard Levinson, M.D.
Duke University
2007

S.S Tholpady, M.D.
University of Virginia
2008

Scott Hollenbeck, M.D.
Duke University
2009

Yvonne Pierpont, M.D.
University of South Florida
2010

Anthony Capito, M.D.
University of Virginia
2011

Matthew Blanton, M.D.
Duke University
2012
Saturday, June 1

4:00pm – 6:00pm  Registration Open  Calusa Pre-Function

6:00 – 7:30pm  Poster Session, Evaluation and Judging  Calusa D–E

6:00 – 7:30pm  “Sippin’ in Seersucker”  Calusa Terrace
   Welcome Reception
   Open to all registrants. Dress is Summer Cocktail. Drinks and light hors d’oeuvres will be served. Dinner on your own — reservations highly recommended.

7:00 – 10:00pm  Past Presidents Reception and Dinner
   By invitation only. See Registration for details.

Sunday, June 2

6:00am  Registration Open  Calusa Pre-Function

6:30 – 7:30am  Continental Breakfast  Calusa D–E
   Exhibits and Posters Viewing

7:30 – 8:15am  Welcome and Society Reports  Calusa ABC

8:15 – 9:00am  Resident Competition for Glancy Award  Calusa ABC

9:00 – 10:30am  Keynote Presentation: Story Musgrave, MD  Calusa ABC
   Story Musgrave was a U.S. Marine, an astronaut, has seven graduate degrees, has been awarded 20 honorary doctorates, and was a part-time trauma surgeon during his 30 year astronaut career. Prepare to be mesmerized and inspired as Dr. Musgrave shares his incredible journey through life.

10:00 – 10:30am  Break, Visit Exhibits and Poster Viewing  Calusa D–E

10:30 – 11:00am  Member Papers  Calusa ABC

11:00 – 12:00pm  Medical — Legal Panel  Calusa ABC

12:00 – 1:00pm  Resident Jeopardy Bowl  Calusa ABC

1:00 – 5:00 pm  Annual Tennis Tournament*  Colony Golf and Tennis Club
   Colony Golf and Country Club boasts six immaculately groomed Har-Tru® tennis courts. Just a short distance from the Hyatt, Shuttle service provided beginning at noon.

6:30 – 10:00 pm  Theme Dinner — Mardi Gras  Waterfall Pool Deck
   Open to all registrants. Festive attire — even costumes — encouraged for the young and young at heart! Check Registration Desk for details.

*separate registration required.
### Monday, June 3

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
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<tbody>
<tr>
<td>6:00am</td>
<td>Registration Open</td>
<td>Calusa Pre-Function</td>
</tr>
<tr>
<td>6:30am</td>
<td>Annual “Fun Run”</td>
<td>Hyatt Regency Grounds</td>
</tr>
<tr>
<td></td>
<td>Registration preferred but not required (no charge). Participants should meet in the lobby of the Hyatt Regency at 6:30 AM.</td>
<td></td>
</tr>
<tr>
<td>7:00 – 8:00am</td>
<td>Continental Breakfast Exhibits and Posters Open</td>
<td>Calusa D–E</td>
</tr>
<tr>
<td>8:00 – 10:00am</td>
<td>Member Papers Fact of Fiction Panel</td>
<td>Calusa ABC</td>
</tr>
<tr>
<td>10:00 – 10:30am</td>
<td>Break, Visit Exhibits and Posters</td>
<td>Calusa D–E</td>
</tr>
<tr>
<td>10:30am – 12:45pm</td>
<td>Resident Competition with Discussion Upchurch Lecture Congenital Anomalies Panel</td>
<td>Calusa ABC</td>
</tr>
<tr>
<td>1:00 – 3:00pm</td>
<td>Body Contouring Special Teaching Course</td>
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<td></td>
<td>Separate registration required, lunch provided.</td>
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<tr>
<td>1:30 – 6:30pm</td>
<td>Annual Golf Tournament Colony Bay Golf and Tennis Club</td>
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<tr>
<td></td>
<td>Separate registration required, boxed lunch provided. The shuttle service to Colony Bay begins at 12:30 PM See registration form for details. Dinner on your own — reservations highly recommended.</td>
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### Tuesday, June 4

<table>
<thead>
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<th>Time</th>
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<tr>
<td>6:00am</td>
<td>Registration Open</td>
<td>Calusa Pre-Function</td>
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<tr>
<td>6:30 – 7:30am</td>
<td>Continental Breakfast Exhibits and Posters Open</td>
<td>Calusa D–E</td>
</tr>
<tr>
<td>7:30 – 9:30am</td>
<td>Safety in the OR, an Anesthesia Viewpoint Facelifts Under Local Jurkiewicz Lecture</td>
<td>Calusa ABC</td>
</tr>
</tbody>
</table>
**WeeK aT-a-Glance**

**Monday, June 4**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:30 – 10:00am</td>
<td>Break, Visit Exhibits and Posters</td>
<td>Calusa D–E</td>
</tr>
<tr>
<td>10:00 – 10:40am</td>
<td>Seven Deadly Sins of Abdominoplasty Update on Perforator Flaps</td>
<td>Calusa ABC</td>
</tr>
<tr>
<td>10:40 – 11:15am</td>
<td>Member Papers</td>
<td>Calusa ABC</td>
</tr>
<tr>
<td>11:15am – 12:30pm</td>
<td>“Problems and Pearls” Session, with Member Participation</td>
<td>Calusa ABC</td>
</tr>
<tr>
<td>12:45 – 2:00pm</td>
<td>Residents Luncheon</td>
<td>Driftwood</td>
</tr>
<tr>
<td>12:45 – 1:45pm</td>
<td>SESPRS Annual Business Meeting</td>
<td>Calusa ABC</td>
</tr>
<tr>
<td>7:00 – 7:45pm</td>
<td>“Black Tie” Reception</td>
<td>Calusa Pre-Function</td>
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<tr>
<td>7:45 – 11:30pm</td>
<td>“Black Tie” Dinner and Dancing</td>
<td>Calusa ABC</td>
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**Tuesday, June 5**

<table>
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<tbody>
<tr>
<td>7:00am</td>
<td>Registration Open</td>
<td>Calusa Pre-Function</td>
</tr>
<tr>
<td>7:30 – 8:30am</td>
<td>Continental Breakfast Exhibits and Posters Open</td>
<td>Calusa D–E</td>
</tr>
<tr>
<td>8:30 – 9:00am</td>
<td>Update on Research Grants Mentor Fellow Presentation</td>
<td>Calusa ABC</td>
</tr>
<tr>
<td></td>
<td>2012 SESPRS Research Grant Presentation of Results: Brent DeGeorge, JR, MD, PhD</td>
<td></td>
</tr>
<tr>
<td>9:00 – 10:00am</td>
<td>Acellular Dermal Matrix Panel</td>
<td>Calusa ABC</td>
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<tr>
<td></td>
<td>The Science and the Future</td>
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<td></td>
<td>Framing the Future of Biologic Implants: The Impact on Plastic and Reconstructive Surgery</td>
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<tr>
<td></td>
<td>Porcine vs. Human: Positives and Negatives, Strengths, Weaknesses, Applications, DNA and Cellular Remnants, Tissue Integration</td>
<td></td>
</tr>
<tr>
<td>10:00 – 10:30am</td>
<td>Break, Visit Exhibits and Posters</td>
<td>Calusa D–E</td>
</tr>
<tr>
<td>10:30 – 11:00am</td>
<td>Member Papers</td>
<td>Calusa ABC</td>
</tr>
<tr>
<td>11:00 – 12:00pm</td>
<td>Update on SESPRS Mission Work Committee</td>
<td>Calusa ABC</td>
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<td></td>
<td>Global Health Discussion</td>
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**Wednesday, June 5**

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<td></td>
</tr>
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<tr>
<td></td>
<td>Porcine vs. Human: Positives and Negatives, Strengths, Weaknesses, Applications, DNA and Cellular Remnants, Tissue Integration</td>
<td></td>
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<tr>
<td>10:00 – 10:30am</td>
<td>Break, Visit Exhibits and Posters</td>
<td>Calusa D–E</td>
</tr>
<tr>
<td>10:30 – 11:00am</td>
<td>Member Papers</td>
<td>Calusa ABC</td>
</tr>
<tr>
<td>11:00 – 12:00pm</td>
<td>Update on SESPRS Mission Work Committee</td>
<td>Calusa ABC</td>
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<td></td>
<td>Global Health Discussion</td>
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RECREATIONAL EVENTS AND SPOUSE PROGRAM
Guests and spouses/family are eligible to attend all of the events below. Several events require separate registration and/or have age restrictions. See the SESPRS Registration Desk for details related to any event.

Saturday, June 1

4:00 – 6:00pm  Registration Open  Calusa Pre-Function

6:00 – 7:30pm  “Sippin’ in Seersucker”  Calusa Terrace
Welcome Reception
Open to all registrants. Dress is Summer Cocktail. Drinks and light hors d’oeuvres will be served.
Dinner on your own — reservations highly recommended.

Sunday, June 2

6:00am  Registration Open  Calusa Pre-Function

8:00 – 10:30am  Spouse Hospitality  Driftwood
Continental Breakfast

9:00 – 10:00am  Keynote Presentation: Story Musgrave, MD  Calusa ABC

1:00 – 5:00pm  Annual Tennis Tournament  Colony Bay Golf and Tennis Club
Separate registration required. Shuttle to Colony Bay begins at 12:00 PM.

JOIN US FOR THE ANNUAL THEME DINNER!
On Sunday, June 2, get your family and friends together (all paid registrants are welcome!) and dance the night away at this fun and entertaining event, theme for this dinner is “Mardi Gras.” Festive attire is encouraged for the young and young at heart!
6:30 – 10:00pm  Theme Dinner — Mardi Gras  Waterfall Pool Deck  
Open to all registrants. Festive attire is encouraged for the young and young at heart! Check registration form for details.

Monday, June 3

6:00am  Registration Open  Calusa Pre-Function

6:30am  Annual “Fun Run”  Hyatt Regency Grounds  
Registration preferred but not required (no charge). Participants should meet in the lobby of the Hyatt Regency at 6:30 AM.

8:00 – 10:00am  Spouse Hospitality, Continental Breakfast  Driftwood

10:00am – 1:30pm  Visit the Edison and Ford Winter Estates  
Separate registration required. The tour bus will depart the Hyatt at 10:00 AM. Approximate tour time is 4 hours and includes lunch. See registration form for details.

ANNUAL GOLF TOURNAMENT
Designed by renowned golf course architect and former U.S. Open champion Jerry Pate, this 18-hole, par-72 championship golf course is distinguished by its sweeping paspalum fairways spanning approximately 6,802 yards. Pate’s masterpiece winds through the community lending spectacular water and preserve views. Just a short distance from the Hyatt, shuttle service provided beginning at 12:30 PM.

1:30 – 6:30pm  Annual Golf Tournament  Colony Bay Golf and Tennis Club  
Separate registration required, boxed lunch provided. Shuttle service to Colony Bay begins at 12:30 PM. See registration form for details.

Dinner on your own — reservations highly recommended.

Tuesday, June 4

6:00am  Registration Open  Calusa Pre-Function

8:00 – 10:00am  Spouse Hospitality, Continental Breakfast  Driftwood

9:00am – 1:00pm  Visit the Audubon Corkscrew Swamp Sanctuary  
Separate registration required. The tour bus will depart the Hyatt at
9:00 a.m. Approximate tour time is 4 hours. Lunch is not included. Food is not available at the Sanctuary; snacks or picnic lunches can be purchased at the Hyatt coffee shop. See registration form for details.

<table>
<thead>
<tr>
<th>Time</th>
<th>Event Description</th>
</tr>
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<tbody>
<tr>
<td>7:00 – 7:45pm</td>
<td>“Black Tie” Reception <em>Calusa Pre-Function</em> Open to registrants 16 and up. Separate registration required for exhibitors. See registration form for details.</td>
</tr>
<tr>
<td>7:45 – 11:30pm</td>
<td>“Black Tie” Dinner and Dancing <em>Calusa ABC</em> Open to registrants 16 and up. Separate registration required for exhibitors. Registrants are asked to confirm their attendance. See registration form for details. For younger children, you may choose the Kids Camp Program or other activities available through the hotel. Reservations are normally required at least 24 hours in advance.</td>
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**Wednesday, June 6**

<table>
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<tr>
<th>Time</th>
<th>Event Description</th>
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<tbody>
<tr>
<td>7:00am</td>
<td>Registration Open <em>Calusa Pre-Function</em></td>
</tr>
<tr>
<td>7:15 – 8:00am</td>
<td>Spouse Hospitality <em>Driftwood</em> Continental Breakfast</td>
</tr>
<tr>
<td>12:00 – 1:00pm</td>
<td>Farewell Lunch <em>Driftwood</em></td>
</tr>
<tr>
<td>7:00 – 11:30pm</td>
<td>Childrens Activities: “Kids Camp” Kids Camp during Black Tie Event, ages 3-12, includes dinner &amp; games, (must be out of diapers/pull-ups)</td>
</tr>
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</table>
NEEDS ASSESSMENT

Topics at the 2013 Annual Meeting will be presented to Diversify and refine the learning opportunities of our members following through with the Southeastern’s recent and ongoing emphasis on aesthetic and reconstructive surgery, particularly of the face, breast, and body. Based upon feedback from prior meetings, there is evidence of an ongoing need to maintain awareness and concentration on particular needs of the practicing plastic surgeon in the Southeast by presenting new approaches to traditional problems. These include but are not limited to the science and practice of fat grafting; refinements in liposuction and body contouring; more science and information in the choice and use of bioprosthesis materials; an update on the management of complex congenital anomalies; necessary and salient points on medical legal issues. The meeting theme, “Mission: Possible—Research, Education, Service” which was chosen to highlight many of the activities that several of our members perform on a daily basis. The theme not only speaks to our activities in Plastic Surgery but also defines who we are as specialists in medicine. It also speaks to the new and active efforts in Global Health which is one of the highlights of the program. Highlights of the 2012 meeting included an excellent facial reconstruction panel; the Upchurch lecture by Dr. Thomas Biggs; a panel on body contouring moderated by Dr. Detlev Erdman; the annual Problems and Pearls session moderated by Dr. David Drake and Dr. Scott Hultman; a facial rejuvenation panel moderated by Dr. Mark Codner; a special business-related presentation on Electronic Medical Records moderated by Dr. Braun Graham; and presentations on Adipose Derived Stem Cell work. In addition, there were great panels on various aspects of cosmetic medicine and surgery distributed among the always excellent Resident and Member papers.

In the post meeting survey, Members and Residents requested further education in Body Contouring, the outcome of liposuction cases, congenital anomalies, fat grafting, facial aesthetic surgery and patient safety among others. These and other topics will be featured at the upcoming meeting. Plans are for the always popular and educational Problems and Pearls Session to feature both reconstructive and cosmetic cases this year. A high level training course on body contouring will provide additional CME. Our Members have indicated that they prefer panel discussions and guest speakers and so the 2013 meeting will reflect that preference. The Southeastern has always placed a high regard on the development of future plastic surgeons. The covered Glancy Award will be given to the Resident and institution with the best Resident presentation. Member papers are also a rich part of our tradition. We will also select the best member paper given at the meeting. The resident and member papers were blind graded and the highest scores were selected to assure that no bias was introduced into the process.

OBJECTIVES

Upon completion of this program, residents-in-training and practicing plastic surgeons should be able to:

- To learn the science of fat grafting including adipose-derived stem cells and the clinical applications of grafting these materials.
- Appreciate the latest techniques for superior results in body contouring for both massive and non-massive weight loss patients.
- Learn the latest in the anatomy and technical advances in designing and executing perforator flaps.
- To learn the past, present and future of space exploration and to consider how space medicine has and will affect humankind.
- Understand the ways to avoid litigation and what to do if you are victim to medical litigation.
- Understand the biology of bioprosthetics and appreciate the differences in structure and clinical application of the various acellular dermal matrices.
- Have a better understanding in the diagnosis and management of complex congenital anomalies, in particular cranial anomalies such as craniosynostosis.
- Gain an understanding of how to avoid complications and optimize your results when performing liposuction and abdominoplasty.
- Improve the safety of your patient in the operating room when under general anesthesia; and understand the indications and advantages including safety and faster recovery in performing procedures under local anesthesia.
- Appreciate the latest techniques in rejuvenation of the face.
- Gain a greater awareness of the needs and health problems of people in developing countries around the world and appreciate the possibilities of support and assistance within a Global Health Initiative.

Description The Southeastern Society of Plastic and Reconstructive Surgeons 56th Annual Scientific Meeting is designed to deliver quality scientific and educational presentations which have been the Society’s hallmark since its beginning in 1957. This program is intended primarily for the education of plastic surgeons and others who have significant involvement within the broad spectrum of reconstructive plastic surgery, facial plastic surgery, and aesthetic plastic surgery. It is comprised of fundamental, intermediate, and advanced didactic material of interest and application to all attendees. Personal practice issues will be discussed along with safety management and medicolegal risk management in the operative theatre. An overview of the art and science of Plastic Surgery as well as new directions, trends and techniques within the time constraints of a four–day meeting will be provided.
ACCREDITATION
The Southeastern Society of Plastic and Reconstructive Surgeons is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide Continuing Medical Education for physicians. The Southeastern Society of Plastic and Reconstructive Surgeons designates this educational activity for a maximum of 17 PRA Category 1 Credits, 1.25 of which have been designated as relating to patient safety education. The teaching course and Resident Luncheon offer an additional 2 hours CME and 1 hour of CME to qualified attendees respectively. Physicians should only claim credit commensurate with the extent of their participation in the activity.

DISCLOSURE/CONFLICT OF INTEREST STATEMENTS
All faculty are required to complete a statement detailing any and all conflicts of interest and/or industry support. It is the policy of the Southeastern Society, consistent with the policies of the ACCME, that every author must complete a Conflict of Interest/Disclosure form or that author is not permitted to make a presentation at the meeting. We have printed and will verbally announce details as to any speaker who has made such a disclosure. The absence of any such affirmative statement of disclosure means that the faculty has submitted a complete disclosure statement, and has indicated that he/she has no conflicts/industry support to report. All faculty/participants have been instructed that any unapproved or off label use of a product is to be referenced in a CME program presentation, the faculty member/participant shall be required to disclose that the product is either investigational or is not labeled for the usage being discussed. Questions from the floor must be preceded by a verbal disclosure of any relevant commercial interest by the questioner.

MEETING ROOM RULES
The meeting room is the focal point for the Southeasterner’s educational sessions. These sessions may include sensitive and explicit patient photographs and material presented which are generally intended to be accessible only to health care professionals. With that understanding, we feel that it is not appropriate for small children to be present in the meeting room during the scientific sessions. We ask that all attendees recognize and observe this restriction. The Southeastern reserves the right to require any children or adolescents present in the meeting room to leave. In compliance standards, the meeting room will remain smoke-free at all times. Additionally, as a courtesy to the speakers and other attendees please turn all cell phones and pagers to their SILENT or OFF position. Individuals with special needs are asked to notify the Southeastern office in advance as to these needs.

CERTIFICATES OF ATTENDANCE
To obtain your CME credit for this meeting, a completed evaluation form must be completed online. The link to this online form will be communicated to attendees prior to or following the sessions. Upon receipt of a properly completed evaluation form, a certificate of CME will be issued approximately six weeks following the meeting. In addition, credit hours will be reported to the American Society of Plastic Surgeons automatically as a courtesy to ASPS members.

DISCLOSURES BY PERSONS RESPONSIBLE FOR PROGRAM PLANNING
The following persons are members of the Southeastern Executive Committee, Program Committee and Resident Competition Committee, which reviewed and scored abstracts and otherwise assisted the Program Chair, Dr. Henry Vasconez, in selecting content and presenters. Each has completed a Disclosure/Conflict of Interest Statement, and all information on financial contacts with commercial sponsors and/or conflicts/industry support which was reported is indicated in a separate document distributed to all attendees. If a name appears with no additional information delineated, it means that this individual completed a disclosure and indicated that he/she had no financial contacts with commercial sponsors and/or conflicts/industry support.
2013 EXECUTIVE COMMITTEE
Ann Ford Reilley, M.D. (President)
Harold I. Friedman, M.D.
Henry C. Vasconez, M.D.
Braun H. Graham, M.D.
Kevin F. Hagan, M.D.
Walter L. Erhardt, Jr., M.D.
Stephen J. Finical, M.D.
Mark A. Codner, M.D.
William Byron Barber, M.D.
C. Scott Hultman, M.D.
John T. Lindsey, M.D.
Robert J. Allen, M.D.
William C. Lineaweaver, M.D.
Albert Losken, M.D.
John G. Sparrow, M.D.

2013 PROGRAM COMMITTEE
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Harold Friedman, M.D.
Scott Hultman, M.D.
Jorge de la Torre, M.D.
Mark Codner, M.D.
Monique Abner, M.D.
David Drake, M.D.
Jack Fisher, M.D.
Kevin Hagan, M.D.
Brian Rinker, M.D.

2013 RESIDENT COMPETITION COMMITTEE
Jorge de la Torre, M.D. (Chair)
Al Cohn, M.D.
Sherry Collawn, M.D.
Mark Craig, M.D.
John Dean, M.D.
Detlev Erdmann, M.D.
Stephan Finical, M.D.
Robert Garza, M.D.
Peter Haines, M.D.
Carmen Kavali, M.D.
Bert Losken, M.D.
Malcolm Marks, M.D.
Bruce Mast, M.D.
Laurence Rosenberg, M.D.
Daniel Shell IV, M.D.
Jon ver Halen, M.D.
Holly Wall, M.D.
Tom Zaydon, M.D.
SECTION 11

Saturday, June 1

6:00 – 7:30pm  
Poster Session with Author Q  
Calusa D–E, Calusa Foyer  
See “Poster Presentations” section for abstract details

Welcome Reception — “Sippin’ in Seersucker”  
Exhibits Open  
Calusa D–E

Sunday, June 2

6:00 am  
Registration Open  
Calusa Foyer

6:30 – 7:30am  
Continental Breakfast  
Exhibits and Poster Viewing  
Calusa D–E

All Scientific Sessions will take place in Calusa Ballroom A–C.

7:30 – 7:45am  
Invocation and Presidential Address  
Andy Moore, Jr., MD  
Ann Ford Reilley, MD  
Calusa A–C

7:45 – 8:00am  
Update from American Society of Plastic Surgeons  
Gregory Evans, MD

7:45 – 8:00am  
Update from American Society of Aesthetic Plastic Surgeons  
Jack Fisher, MD

8:15 – 9:00am  
Resident Competition for Glancy Award  
Chairman: Jorge de la Torre, MD  
Secretary: Bruce Mast, MD
Transverse Mucoperiosteal Flap Inset for Cleft Palate Repair: Technique and Outcomes
Jonathan Black, M.D. – University of Virginia – Charlottesville, VA
Thomas Gampper, M.D.

BACKGROUND AND PURPOSE:
The majority of cleft palate repair techniques address the hard palate portion through transposition of mucoperiosteal flaps to the midline using a linear closure over the cleft. This can be difficult in patients with wide clefts due to tension often leading to wound breakdown and fistula rates as high as 76%. We have modified the Bardach two-flap palatoplasty by rotating the mucoperiosteal flaps medially rather than transposing as typically described. The purpose of this report is to present our technique, discuss its multiple advantages in the patient with a wide cleft, and compare outcomes to the literature.

METHODS:
A retrospective chart review analysis was performed of consecutive patients undergoing primary cleft palate repair by the senior author from 2000-2012. Technical description including photographs is provided. Patients with a soft palate cleft only or treated using an alternate technique were excluded. Demographic information including Veau type was recorded. Outcomes were assessed including postoperative fistula, velopharyngeal insufficiency (VPI), length of follow-up, and need for secondary procedures.

RESULTS:
51 primary palatoplasties were performed of which 37 patients treated using this technique were included. The majority (9 of 14) of patients excluded had a soft palate cleft only. Eleven (29.7%) patients were diagnosed with Pierre Robin Sequence. All patients were treated using the described technique resulting in 2 (5.4%) postoperative fistulae. Three (8.1%) patients were diagnosed with VPI. Both patients underwent secondary repair for fistula and 2 of 3 underwent correction for VPI. All but two patients were treated using a double-opposing Z-plasty for the soft palate cleft. A single mucoperiosteal flap was used for closure of 6 of 16 (37.5%) patients with Veau 2 type clefts without postoperative fistulae. Mean length of follow-up was 19 months. Mean age at most recent follow-up was 35.5 months.

CONCLUSION:
Patients with wide cleft palates had excellent outcomes using the described technique and its variations. Rates of postoperative fistula were low particularly in this difficult patient population with comparable incidence of velopharyngeal insufficiency to the literature. Multiple disadvantages exist with current techniques and are addressed using this technique. This provides an excellent option for repair of the patient with cleft palate with several advantages to current techniques.

FIGURE: (OPERATIVE TECHNIQUE)
A) Veau type 2 cleft palate after local anesthetic injected (top left)

B) After closure of nasal mucosa and anteriorly and nasal mucosa-containing z-plasty flaps posteriorly (top right)

C) Marking of left, unilateral mucoperiosteal flap (bottom left)

D) Inset of mucoperiosteal flap after rotation. Note transverse orientation of medial edge of flap to meet anterior edge of oral z-plasty flaps (bottom right)
Resident Competition Paper #2

An Outcome Analysis of Intraoperative Angiography for Post-Mastectomy Breast Reconstruction
Claire Duggal, M.D. – Emory University – Atlanta, GA
Albert Losken, M.D.

BACKGROUND:
Intra-operative angiography is a useful tool for predicting tissue perfusion during post mastectomy breast reconstruction. The purpose of this review was to determine whether the routine use of Spy angiography in breast reconstruction decreases complications and whether this new technology is cost affective.

METHODS:
A retrospective review of 184 consecutive patients who underwent breast reconstruction using intra-operative Spy technology at Emory University was conducted. This was compared to 184 consecutive patients as historical controls who were reconstructed prior to the introduction of Spy. Patient demographics and complication data were queried. The cost of unexpected re-operations for ischemic complications and associated hospital stays were calculated and comparisons were made between the two groups.

RESULTS:
The overall complication rate was 42.7% in the Spy group compared to 46.7% in the control group (p=0.464). The incidence of mastectomy skin necrosis was significantly lower in the Spy group compared to the control group (13% vs 23.4%, p=0.010). There were also significantly fewer re-operations for perfusion related complications in the Spy group compared to the control group (5.9% vs 14.1%, p=0.0009). There was a trend towards lower partial flap necrosis and fat necrosis rates in the Spy group compared to control group (14% vs 22%, p=0.237). Comparing the costs of reoperations for ischemic complications, the use of Spy saved $112,218.00 overall or $610.00 per patient.

OUTCOME COMPARISON BETWEEN THE TWO GROUPS

<table>
<thead>
<tr>
<th></th>
<th>Spy Group n (%)</th>
<th>Control Group n (%)</th>
<th>P</th>
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<tbody>
<tr>
<td>Take-back to OR</td>
<td>11 (5.9%)</td>
<td>26 (14.1%)</td>
<td>0.009</td>
</tr>
<tr>
<td>Mastectomy flap necrosis</td>
<td>24 (13.0%)</td>
<td>43 (23.4%)</td>
<td>0.010</td>
</tr>
<tr>
<td>Dehiscence</td>
<td>4 (2.2%)</td>
<td>1 (0.5%)</td>
<td>0.372</td>
</tr>
<tr>
<td>Infection</td>
<td>18 (9.7%)</td>
<td>20 (10.9%)</td>
<td>0.785</td>
</tr>
<tr>
<td>Implant Exposure</td>
<td>3 (1.6%)</td>
<td>3 (1.6%)</td>
<td>1.00</td>
</tr>
<tr>
<td>Seroma</td>
<td>18 (9.7%)</td>
<td>17 (9.2%)</td>
<td>1.00</td>
</tr>
<tr>
<td>Hematoma</td>
<td>5 (2.7%)</td>
<td>7 (3.8%)</td>
<td>0.574</td>
</tr>
<tr>
<td>Complication</td>
<td>79 (42.7%)</td>
<td>86 (46.7%)</td>
<td>0.464</td>
</tr>
</tbody>
</table>

Severity of Mastectomy Skin Necrosis

Historical cohort
- Mild: 21%
- Moderate: 34.80%
- Severe: 44.10%

Spy cohort
- Mild: 41.7%
- Moderate: 33.30%
- Severe: 25%
CONCLUSIONS:
The use of intra-operative angiography during breast reconstruction decreases the incidence of mastectomy skin necrosis and the incidence of unexpected re-operations. This technology at our institution was also cost-effective when comparing re-operative complications.
Impact of Intraoperative Vasopressors Use in Free Tissue Transfer for Head, Neck and Extremity Reconstruction

David A. Kelly, M.D. — Wake Forest University — Durham, NC
Clayton Crantford, M.D.
Michael Reynolds, M.D.
Ivo A. Pestana, M.D.

BACKGROUND:
General anesthesia induces hypotension and this is commonly treated intraoperatively with administering vasopressors. Microsurgeons are hesitant to use vasopressors due to the potential risk of inducing vasoconstriction and flap necrosis. The aim of this study was to determine the frequency of intraoperative vasopressor utilization in patients undergoing free tissue transfer reconstruction and to determine its impact on patient outcomes.

METHODS:
An IRB approved retrospective review was performed for patients undergoing free tissue transfer for head, neck and extremity reconstruction at Wake Forest Baptist Health from 2008 to 2011.

RESULTS:
Free flap survival was 97%, with 3% of patients having total flap necrosis and 17% with partial flap necrosis. The frequency of intraoperative vasopressor use was 53.2%. There was no significant difference in the frequency of total or partial flap necrosis between patients who received intraoperative vasopressors, 12.8%, and those who did not, 10.63% (p=0.60). No statistical significance in the rate of arterial or venous thrombosis between the two groups (p=0.095 and p=0.095, respectfully). The use of vasopressors did not significantly increase postoperative complications. The timing of vasopressor administration did not affect outcomes. (Place Figure 1 Here)

CONCLUSIONS:
Intraoperative vasopressors are used more frequently than previously realized during free tissue transfer for reconstructive surgery. The use of intraoperative vasopressors does not appear to adversely affect outcomes of free tissue transfer. Further investigation and larger study size are needed to analyze drug administration timing, dose, and type of vasopressor to better understand the impact of intraoperative vasopressor use in free tissue transfer outcomes.
Comparison of the Umbilical Cord (UC) and Palate Periosteum (PP) As Mesenchymal Stem Cell (MSCs) Sources for Tissue Engineered Bone in Children

Daniel J. Krochmal, M.D. – University of North Carolina – Chapel Hill, NC
Montserrat Caballero, Ph.D.
Andrew Pappa, B.S.
Katherine Roden, B.S.
Stoyan Smoukov, Ph.D.
C. Scott Hultman, M.D., M.B.A.
John A. van Aalst, M.D., M.A.

BACKGROUND:
There is a significant need for tissue engineered bone to treat complex pediatric craniofacial bone defects secondary to congenital anomalies, trauma, and cancer extirpation. Traditional treatments in children have focused on autologous bone sources, which are limited in supply. Tissue engineered solutions for these defects are attractive, yet require a readily available, ideally discarded, source of stem cells. The goal of this work is to compare UC and PP (and hence bone-primed) MSC sources for engineered bone quality.

METHODS:
With IRB approval, UC and PP MSCs were harvested by explant technique, and grown to subconfluence; at passage 2, MSCs were osteoinduced on 2-dimensional and nanofiber surfaces for 21 days. Cell attachment, proliferation, and osteoinduction were quantified. Cell response after cryopreservation was determined. Cell viability and proliferation was assessed by calcein AM; after osteoinduction, calcium deposition was assessed by alizarin red; mRNA for alkaline phosphatase (ALP), bone morphogenetic protein-2 (BMP-2), osteopontin (OPN), and osteocalcin (OST) were assessed by RT-PCR.

RESULTS:
UC MSCs demonstrated greater proliferation, calcium deposition, and secretion of ALP and BMP-2 mRNA on nanofiber scaffolds than PP MSCs. OPN and OST were comparable in the two stem cell sources. Osteoinduction capacity was preserved in both MSC sources after cryopreservation.

CONCLUSIONS:
UC MSC osteoinduction was greater on nanofiber scaffolds than PP MSCs, suggesting that UC-derived MSCs have greater potential for bone formation than even a bone-primed source of MSCs. Given these findings, harvest and storage of UC MSCs for later use in children with known craniofacial birth defects may be warranted.

9:00 – 10:00am  Keynote Presentation:
Story Musgrave, MD
Introduction: Henry Vasconez, MD
Story Musgrave was born in 1935 on a dairy farm in Stockbridge, MA. He left school, and ran off to Korea with the U.S. Marines where he was an aircraft electrician and an engine mechanic. He started flying with the Marines, and over the next 55 years accumulated 18,000 hours in over 160 aircraft. He is a parachutist with over 800 freefalls.

Story went on to become a NASA astronaut for over 30 years, and has flown on six spaceflights. He performed the first shuttle spacewalk on Challenger’s first flight, was a pilot on an astronomy mission, conducted two classified DOD missions, was the lead spacewalker on the Hubble Telescope repair mission and on his last flight, he operated an electronic chip manufacturing satellite on Columbia.

He now has seven graduate degrees in math, computers, chemistry, medicine, physiology, literature and psychology. He has been awarded 20 honorary doctorates. He was a part time trauma surgeon during his 30 year astronaut career. Prepare to be mesmerized and inspired as Dr. Musgrave shares his incredible journey through life.

10:00 – 10:30am  Refreshment Break
Exhibits and Poster Viewing
Calusa D–E

10:30 – 11:00am  Member Papers
Chair: Roxanné Guy, MD
Secretary: Galen Peridikis, MD
Calusa A–C
A Novel Adipose-derived, Point-of-Care Cell Therapy for Autologous Dermal Replacement

Adam J. Katz, M.D. – University of Florida – Gainesville, FL
Ning Yang, Ph.D.
Hulan Shang, M.S.

BACKGROUND:
The formulation of autologous cell-seeded constructs in real-time at the “point-of-care” may engender translational advantages, but similarly involves significant technical hurdles. Our goal is to leverage adipose tissue into novel point-of-care therapies for full thickness wounds. To this end, we hypothesized that freshly isolated human adipose-derived stromal vascular fraction (SVF) cells could survive homogenous seeding in ‘real time’ onto dermal scaffold materials; proliferate within these constructs; and secrete bioactive factors that are critical to tissue repair and effect the migration of wound-related cells.

METHODS:
Freshly isolated SVF cells were combined with dermal scaffold and ECM, and the resulting constructs placed into culture. Parallel control groups consisted of constructs without cells. During a 14-day period, cell viability was assessed and conditioned medium was collected for analysis of growth factor levels, and for evaluation of bioactivity in the context of cell migration assays. On day 14, constructs were processed for histology.

RESULTS:
Freshly isolated human SVF cells were reproducibly and uniformly distributed within dermal constructs in ‘real time’, and remained viable and proliferative during 14 days of culture (average increase in cell number of 157%). A number of important angiogenic and immuno-modulatory factors were detected at elevated levels (compared to acellular controls), and conditioned media from cell-containing constructs enhanced the transwell migration of keratinocytes and endothelial cells. On histology, lumen-like structures with CD31+ staining suggested the formation of neo-capillaries within constructs.

CONCLUSION:
Our results demonstrate that freshly isolated human cells can be reliably formulated into combinatorial constructs in real time at the point-of-care; and, that these constructs possess enhanced biological activity as a result of these cells. This point-of-care strategy may provide a flexible platform for the translation of autologous cell-based therapies for a number of clinical challenges. Our future work will evaluate the efficacy of this wound paste platform in vivo using rodent models of full thickness wound healing.
Member Paper #2

The Benefits of the Modified Passot Mastopexy Technique for Massive Weight Loss and Prosthetic Explantation Patients
Wyndell H. Merritt, M.D. - Richmond, Virginia

INTRODUCTION:
At the SESPRS meeting in 2000 (Bermuda) we presented the benefits of the modified Passot reduction mammoplasty for gigantomastia: no vertical scar; internal “bra” support by contouring the entire inferior dermal breast; preservation of nipple sensation, erectility and breast-feeding; and no nipple grafts regardless of pedicle length (including 51 cm). We now present the benefits when implants must be removed and in massive weight loss patients.

METHODS:
Eight patients with implant removal had breast mound recreation from the inferior half using Passot’s concept, modified by lateral dermal advancement to a superior and medial position on the pectoralis, covered by the superior skin flap with an opening for the nipple. Six massive weight loss patients had sufficient inferior length to recreate adequate breast mounds using this technique, without need for prostheses.

RESULTS:
None of these patients desired augmentation when offered, remaining satisfied with their new contour. Nipple sensation and erectility was preserved, and no “bottoming out” occurred.

CONCLUSION:
The modified Passot mastopexy for massive weight loss and explantation patients is a versatile technique with these benefits: no vertical scar, no prostheses, minimal to no “bottoming out,” no nipple grafts, and a single-stage procedure that preserves nipple sensation, erectility and breast-feeding.
Member Paper #3

Skin-Sparing Mastectomy and Immediate Tissue Expander Breast Reconstruction in the Macromastia Patient Using the Passot Breast Reduction Pattern
Brian Rinker, M.D. — University of Kentucky — Lexington, KY
Brian Thornton, M.D.

Skin-sparing mastectomy with immediate tissue expander reconstruction poses a challenge in the patient with macromastia or excessive ptosis. Skin reduction via the Wise pattern has been described but is associated with high rates of skin necrosis. The purpose of this study is to review a series of 43 patients who underwent skin-sparing mastectomy and immediate tissue expander breast reconstruction using a horizontal (Passot) breast reduction pattern, with an inframammary-only scar. Thirty reconstructions were bilateral, 13 were unilateral (73 breasts total). Follow up ranged from 6 to 55 months (mean 20 months). Common co-morbid conditions included hypertension (n=16) and obesity (n=22). Nine patients were smokers. Mean BMI was 30.6 (range 19.4 to 58.6). Twenty-one patients underwent chemotherapy between reconstructive stages, and 12 patients received radiation. The mean initial fill was 196cc (range 0 to 420cc), and the mean time to final expansion was 84 days (range 28 to 225 days). Five patients did not complete the reconstruction, two due to cancer recurrence and three due to infection. Thirty-five patients received silicone implants, two saline, with a mean implant size of 652cc. There were 4 wound healing complications (9%), three of which occurred after expander placement, one after device exchange. There were 7 infectious complications (16%). The use of a horizontal breast reduction pattern at the time of expander placement produces consistently good aesthetic outcomes and a low rate of skin necrosis, and it should be considered as an option in patients with macromastia or ptosis undergoing skin-sparing mastectomy and immediate reconstruction.

FIGURE 1

FIGURE 2
11:00 – 12:00pm  **Medical — Legal Panel**
What You May Not Want to Know, But Can’t Afford Not to Ask
Moderator: Morton Kasdan, MD

The Physician Perspective
Morton Kasdan, MD

The Defense Attorney Perspective
Karen Keith, JD

The Perspective of the Court
Nick King, JD

The Perspective of the Plaintiff Attorney
Peter Palmer, JD

12:00 – 1:00pm  **Resident Jeopardy Bowl**
Moderator: Bert Losken

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**Section 12**

**Monday, June 3**

6:00am  **Registration Open**  Calusa Foyer

7:00 – 8:00am  **Continental Breakfast**  Calusa D–E
Exhibits and Poster Viewing

*All Scientific Sessions will take place in Calusa Ballroom A–C.*

8:00 – 9:00am  **Member Papers**  Calusa D–E
Chairman: Jobe Fix, MD
Secretary: Jeffrey Marcus, MD
Member Paper #4

**Early Passage Adipose-Derived Stem Cells Enhance Wound Healing**

Sherry Collawn, M.D. — University of Alabama — Birmingham, AL
Nillam Banerjee, M.D.
Louise Chow, M.D.

**PURPOSE:**
The goal of this project is to optimize a method for accelerating wound healing using adipose-derived stromal cells (ADSC).

**METHODS:**
ADSC preparations from abdominal liposuction were expanded in culture and then incorporated into a dermal equivalent consisting of type I collagen and fibroblasts. Primary keratinocytes were cultured at the air-medium interface on dermal equivalents with or without ADSC as organotypic cultures. These cultures were laser injured and harvested at 72 hours for initial comparisons of cultures containing young ADSC compared to controls that did not contain ADSC. These studies were also conducted with young passage 1 ADSC versus old passage 10 ADSC at 48 hours after laser injury. Wound healing was evaluated by directly measuring the burns on H&E stained sections using the axiovision system for measurements in microns.

**RESULTS:**
In table 1, re-epithelialization was always enhanced when early passage ADSC were added to the raft cultures. Controls did not heal to the extent seen with the ADSC rafts which had totally healed with a multilayered epidermis at 72 hours. The fibroblast control rafts which had started to heal only had a thin epidermis. Using Fisher’s Exact test the p-value is $\approx 0.014$ showing a significant difference in healing with the early passage ADSC. These studies were repeated with young passage 1 versus old passage 10 ADSC as well as with controls and harvested at 48 hours. Results again demonstrated faster healing with young ADSC versus fibroblast controls with a burn diameter average of 176 microns compared to 539 microns, respectively. The older ADSC also healed faster than the controls but not as well as the young ADSC with a burn average of 191 microns.

**CONCLUSIONS:**
In these studies we have shown that young ADSC have consistently accelerated re-epithelialization in this 3-D culture system.

**ADSC Accelerate Healing of Laser-injured PHK Raft Cultures**

<table>
<thead>
<tr>
<th>Raft 1 ADSC and fibroblasts</th>
<th>Burn 1</th>
<th>Burn 2</th>
<th>Burn 3</th>
<th>Raft Diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 µm</td>
<td>0 µm</td>
<td>0 µm</td>
<td>9mm</td>
<td></td>
</tr>
<tr>
<td>Raft 2 ADSC and fibroblasts</td>
<td>0 µm</td>
<td>0 µm</td>
<td>0 µm</td>
<td>9mm</td>
</tr>
<tr>
<td>Raft 3 ADSC and fibroblasts</td>
<td>0 µm</td>
<td>0 µm</td>
<td>0 µm</td>
<td>9mm</td>
</tr>
<tr>
<td>Raft 4 ADSC and fibroblasts</td>
<td>0 µm</td>
<td>0 µm</td>
<td>0 µm</td>
<td>8mm</td>
</tr>
</tbody>
</table>

*Only had a very thin layer of keratinocytes on the burns that were healing. Raft cultures with ADSC had all healed (0 µm) and had a full multilayered epidermis.*
Correlation between Abdominal Perforator Vessels Identified with Preoperative CT Angiography and Intraoperative Fluorescent Angiography in the Microsurgical Breast Reconstruction Patient

Ivo Pestana, M.D. — Wake Forest University — Durham, NC
Michael Zenn, M.D.

BACKGROUND:
CT angiography (CTA) has become a reliable method of perforator vessel identification. Indocyanine Green Fluorescent Angiography (ICGLA) imaging produces a real-time image of large and small caliber blood vessels. The aim of this prospective study was to compare ICGLA with CTA to evaluate its reliability of vessel identification and correlation to perforator vessel size and number determined preoperatively by CTA. The effect of both imaging techniques on flap design or intraoperative plan was also evaluated.

METHODS:
Over a one year period, patients presenting for free-tissue transfer breast reconstruction underwent preoperative CTA mapping of abdominal perforators followed by intraoperative ICGLA. Using visualization software, scaling factors for both image types were calculated so CTA and ICGLA data could be compared.

RESULTS:
Eighteen patients (24 breast reconstructions) were included in the study. Larger CTA perforator size was associated with larger actual size (p=0.04). The largest CTA identified perforator or largest actual perforator was used 78% of the time. In 7 of 18 cases, perforator bundles noted to be larger and distinct from the CTA largest perforator were identified. Increasing BMI was not associated with larger CTA identified perforator size (p=0.67) or more intense ICGLA blushes (p=0.13). No significant correlation was found between CTA identified perforator location and ICGLA skin blush location, size, or intensity. CTA or SPY data guided intraoperative procedure adjustments in 72% of patients. ICGLA identified poor soft tissue perfusion and guided flap resection in 46% of patients.

CONCLUSIONS:
ICGLA skin blush location, size, and intensity does not correlate with CTA-identified perforating vessel location or actual perforating vessel size. Despite this, the ICGLA information was useful for evaluation of soft tissue perfusion and flap design.
Member Paper #6

Anatomical Study of the Posterior Pedicle Nasoseptal Flap For The Treatment of Oroantral / Oronasal Nasal Fistulas and Septal Perforations
Carlos Rivera-Serrano, M.D. – University of Florida – Gainesville, FL
Carlos Pinheiro-Neto, M.D.
Carl Snyderma, M.D.
Ashley Lentz, M.D.

BACKGROUND:
The posterior Pedicle Nasoseptal Flap (NSF) (aka, Hadad-Bassagasteguy flap) was originally described for reconstruction of cranial base defects resultant from expanded endoscopic/endonasal approaches (EEA). It has been extensively demonstrated that the NSF is reliable; decreasing postoperative cerebral spinal fluid (CSF) leak rates after EEA from more than 20% to less than 5%. We present the cadaveric foundations of the use of the NSF for reconstruction of nasal septal perforations and oronasal/nasal fistulas.

STUDY DESIGN:
Feasibility. Cadaveric study

METHODS:
10 cadavers were used. 9 flaps were harvested and transposed endoscopically. Photographs were taken using 0° and 30° rod-lens endoscopes coupled to a high definition camera.

RESULTS:
A total of 10 NSF were harvested. Three flaps were used to reconstruct oronasal fistulas (Fig. 1-2), and three to reconstruct oroantral fistulas (Fig. 3). Four flaps were transposed to reconstruct septal defects (Fig. 4-5). The NSF reliably reached the entire maxillary sinus and nasal floors, with the exception of the area anterior to the head to inferior turbinate. The NSF was able to cover all nasal perforations immediately above or below the flap itself, as long as the perforation was not larger than the width of the flap (superior to inferior, in situ). All NSFs were easily tailored endoscopically with standard sinonasal instrumentation.

CONCLUSIONS:
In cadavers, the NSF provides adequate nasal lining to close all oroantral fistulas, and all oronasal fistulas posterior to the head of the inferior turbinate. The NSF provides unilateral mucopericondrial/osteal lining to septal defects immediately inferior or superior to the flap, as long as the perforation is less than the flap cephalocaudal dimension.

Figure 1.
Endoscopic harvesting of the posterior pedicle nasoseptal flap in the right nasal cavity. A. NSF completely elevated from nasal septum. B. NSF reflected to expose the choanal arch (large arrow). C. The NSF is partially transposed into the right maxillary sinus (white arrow). The septal artery is pointed with a small black arrow in B and C.
Figure 2.
Right palatal/oronasal defect. A. Transoral view of the defect. B. Endoscopic view of right nasal cavity. The flap is completely harvested and transposed to cover the fistula in the right nasal floor. S = denuded septum (donor site). f = NSF. C. Same as in B but the flap has been lifted up to visualize the fistula (white arrow). D. Intraoral view of the flap providing nasal lining for closure of the fistula. The flap was sutured for demonstration purposes.

Figure 3.
Right palatal/oroantral fistula. A. Transoral view of the defect. B. Endonasal view of the flap transposed into the right maxillary sinus. f = flap. C. NSF completely covering the floor of the maxillary sinus. The pedicle has been pointed with a large black arrow. pmsw = posterior maxillary sinus wall. D. Transoral view of the NSF providing nasal lining to close the defect. The flap has been sutured for demonstration purposes.
CONTINUATION OF MEMBER PAPER #6

**Figure 4.**
View of the left nasal septum in a cadaver that was split sagitally (close to the midline). A. Flap in situ with inferiorly based perforation. The area in black represents the area of mucosa that should be removed to allow fixation of the flap to the septal cartilage. B. NSF transposed (white arrow = the flap is inferiorly rotated) covering the perforation.

**Figure 5.**
Closure of inferior nasal perforation. A. A low, relatively anterior septal perforation is viewed endoscopically inside the right nasal cavity. B. Perforation viewed from the left nasal cavity. C. The dotted line represents the area of mucosa around the perforation that should be be removed to facilitate adhesion of the flap to the septum. D. Right endonasal view. The flap was transposed (inferiorly rotated) on the left side and the perforation is completely covered.
**Member Paper #7**

**Submandibular Artery- Bilobed Platysma Myocutaneous Flap for Total Lower Lip Reconstruction**

William Lineaweaver, M.D., F.A.C.S. — Brandon, MS  
Yigit Tiftikcioglu, M.D.  
Ovunc Akdemir, M.D.  
Irem Bedile Tiftikcioglu, M.D.  
Mehmet Erdem, M.D.  
Yakup Isik, M.D.  
Ecmel Songur, M.D., Ph.D.

**INTRODUCTION:**
Lower lip reconstruction following cancer resection includes a variety of clinical and microsurgical options. We have developed a myocutaneous flap for full thickness reconstruction with functioning muscle.

**TECHNIQUE:**
In all patients, the submandibular artery was outlines with CTA and Doppler. The flap is designed after resection. The first lobe is designed to fill the defect and is outlined at 90° from the defect margin with the submandibular artery in the center of the flap. A second lobe is then outlines at 90° from the first lobe. The flap is raised with platysma muscle and artery with the first lobe rotated to the lip and the second lobe inset into the first lobe site, permitting neck closure without skin redundancy.

**RESULTS:**
17 patients were treated with this flap from January- May of 2012. All flaps survived. All patients had oral continence at 6 months, and EMG documented platysma function.

**COMMENT:**
The flap provides single stage lower lip reconstruction with functional muscle.
Member Paper #8

Preclinical Studies of the Dendrimer PAMAM-G3 for Treatment of Pathological Scarring

Jennifer Bond, M.D. – Duke University – Durham, NC
Eda Holl, M.D.
M. Angelica Sallem, M.D.
Bruce Sullenger, M.D.
Howard Levinson, M.D.

Pathological cutaneous scarring (PS) affects over 40 million people worldwide and costs billions of dollars annually. PS remains a major medical challenge for which a therapy is desperately needed. PS is caused by aberrant signaling, over-activation of fibroblasts and granulation tissue contraction. Following injury, pathogen- and damage-associated signaling molecular patterns including oligonucleotides (OGNs) are generated and subsequently activate cells involved in repair and resultant PS. The purpose of this study is the pre-clinical evaluation of the dendrimer, PAMAM-G3 as a novel anti-scarring technology. Our hypothesis is: PAMAM-G3 decreases PS by capturing and removing OGN signaling thus inhibiting OGN-stimulated increased fibroblast activation and granulation tissue contraction. Using a mouse model of granulation tissue contraction, PAMAM-G3 significantly decreased contraction (Fig 1) and angiogenesis (n=8, p<0.05). Collagen deposition in PAMAM-G3 treated tissues was more randomly aligned and whorl-like compared to control tissue. We propose that PAMAM-G3 acts by inhibiting fibroblast associated granulation tissue contraction. Mouse and primary human scar dermal fibroblasts stimulated with OGNs had increased NFκκ signaling, cytokine production (TGFκ, MCP1, IL10 TNFκ IFNκ), migration, and differentiation into myofibroblasts. PAMAM-G3 inhibited OGN-stimulated NFκκ signaling, cytokine production, migration, and differentiation into myofibroblasts (Fig 2). This is the first study to investigate dendrimer technology to treat PS and could have a significant impact on future treatment of patients.
A New Case of Anaplastic Large Cell Lymphoma of the Breast: An Update on Patients with Breast Implants Presenting with Late Periprosthetic Fluid Collection

Kendall Peters, M.D. — Orlando, FL

BACKGROUND:
In January 2011, the U.S. Food and Drug Administration released a statement regarding a possible association between non-Hodgkin’s anaplastic large cell lymphoma (ALCL) and breast implants. Only 34 cases of ALCL in women with breast implants have been published in the literature between 1997-2010. The American Society of Plastic Surgeons and the FDA have collaborated to track this development and established a database for that purpose. The author recently diagnosed a new case of ALCL in a patient presenting with late seroma 16 years after breast augmentation. Other new patients with ALCL and similar clinical presentations have also been identified and are being added to the registry. Proper evaluation of patients with late periprosthetic fluid collections is essential to provide a more accurate understanding of the possible association of breast implants and ALCL.

METHODS:
The author reviewed the current literature pertaining to ALCL and breast implants. The FDA and ASPS are currently assimilating information regarding new patients with ALCL that has not yet been released. The recommendations for management of late seroma in patients with breast implants were reviewed.

RESULTS:
Greater than ten new cases of ALCL in patients with breast implants are currently being investigated and added to the FDA database and ASPS PROFILE registry. Patients with breast implants presenting with late seromas should be appropriately evaluated for ALCL and new cases should be reported to the FDA and ASPS.

CONCLUSIONS:
The combined data registry of all new patients with breast implants diagnosed with ALCL will help clarify their potential association. Recognition, proper evaluation, and reporting of these issues will assist in this effort.

Monday, June 3

9:00 – 10:00am Fact of Fiction Panel
The Science of Fat Grafting
Moderator: Peter Rubin, MD
Panel: Adam Katz, MD
Roger Khouri, MD
Kamran Khoobehi, MD

10:00 – 10:30am Refreshment Break
Exhibits and Poster Viewing

10:30 – 11:15am Resident Competition with Discussion
Chairman: David Smith, MD
Secretary: Brian Rinker, MD
Internal Mammary Usability as Recipient Vessels in DIEP Breast Reconstruction in the Setting of Previous Radiation
William Leppard, M.D. — Medical University of South Carolina — Charleston, SC
Olivia Madan, M.S.
Shayla Freeman, M.S.
Thomas Pomposelli, M.S.
Dennis Schimpf, M.D.
Patrick O’Neill, M.D.
Fernando Herrera, M.D.

BACKGROUND:
The advancement in microsurgical techniques has made the use of autologous tissue the standard of care for breast reconstruction. The recipient vessels most commonly used today include the internal mammary followed by thoracodorsal vessels. Previous studies suggested that internal mammary vessels are unusable in up to 20% of cases following preoperative radiotherapy.

PURPOSE:
To review a multi-institutional experience and determine the usability of internal mammary vessels after previous radiation exposure.

METHODS:
Retrospective review using Medical University of South Carolina and UCLA microsurgical database to identify patients who have undergone breast reconstruction with DIEP flap and previous history of breast or chest wall irradiation. Patient demographics, size of vein, and recipient vessels used.

RESULTS:
218 DIEP flaps were performed in 154 patients (90 unilateral and 64 bilateral) between January of 2006 to July of 2011. The mean age was 51 and mean body mass index (BMI) was 28. Immediate breast reconstruction was performed in 61 patients. The internal mammary vessels were used in 214 flaps (98% usability). The thoracodorsal vessels were used as recipient vessels in 4 flaps. The mean IMV was 2.8 mm.

CONCLUSION:
Our study demonstrates that the internal mammary vessels appear to have a much higher usability rate than previously thought (97%) regardless of previous radiation to the breast or chest wall.
Dermal Autografts as a Substitute for Acellular Dermal Matrices (ADM) in Tissue Expander Breast Reconstruction: A Prospective Comparative Study

Michael Lynch, M.D. — University of Kentucky — Lexington, KY
Micahel Chung, M.D.
Brian Rinker, M.D.

BACKGROUND:
The use of acellular dermal matrix (ADM) in tissue expander breast reconstruction has several advantages but increased complications have been reported. Dermal autografts may offer a safer and more cost-effective alternative. The purpose of this prospective study was to compare the outcomes of tissue expander breast reconstruction using dermal autografts with ADM-assisted reconstruction.

METHODS:
Patients undergoing tissue expander breast reconstruction with either ADM or dermal autografts were enrolled. Autografts were harvested from the lower abdomen. At each follow-up visit, patients were surveyed on a seven point scale for scar and overall satisfaction. Biopsies taken at the time of device exchange were evaluated histologically with CD34 staining to assess tissue integration and vessel ingrowth. Expansion parameters, complications, procedural costs, and operative times were compared.

RESULTS:
Forty-eight patients were enrolled (76 breasts). Twenty-seven patients received ADM, and twenty-one patients received dermal autograft. Wound healing complications were significantly higher in the ADM group (14.8% versus 4.8%, p=0.03), as were major complications (18.5% versus 0%, p<0.01). Histologic vessel counts in the autograft group averaged 21 vessels/mm^2, compared to 7 vessels/mm^2 in the ADM group (p<0.01). There was no difference between the two groups in scar satisfaction or overall satisfaction.

CONCLUSIONS:
Patients receiving dermal autograft had a lower incidence of major complications and delayed wound healing than patients who received ADM. Despite harvest time, the overall cost of the ADM-assisted expander placement was higher. Dermal autograft-assisted breast reconstruction offers many of the benefits of ADM, but with a lower cost and improved safety profile.

Table 2. Postoperative Complications

<table>
<thead>
<tr>
<th></th>
<th>AlloDerm® (%)</th>
<th>Dermal Autograft (%)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of Total</td>
<td>16 (59.2)</td>
<td>4 (19.0)</td>
<td></td>
</tr>
<tr>
<td>Wound Complications</td>
<td>4 (14.8)</td>
<td>1 (4.8)</td>
<td>0.03</td>
</tr>
<tr>
<td>Infectious Complications</td>
<td>7 (25.9)</td>
<td>3 (14.3)</td>
<td>0.06</td>
</tr>
<tr>
<td>Major Complications</td>
<td>5 (18.5)</td>
<td>0 (0.0)</td>
<td>&lt; 0.01</td>
</tr>
</tbody>
</table>
Revision Decompression and Collagen Nerve Wrap for Recurrent and Persistent Compression Neuropathies of the Upper Extremity and Systematic Review of the Literature

Ali Soltani, M.D. — University of Miami — Miami, FL
Bassan Allan, M.D.
Matthew Best, M.D.
Haaris Mir, M.D.
Zubin Panthaki, M.D.

Recurrent or persistent compression neuropathies of the upper extremity, including carpal and cubital tunnel syndrome, present a difficult treatment challenge to the hand or peripheral nerve surgeon. Patients with recurrent or persistent compression neuropathies treated with a repeat decompression and collagen wrap from a 5-year period were retrieved from the CPRS database and 15 patient records were identified. A systematic review was performed for all articles from 1946 to 2012 on secondary carpal and cubital tunnel syndrome. The mean age of the 15 patients treated was 63.3 years and ranged from 35 to 86 years. Patients with revision carpal tunnel decompression had an 89% subjective response rate while those with revision cubital tunnel decompression had an 83% resolution or improvement of symptoms. VAS decreased from a pre-operative mean 2.47 to 0.47 post-operatively and the mean number of opiate medications decreased from 0.67 to 0.40. We identified 32 papers utilizing various treatment strategies for recurrent carpal tunnel syndrome with success rates ranging from 53% to 100%. We identified 18 papers on recurrent cubital tunnel syndrome, with success rates ranging from 33% to 100%, with a weighted success of 78.1% overall but 71.7% in the submuscular transposition group. This novel technique using the collagen matrix wrap in recurrent compression neuropathies demonstrates favorable success rates. The collagen wrap allows nerve gliding, protection from perineural scar formation, and a favorable microenvironment. Submuscular transposition appears to be no better than other methods of decompression for recurrent cubital tunnel syndrome in contrary to traditional teaching.

**Figure 1:**
Exposure of the median nerve after external neurolysis.

**Figure 2:**
NeuraWrap of the median nerve after external neurolysis.

**Figure 3:**
NeuraWrap of the ulnar nerve after external neurolysis.
### Table 1.
Coexisting conditions in 15 patients undergoing revision surgery with NeuraWrap for recurrent/persistent upper extremity nerve compression.

<table>
<thead>
<tr>
<th>Condition</th>
<th>Frequency, n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypertension</td>
<td>9 (60)</td>
</tr>
<tr>
<td>Osteoarthritis</td>
<td>8 (53)</td>
</tr>
<tr>
<td>Gastro-esophageal Reflux Disease</td>
<td>8 (53)</td>
</tr>
<tr>
<td>Hypercholesterolemia</td>
<td>7 (47)</td>
</tr>
<tr>
<td>Atherosclerosis</td>
<td>5 (33)</td>
</tr>
<tr>
<td>Psychiatric disorders</td>
<td>5 (33)</td>
</tr>
<tr>
<td>Diabetes Mellitus</td>
<td>3 (20)</td>
</tr>
<tr>
<td>Benign Prostatic Hyperplasia</td>
<td>3 (20)</td>
</tr>
<tr>
<td>COPD</td>
<td>2 (13)</td>
</tr>
<tr>
<td>Asthma</td>
<td>2 (13)</td>
</tr>
</tbody>
</table>

### Table 2.
Patient characteristics, operative details and outcomes for patients with recurrent/persistent carpal tunnel syndrome undergoing revision surgery with NeuraWrap.

<table>
<thead>
<tr>
<th>Age</th>
<th>Dominance</th>
<th>Pre-op VAS*</th>
<th>Post-op VAS*</th>
<th>Initial Surgery</th>
<th>Initial Result</th>
<th>Intraoperative Findings</th>
<th>Operative Details</th>
<th>Months to Revision</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>84</td>
<td>Right</td>
<td>0</td>
<td>0</td>
<td>Open</td>
<td>Recurrent</td>
<td>Perineural/intra neural fibrosis</td>
<td>External/internal neurolysis</td>
<td>13</td>
<td>Resolved</td>
</tr>
<tr>
<td>59</td>
<td>Right</td>
<td>3</td>
<td>0</td>
<td>Endoscopic</td>
<td>Recurrent</td>
<td>Incomplete release</td>
<td>External neurolysis</td>
<td>60</td>
<td>Resolved</td>
</tr>
<tr>
<td>62</td>
<td>Right</td>
<td>0</td>
<td>0</td>
<td>Endoscopic</td>
<td>Persistent</td>
<td>Incomplete release, perineural/intra neural fibrosis</td>
<td>External/internal neurolysis</td>
<td>13</td>
<td>Unchanged</td>
</tr>
<tr>
<td>35</td>
<td>Right</td>
<td>7</td>
<td>0</td>
<td>Endoscopic</td>
<td>Recurrent</td>
<td>Perineural/intra neural fibrosis</td>
<td>External/internal neurolysis, flexor tenosynovectomy</td>
<td>31</td>
<td>Resolved</td>
</tr>
<tr>
<td>63</td>
<td>Right</td>
<td>3</td>
<td>0</td>
<td>Endoscopic</td>
<td>Persistent</td>
<td>Perineural fibrosis</td>
<td>External neurolysis</td>
<td>27</td>
<td>Improved</td>
</tr>
<tr>
<td>83</td>
<td>Right</td>
<td>8</td>
<td>0</td>
<td>Endoscopic</td>
<td>Persistent</td>
<td>Incomplete release, perineural/intra neural fibrosis</td>
<td>External/internal neurolysis, flexor tenosynovectomy</td>
<td>36</td>
<td>Resolved</td>
</tr>
<tr>
<td>83</td>
<td>Right</td>
<td>0</td>
<td>0</td>
<td>Open</td>
<td>Persistent</td>
<td>Perineural/intra neural fibrosis</td>
<td>External/internal neurolysis</td>
<td>5</td>
<td>Resolved</td>
</tr>
<tr>
<td>56</td>
<td>Right</td>
<td>0</td>
<td>0</td>
<td>Endoscopic</td>
<td>Recurrent</td>
<td>Perineural fibrosis</td>
<td>External neurolysis</td>
<td>57</td>
<td>Resolved</td>
</tr>
<tr>
<td>78</td>
<td>Right</td>
<td>0</td>
<td>0</td>
<td>Open</td>
<td>Persistent</td>
<td>Perineural fibrosis, excess tenosynovium</td>
<td>External neurolysis, flexor tenosynovectomy</td>
<td>36</td>
<td>Resolved</td>
</tr>
</tbody>
</table>

*Visual Analog Scale
Table 3.
Patient characteristics, operative details and outcomes for patients with recurrent/persistent cubital tunnel syndrome undergoing revision surgery with NeuraWrap.

<table>
<thead>
<tr>
<th>Age</th>
<th>Dominance</th>
<th>Pre-op VAS*</th>
<th>Post-op VAS*</th>
<th>Initial Surgery</th>
<th>Initial Result</th>
<th>Intraoperative Findings</th>
<th>Operative Details</th>
<th>Months to Revision</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>63</td>
<td>Left</td>
<td>0</td>
<td>0</td>
<td>Subfascial Transposition</td>
<td>Persistent</td>
<td>Perineural fibrosis and kink</td>
<td>Submuscular transposition</td>
<td>3</td>
<td>Resolved</td>
</tr>
<tr>
<td>47</td>
<td>Left</td>
<td>5</td>
<td>2</td>
<td>Subfascial Transposition</td>
<td>Recurrent</td>
<td>Kink</td>
<td>Submuscular transposition</td>
<td>16</td>
<td>Improved</td>
</tr>
<tr>
<td>66</td>
<td>Right</td>
<td>3</td>
<td>3</td>
<td>Subfascial Transposition</td>
<td>Persistent</td>
<td>Kink</td>
<td>Submuscular transposition</td>
<td>12</td>
<td>Unchanged</td>
</tr>
<tr>
<td>57</td>
<td>Right</td>
<td>5</td>
<td>2</td>
<td>Subfascial Transposition</td>
<td>Recurrent</td>
<td>Perineural fibrosis</td>
<td>External neurolysis</td>
<td>168</td>
<td>Resolved</td>
</tr>
<tr>
<td>49</td>
<td>Right</td>
<td>30</td>
<td>0</td>
<td>In-situ</td>
<td>Persistent</td>
<td>Perineural fibrosis</td>
<td>External neurolysis</td>
<td>8</td>
<td>Resolved</td>
</tr>
<tr>
<td>61</td>
<td>Right</td>
<td>3</td>
<td>0</td>
<td>In-situ</td>
<td>Recurrent</td>
<td>Perineural fibrosis</td>
<td>External neurolysis</td>
<td>55</td>
<td>Resolved</td>
</tr>
</tbody>
</table>

*Visual Analog Scale

Table 4.
Study characteristics and outcomes for patients undergoing flap revisions for recurrent/persistent carpal tunnel syndrome over a 40-year period.

<table>
<thead>
<tr>
<th>Study</th>
<th>No. Hands</th>
<th>Type of Flap</th>
<th>Resolved/Improved n(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noor et al. 2012</td>
<td>2</td>
<td>Radial/Ulnar perforator</td>
<td>2 (100)</td>
</tr>
<tr>
<td>Karthik et al. 2012</td>
<td>27</td>
<td>Hypothenar</td>
<td>24 (89)</td>
</tr>
<tr>
<td>Fusetti et al. 2009</td>
<td>20</td>
<td>Hypothenar</td>
<td>18 (90)</td>
</tr>
<tr>
<td>Stutz et al. 2008</td>
<td>27</td>
<td>Synovial (16) Hypothenar (11)</td>
<td>17 (63)</td>
</tr>
<tr>
<td>Craft et al. 2007</td>
<td>28</td>
<td>Hypothenar</td>
<td>26 (93)</td>
</tr>
<tr>
<td>Goitz et al. 2005</td>
<td>9</td>
<td>Omental free flap</td>
<td>6 (67)</td>
</tr>
<tr>
<td>Dahlin et al. 2002</td>
<td>14</td>
<td>Mixed local/free flap</td>
<td>10 (71)</td>
</tr>
<tr>
<td>Mathoulin et al. 1998</td>
<td>45</td>
<td>Hypothenar</td>
<td>41 (91)</td>
</tr>
<tr>
<td>Giunta et al. 1998</td>
<td>9</td>
<td>Hypothenar</td>
<td>8 (89)</td>
</tr>
<tr>
<td>Wulle et al. 1996</td>
<td>27</td>
<td>Synovial</td>
<td>25 (93)</td>
</tr>
<tr>
<td>Tham et al. 1996</td>
<td>6</td>
<td>Reverse radial forearm</td>
<td>6 (100)</td>
</tr>
<tr>
<td>Strickland et al. 1996</td>
<td>62</td>
<td>Hypothenar</td>
<td>55 (89)</td>
</tr>
<tr>
<td>Rose et al. 1991</td>
<td>13</td>
<td>Palmaris brevis</td>
<td>13 (100)</td>
</tr>
<tr>
<td>Reisman et al. 1983</td>
<td>5</td>
<td>Abductor digiti minimi</td>
<td>5 (100)</td>
</tr>
</tbody>
</table>
Table 5.
Study characteristics and outcomes inclusive of all patients undergoing open revisions for recurrent/persistent carpal tunnel syndrome over a 40-year period.

<table>
<thead>
<tr>
<th>Study</th>
<th>No. Hands</th>
<th>Type of Flap</th>
<th>Resolved/Improved n(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beck et al. 2012</td>
<td>28</td>
<td>External neurolysis</td>
<td>23 (82)</td>
</tr>
<tr>
<td>Duclos et al. 1998</td>
<td>13</td>
<td>External neurolysis</td>
<td>12 (92)</td>
</tr>
<tr>
<td>Hulsizer et al.1998</td>
<td>30</td>
<td>External neurolysis</td>
<td>18 (60)</td>
</tr>
<tr>
<td>Forman et al. 1998</td>
<td>22</td>
<td>External neurolysis</td>
<td>22 (100)</td>
</tr>
<tr>
<td>Cobb et al. 1996</td>
<td>131</td>
<td>External/Internal neurolysis</td>
<td>102 (78)</td>
</tr>
<tr>
<td>Strasberg et al. 1994</td>
<td>45</td>
<td>External/Internal neurolysis</td>
<td>24 (53)</td>
</tr>
<tr>
<td>Chang et al. 1993</td>
<td>35</td>
<td>External/Internal neurolysis</td>
<td>29 (83)</td>
</tr>
<tr>
<td>Wadstroem et al. 1986</td>
<td>27</td>
<td>External/Internal neurolysis</td>
<td>22 (81)</td>
</tr>
<tr>
<td>Langloh et al. 1972</td>
<td>33</td>
<td>External neurolysis</td>
<td>28 (85)</td>
</tr>
</tbody>
</table>

Table 6.
Study characteristics and outcomes inclusive of all patients undergoing other techniques for revisions of recurrent/persistent carpal tunnel syndrome over a 40-year period.

<table>
<thead>
<tr>
<th>Study</th>
<th>No. Hands</th>
<th>Type of Flap</th>
<th>Resolved/Improved n(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jones et al. 2012</td>
<td>55</td>
<td>External neurolysis (41)</td>
<td>45 (82)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Epineurectomy (15) Synovial/</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>hypothenar flap (8) Rev. radial forearm flap (3)</td>
<td></td>
</tr>
<tr>
<td>Bilasy et al. 2011</td>
<td>21</td>
<td>Polyethylene Patch</td>
<td>16 (76)</td>
</tr>
<tr>
<td>Luira et al. 2008</td>
<td>41</td>
<td>Endoscopic</td>
<td>37 (90)</td>
</tr>
<tr>
<td>Teoh et al. 2004</td>
<td>9</td>
<td>Endoscopic</td>
<td>9 (100)</td>
</tr>
<tr>
<td>Zingale et al. 2003</td>
<td>1</td>
<td>Polyurethane Patch</td>
<td>1 (100)</td>
</tr>
<tr>
<td>Varitimidis et al. 2001</td>
<td>15</td>
<td>Vein wrap</td>
<td>15 (100)</td>
</tr>
<tr>
<td>Varitimidis et al. 2000</td>
<td>48</td>
<td>Vein wrap</td>
<td>48 (100)</td>
</tr>
<tr>
<td>Varitimidis et al. 1999</td>
<td>24</td>
<td>External neurolysis (7)</td>
<td>24 (100)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hypothenar flap (16) Vein wrap (1)</td>
<td></td>
</tr>
<tr>
<td>Sotereanos et al. 1995</td>
<td>3</td>
<td>Vein wrap</td>
<td>3 (100)</td>
</tr>
</tbody>
</table>
### Table 7.
Study characteristics and outcomes inclusive of all patients undergoing transpositions for revisions of recurrent/persistent cubital tunnel syndrome over a 35-year period.

<table>
<thead>
<tr>
<th>Study</th>
<th>No. Hands</th>
<th>Type of Flap</th>
<th>Resolved/Improved n(%)</th>
<th>Follow-up (months)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goldfarb et al. 2009</td>
<td>5</td>
<td>Submuscular</td>
<td>5 (100)</td>
<td>-</td>
</tr>
<tr>
<td>Davis et al. 2005</td>
<td>5</td>
<td>Submuscular</td>
<td>3 (60)</td>
<td>5.3</td>
</tr>
<tr>
<td>Bartels et al. 2004</td>
<td>38</td>
<td>Submuscular</td>
<td>16 (42)</td>
<td>11.4</td>
</tr>
<tr>
<td>Vogel et al. 2004</td>
<td>18</td>
<td>Submuscular</td>
<td>14 (78)</td>
<td>34</td>
</tr>
<tr>
<td>Sarris et al. 2002</td>
<td>20</td>
<td>Subcutaneous/Submuscular</td>
<td>19 (95)</td>
<td>26</td>
</tr>
<tr>
<td>Leone et al. 2001</td>
<td>3</td>
<td>Intramuscular transposition</td>
<td>1 (33)</td>
<td>12</td>
</tr>
<tr>
<td>Caputo et al. 2000</td>
<td>20</td>
<td>Subcutaneous transposition</td>
<td>19 (95)</td>
<td>24</td>
</tr>
<tr>
<td>Holmberg et al. 1991</td>
<td>16</td>
<td>Subcutaneous Submuscular</td>
<td>3/10 (33) 4/6 (67)</td>
<td>18.2</td>
</tr>
<tr>
<td>Rogers et al. 1991</td>
<td>14</td>
<td>Submuscular</td>
<td>14 (100)</td>
<td>19</td>
</tr>
<tr>
<td>Gabel et al. 1990</td>
<td>30</td>
<td>Submuscular Subcutaneous Intramuscular</td>
<td>20/24 (83) 3/5 (60) 1/1 (100)</td>
<td>46</td>
</tr>
<tr>
<td>Broudy et al. 1978</td>
<td>10</td>
<td>Submuscular</td>
<td>10 (100)</td>
<td>14.5</td>
</tr>
</tbody>
</table>

### Table 8.
Study characteristics and outcomes inclusive of all patients undergoing revisions by other techniques for recurrent/persistent cubital tunnel syndrome over a 35-year period.

<table>
<thead>
<tr>
<th>Study</th>
<th>No. Hands</th>
<th>Type of Flap</th>
<th>Resolved/Improved n(%)</th>
<th>Follow-up (months)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Puckett et al. 2011</td>
<td>5</td>
<td>Acellular dermis wrap</td>
<td>5 (100)</td>
<td>13.3</td>
</tr>
<tr>
<td>Kokkalis et al. 2010</td>
<td>17</td>
<td>Saphenous vein wrap</td>
<td>17 (100)</td>
<td>44</td>
</tr>
<tr>
<td>Dagregorio et al. 2004</td>
<td>9</td>
<td>External neurolysis</td>
<td>8 (89)</td>
<td>24</td>
</tr>
<tr>
<td>Filippi et al. 2001</td>
<td>22</td>
<td>Various techniques*</td>
<td>18 (82)</td>
<td>7</td>
</tr>
<tr>
<td>Varitimidis et al. 2001</td>
<td>4</td>
<td>Saphenous vein wrap</td>
<td>4 (100)</td>
<td>34.5</td>
</tr>
<tr>
<td>Varitimidis et al. 2000</td>
<td>4</td>
<td>Saphenous vein wrap</td>
<td>4 (100)</td>
<td>34</td>
</tr>
<tr>
<td>Antoniadis et al. 1997</td>
<td>25</td>
<td>Various techniques*</td>
<td>19 (76)</td>
<td>17</td>
</tr>
</tbody>
</table>

*Includes: subcutaneous transposition, reposition, and internal/external neurolysis.
Mastopexy/Reduction Mammoplasty after Nipple Sparing Mastectomy and Breast Reconstruction Using Autologous Tissue: Is it safe?
Sybile Val, M.D. — Louisiana University — Baton Rouge, LA
Alireza Sadeghi, M.D.

INTRODUCTION:
Breast and plastic surgeons have refined operative techniques to ensure the best oncological and cosmetic results for breast reconstruction. Results of staged operations in an attempt to improved cosmetic outcomes are very promising. However, to date there is no literature describing mastopexy techniques following NSM with autologous reconstruction. Thus, we report our experience with “lifting” the autologous reconstructed breast.

METHOD:
Thirty patients with grade one or two ptosis were included in our experience. Pre-operatively degree of ptosis was recorded. All had autologous reconstruction with abdominal perforator artery flaps followed by either Wise pattern, circumareolar or circumvertical mastopexy (Figure 1). Post-operatively all patients were examined at 2, 4, 6 and 8 weeks, then semi-annually. All complications were documented with particular attention to nipple viability and post-operative degree of ptosis.

RESULTS:
Thirty patients (50 reconstructed breasts) underwent “autologous lift”. Post-operatively all had non-ptotic breasts. Two patients had minor wound complications and one patient had partial nipple loss.

DISCUSSION:
NSM can safely be offered to patients with moderate to severe ptosis with immediate autologous breast reconstruction followed by a staged mastopexy/reduction. After free flap reconstruction, the blood supply of the nipple is dependent on the underlying flap and less dependent on the peripheral cutaneous circulation which allows movement of the nipple based solely on the blood supply of the reconstructed breast.

CONCLUSION:
Mastopexy of the autologous reconstructed breast performed after nipple sparing mastectomy can be safely performed. The viability of the nipple can be maintained based solely on the vasculature of the free flap.
### Monday, June 3

**11:15 – 12:00pm**  
**Upchurch Lecture**  
R. Bruce Shack, MD  
Introduction: Ann Ford Reilley, MD

**12:00 – 12:45pm**  
**Congenital Anomalies Panel**  
**Update on Craniosynostosis**  
Moderator: Kant Lin  
Lisa David, MD  
John Grant, MD  
Kevin Kelly, MD  
Tony Wolfe, MD

**1:00 – 3:00pm**  
**Captiva**  
**Body Contouring**  
**Special Teaching Course**  
Peter Rubin, MD

Separate registration required, lunch provided.

### Tuesday, June 4

**6:00am**  
Registration Open  
*Calusa Pre-Function*

**6:30 – 7:30am**  
Continental Breakfast  
Exhibits and Poster Viewing  
*Calusa D–E*

All Scientific Sessions will take place in Calusa Ballroom A–C.

**7:30 – 8:00am**  
Safety in the OR, an Anesthesia Viewpoint  
John Eichhorn, MD  
*Calusa A–C*

**8:00 – 8:30am**  
Facelifts Under Local  
Luis O. Vasconez, MD

**8:30 – 9:30am**  
Jurkiewicz Lecture  
A Legacy of Education  
Jack Fisher, MD  
Introduction: Bert Losken, MD

**9:30 – 10:00am**  
Refreshment Break  
Exhibits and Poster Viewing  
*Calusa D–E*

**10:00 – 10:20am**  
**Seven Deadly Sins of Abdominoplasty**  
Simeon Wall, MD  
*Calusa A–C*

**10:20 – 10:40am**  
Update on Preforator Flaps  
Robert J. Allen, MD

**10:40 – 11:15am**  
Member Papers

Chairman: Steve Finical, MD  
Secretary: Roxanne Johnson-Giebink, MD
Advantages and Limitations of the MACS Lift for Facial Rejuvenation

Bruce Mast, M.D. — University of Florida — Gainesville, FL

INTRODUCTION:
Minimal Access Cranial Suspension (MACS) Facelifts provide the potential advantage of less invasiveness with quicker recovery. However, there is deficient literature documenting its usefulness and limitations.

PURPOSE:
To evaluate the MACS Lift for effectiveness in facial rejuvenation.

METHODS:
IRB approved record review of all facelift patients treated August 2006-October 2011 by a single surgeon.

RESULTS:
89 facelifts were done, 9 conventional and 80 MACS. Average age was 59 years with 97% being female. Average BMI and ASA score were 24 and 1.6 respectively. The only significant complications noted were four hematomas that required drainage: three in the MACS group (3.75%). Other facial procedures were done on 8 (89%) of the conventional patients and 59 (74%) of the MACS patients. Notably 8 (10%) of the MACS patients had a non-facial procedure done concurrently. Average operative times were 3:55 for the conventional lifts and 2:39 for all the MACS lifts; 2:05 for MACS alone. Follow up averaged 6 months (4 to 49). Average return to work in the MACS group was 2 weeks. All conventional lift patients had a high level of satisfaction. Of the MACS patients, 3 expressed disappointment due to residual facial skin laxity or inadequate neck contouring.

CONCLUSIONS:
MACS-Lift is effective, providing high level of patient satisfaction due to aesthetic results, combined with rapid recovery and return to normal activities. Compared to conventional facelift, the reduced operative time makes concurrent non-facial procedures more feasible. Effectiveness has limitations in those with marked skin laxity and/or marked cervical lipodystrophy.
Member Paper #11

Optimizing Deep Interior Epigastric Perforator Flap Efficiency
Orlando Canizares, M.D. — San Juan, PR
Alireza Sadeghi, M.D., F.A.C.S.

BACKGROUND:
The deep inferior epigastric perforator (DIEP) flap has revolutionized the practice of autologous breast reconstruction because it allows the transfer of soft tissue from the abdomen without the sacrifice of the rectus muscle or fascia. Although it remains the workhorse perforator flap for autologous breast reconstruction, the process of harvesting and performing the microsurgical anastomosis may become a lengthy procedure, which could affect outcomes and patient safety. We believe that in order to perform these procedures certain components need to be in place to maximize your efficiency in the operating room.

METHODS:
A retrospective review of 50 patients who underwent 77 DIEP flaps for immediate and delayed breast reconstruction was studied. Preoperative planning, nursing planning, operating room setup and operative technique were examined to assess how they affected the length of the procedure. The times of flap harvest, IMA harvest, microsurgical anastomosis, flap inset and closure were reviewed as well as patient outcomes. The length of the procedure was compared between a specialized breast center and a community-based hospital.

RESULTS:
The average time for flap harvest was 51 ± 33 minutes and IM vessel preparation time was 17 ± 5 minutes. Average microsurgical anastomosis time was 14 ± 3 minutes and flap inset and breast closure time was 21 ± 3 minutes. The donor site closure took an average of 30 ± 11 minutes. For a unilateral breast reconstruction with DIEP flap the average length of the procedure was 240 ± 36 minutes and for a bilateral DIEP the average time was 360 ± 47 minutes. From the 77 perforators flaps performed only 2 flaps required revision of the venous anastomosis and there was no total flap loss.

CONCLUSIONS:
Preoperative planning, performing the procedure at specialized center and following certain guidelines during the procedure will help optimize the efficiency of performing perforator flaps for breast reconstruction. Reducing the time of your perforator flap breast reconstruction will significantly improve patient outcomes and safety.
Member Paper #12

Use of Human Acellular Dermis and Tissue Expander vs. Latissimus Flap and Tissue Expander in the Morbidly Obese Breast Reconstruction Patient

Edward Luce, M.D. — University of Tennessee Health Science Center — Memphis, TN
Joseph Parks, M.D.
Robert Chandler, M.D.
Lou Adams, M.D.

INTRODUCTION:
With increasing popularity of breast reconstruction, current clinical research has focused on methods to reduce risk. Recent publications have implicated human acellular dermis as a causative agent for an increase in complications in prosthetic-based breast reconstruction including tissue expander loss. Although high BMI has been reported as a contributing factor, the magnitude of risk for a BMI > 35 (morbid obesity) has not been described. This report presents the specific probability of tissue expander loss with prosthetic reconstruction and acellular dermis (ACD) in the immediate post-mastectomy morbidly obese patient. That risk is compared to a group of morbidly obese patients reconstructed with latissimus flap and tissue expander.

METHODS:
A comparison of expander loss and reconstructive failure was performed between those patients with a BMI > 35 either reconstructed with tissue expander and ACD or latissimus flap and tissue expander. The other variables of smoking and prior radiation were included in the analysis.

RESULTS:

<table>
<thead>
<tr>
<th>Patients (breasts) with BMI &gt; 35</th>
<th>Tissue expander + ACD (n = 67 breasts, 49 patients)</th>
<th>Latissimus + tissue expander (n = 15 breasts, 15 patients)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smoker</td>
<td>7 (10.5%)</td>
<td>3 (20%)</td>
</tr>
<tr>
<td>Pre-Radiation</td>
<td>5 (7.5%)</td>
<td>12</td>
</tr>
<tr>
<td>(80%) Skin Necrosis</td>
<td>7 (10.5%)</td>
<td>2</td>
</tr>
<tr>
<td>(13.3%) TE Loss</td>
<td>13 (19.4%)</td>
<td>0 (0%)</td>
</tr>
</tbody>
</table>

CONCLUSION:
Immediate post-mastectomy reconstruction should be accomplished with latissimus flap + tissue expander.
**Outcomes Associated with Surgical Resection of Massive Localized Lymphedema in the Morbidly Obese: A Series of 26 Consecutive Patients with 41 Areas of MLL**

Christine Haug, M.D. — Charlotte, NC  
C.L. Carpenter, M.D.  
Stanley B. Getz, M.D.

**INTRODUCTION:**
Massive Localized Lymphedema (MLL) describes benign, soft tissue masses that develop in the morbidly obese due to localized obstruction of lymphatic drainage. Few studies have reported on the dermatologic diseases that result from obesity, such as chronic lymphedema and subsequent development of MLL. Therefore, this study describes our experience with surgical treatment of MLL and associated outcomes over an 11-year period.

**METHODS:**
Demographics, pathological findings and outcomes of patients undergoing surgical resection and excision of MLL from January 2001 to October 2012 were reviewed retrospectively.

**RESULTS:**
N= 26 patients underwent procedures to remove 41 areas of MLL. Patients were predominantly female (72%) with average age and BMI of 50 ± 10.6 and 63 ± 17, respectively. All patients had between 1 and 4 areas of MLL primarily located on the lower extremities (73%), with 42% of cases requiring bilateral resection. Individual MLL weights averaged 17.5 ± 7.8lbs, with largest exceeding 28lbs. N=10 cases had a postoperative complication, including 2 cases each of a seroma or hematoma requiring return to the OR for treatment. N=3 patients (12%) had local recurrence requiring excision 2 months to 5 years after original surgery; 2 additional patients had other areas of MLL develop 7-10 months postoperatively.

**CONCLUSION:**
MLL is a chronic problem in the morbidly obese. While surgical treatment is effective, patients are at an increased risk for developing wound complications, recurrence and development of alternate areas of MLL. However, post-operative improvement in patient mobility and quality of life make these procedures very worthwhile.

**Tuesday, June 4**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:15 – 12:30pm</td>
<td>Problems and Pearls Panel</td>
<td>Moderator: Scott Hultman, MD</td>
</tr>
<tr>
<td>12:45 – 1:30pm</td>
<td>Annual Business Meeting</td>
<td>Calusa A–C</td>
</tr>
<tr>
<td></td>
<td>Open to Members Only, end time is approximate.</td>
<td></td>
</tr>
<tr>
<td>12:45 – 2:00pm</td>
<td>Resident Luncheon</td>
<td>Driftwood</td>
</tr>
<tr>
<td></td>
<td>Pragmatic and Comprehensive</td>
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<td></td>
<td>Body Contouring Using SAFE Lipo Techniques</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Simeon Wall, MD</td>
<td></td>
</tr>
<tr>
<td></td>
<td>How to Start an Aesthetic Practice</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bruce Maat, MD</td>
<td></td>
</tr>
</tbody>
</table>
# Wednesday, June 5

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:00am</td>
<td>Registration Open</td>
<td>Calusa–Foyer</td>
</tr>
</tbody>
</table>
| 7:30 – 8:30am | Continental Breakfast  
                      | Exhibits and Poster Viewing                                        | Calusa D–E     |
| 8:30 – 9:00am | Update on Research Grants  
                                | Mentor Fellow Presentation                                         | Calusa A–C     |
|          | Evaluation of Rhytidectomy with and without Autologous Fat  
                      | Grafting Aided by Morphing Technology                              |                |
|          | 2012 SESPRS Research Grant  
                      | Traumatic Hand Flexor Repair with Human Composite Tendon Allograft |                |
|          | Brent DeGeorge, MD                                                   |                |
| 9:00 – 10:00am | Acellular Dermal Matrix Panel  
                                | Understanding ADMs                                                 | Calusa A–C     |
|          | The Science and the Future                                           | David Drake, MD                                               |
|          | Framing the Future of Biologic Implants:  
                      | The Impact on Plastic and Reconstructive Surgery                  | William Lineaweaver, MD                                      |
|          | Porcine vs. Human  
                      | Positives and Negatives, Strengths, Weaknesses, Applications. DNA and Cellular Remnants, Tissue Integration | Bret Jessee, PhD                                        |
| 10:00 – 10:30am | Refreshment Break  
                      | Exhibits and Poster Viewing                                        | Calusa D–E     |
| 10:30 – 11:00am | Member Papers  
                                | Chairman: Petra Schneider-Redden, MD  
                      | Secretary: Mark Craig, MD                                        | Calusa A–C     |
| 11:00 – 11:15am | Update on SESPRS Mission Work Committee  
                                | Scott Corlew, MD                                               |
| 11:15 – 12:00pm | Global Health Discussion  
                                | Bill MaGee, MD                                                 |

*All Scientific Sessions will take place in Calusa Ballroom A–C.*
Patient-reported Quality of Life following Breast Reconstruction: A One-year Longitudinal Study Using the WHO-QOL Survey

Albert Losken, M.D. — Emory University — Atlanta, GA
Ximena Pinell-White, M.D.
Claire Duggal, M.D.
Drew Metcalfe, M.D.
Robin Sakeyfio, M.D.
Alexandra Lippert, B.S.

BACKGROUND:
Patient-reported quality of life (QOL) is an important measure of the impact of breast reconstruction.

PURPOSE:
This study seeks to describe psychosocial outcomes following post-mastectomy reconstruction and to identify factors that influence them.

METHODS:
All patients who underwent immediate post-mastectomy reconstruction by the senior author between 2009 and 2011 were offered participation in this study. Patients completed the World Health Organization QOL-BREF questionnaire preoperatively and one year post-operatively. Change scores were compared across reconstructive techniques, as well as across various demographic and clinical variables.

Table 1.
Sample questions from the WHO QOL-BREF questionnaire

<table>
<thead>
<tr>
<th>Physical Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>To what extent do you feel that physical pain prevents you from doing what you need to do?</td>
</tr>
<tr>
<td>How satisfied are you with your ability to perform your daily living activities?</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Psychological health</th>
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</thead>
<tbody>
<tr>
<td>How much do you enjoy life?</td>
</tr>
<tr>
<td>Are you able to accept your bodily appearance?</td>
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<table>
<thead>
<tr>
<th>Social relationships</th>
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</thead>
<tbody>
<tr>
<td>How satisfied are you with your personal relationships?</td>
</tr>
<tr>
<td>How satisfied are you with your sex life?</td>
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<table>
<thead>
<tr>
<th>Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>How healthy is your physical environment?</td>
</tr>
<tr>
<td>How satisfied are you with your access to health services?</td>
</tr>
</tbody>
</table>

RESULTS:
One-hundred and twenty-nine women completed the preoperative questionnaire, and 60 patients completed the follow-up questionnaire at one year (response rate 46.5%). Compared to the preoperative baseline, overall QOL was unchanged, general satisfaction with health improved significantly, and QOL in physical, psychological, social, and environmental domains decreased (p<0.05 for all but social domains). On bivariate analysis, being in a relationship at the time of reconstruction was associated with a decline in overall QOL. Educational level impacted change scores in the physical and psychological domains. Patients with a higher cancer stage reported a decrease in satisfaction with health. Type of reconstruction, development of a complication, and need for additional surgery did not influence any of these outcomes.
CONCLUSIONS:
At one-year follow-up from post-mastectomy reconstruction, breast cancer survivors report a similar overall quality of life, but significant decrements in physical, psychological, and environmental QOL. Satisfaction with health improved. Importantly, none of these outcomes was influenced by the type of breast reconstruction pursued.
Member Paper 15

LessPain Cosmetic Surgery: Early Experience with Liposomal Bupivicaine

Arthur Desrosiers, M.D. — Miami, FL
S. Anthony Wolfe, M.D.

Bupivacaine is a local anesthetic belonging to the amino amide group and when given correctly results in safe analgesia. More recently, the FDA has approved a version of liposomal bupivacaine (Exparel; Pacira Pharmaceuticals, NJ, USA) that offers up to 72 hours of post-operative pain control. Clearly, it is important if plastic surgeons have the option of offering less-pain cosmetic surgery to patients since one of the deciding factors for a discerning cosmetic patient is the post-operative down-time that the procedure entails. Narcotic use has well established sequelae including nausea, vomiting, constipation, inability to drive, operate heavy machinery, or return to work. In this series of 16 patients, Exparel was infiltrated intra-operatively for a wide range of cosmetic procedures, including: labiaplasty, liposuction, tummy tuck, neck lift, face lift, and eyebrow lift. Regardless of the procedure, all patients reported no pain immediately postoperatively or for the first two days. In fact, 94% of patients did not take any narcotics post-operatively. The only patient that took narcotics took only 2 Percocets on day #3. This particular patient had had liposuction previously performed by another plastic surgeon, and her pain was in that particular area; importantly, she had no pain in any of the other areas that Exparel was infiltrated. In conclusion, the introduction of liposomal bupivacaine has shown a dramatic result in this series in terms of patient satisfaction and reduction in post-operative pain. Less-pain cosmetic surgery is an instrumental innovation for cosmetic surgery and should be more closely studied in the future.
Member Paper 16

With a little help from my friends: A systematic review of the literature investigating the role of advanced practice providers in acute care, so as to create a new provider model which maintains access, throughput, and quality in burn centers

Renee Edkins, M.D. — University of North Carolina — Chapel Hill, NC
Bruce Cairns, M.D.
Scott Hultman, M.D.

INTRODUCTION:
ACGME-mandated work-hour restrictions have negatively impacted many areas of clinical care, including management of burn patients, who require intensive monitoring, resuscitation, and procedural interventions. As surgery residents become less available to meet service needs, new models integrating Advanced Practice Providers (APPs) into the burn team must emerge. We performed a systematic review of APPs in critical care questioning; how best to utilize all providers to solve these workforce challenges?

METHODS:
We performed a systematic review of PubMed, CINAHL, Ovid, and Google Scholar, from 2002-2012, utilizing the key words: Nurse Practitioner, Physician Assistant, Critical Care, & Burn Care. After applying inclusion/exclusion criteria 19 relevant articles were selected for review.

RESULTS:
APPs in critical care settings function in various models, both with and without residents, reporting to either an Intensivist, or an Attending Physician. When APPs participated, patient outcomes were similar or improved compared across provider models. One study reported cost-savings of $2.5M, due to decreases in UTIs and pressure ulcers, when Nurse Practitioners were included in the provider mix.

CONCLUSIONS:
Restriction in resident work-hours and changing healthcare environments requires that new provider models be created for acute burn care. This paper reviews current utilization of APPs in critical care units and proposes a new provider model for burn centers.