



The **Academy** **NEWSLETTER**

THE AMERICAN ACADEMY
OF
CARDIOVASCULAR PERFUSION
515A EAST MAIN STREET
ANNVILLE, PA 17003
(717) 867-1485 PHONE OR FAX
OFFICEAACP@AOL.COM
HTTP://WWW.THEAACP.COM

FALL 2013

Editor

David Palanzo
Anville, PA

Contributing Editors

Tom Frazier
Nashville, TN

Kelly Hedlund
Flays, KS

Student Section
Richard Chan

Inside This Issue

President's	1
Our <u>New</u> Host Hotel	3
2014 Annual Meeting	4
AACP Student Council President's	7
On Bypass	8
Student Section	11
AACP Student Council	13
Sponsoring Members	18
Important Dates	18

Volunteers of the Academy

I want to take a moment and recognize a few of the hard working volunteers of the American Academy of Cardiovascular Perfusion. These individuals have very demanding careers and home life but still find a way to serve this organization. The officers and committee members of the AACP are the latest in a long list of volunteers who keep this organization going.

The Executive Director, David Palanzo and his wife Jill are the backbone of the organization that keep everything on course and organized. Although this is a paid position, David and Jill go well beyond the scope of their positions to keep the AACP functioning well. I want to personally thank David for his support and guidance during my Presidency.

The AACP Council is comprised of the President, Vice President (Steve Sutton), Secretary (Vince Olshove), Treasurer (Kevin Lilly) and the Council members (Karen Smith, Linda Mongero, Bill Harris, Rich Melchior and Philip Fernandez). These individuals are involved in all AACP business and decisions. To sit on the Council is a great honor and is a demanding position. I thank them for their dedication and support during my term.

The Simulation Committee is comprised of Jeff Riley and Ed Darling. These young men have been active this year participating in a multi-disciplinary focus group to help the American Board of Cardiovascular Perfusion understand what the future of simulation training might look like for Perfusionists. I thank them for their efforts.

The Membership Committee is chaired by Jim Beavers, his team is comprised of Marijean Zacha, Kevin Lilly, Thomas Ebersole and Philip Fernandez. The Membership committee is recruiting new members and strategizing a plan to retain our current membership. I thank them all for their dedication.

The AC-PE Representatives (Linda Mongero, Dan Fitzgerald and Bill Riley) represent the Academy on the Accreditation Committee – Perfusion Education. The Academy, along with AmSECT, ABCP, AATS, PPDC, SCA and STS provide representatives to collaborate on Perfusion educational issues. Their work is invaluable to our profession and I appreciate their efforts.

The Awards Committee chaired by Bill Harris is charged with evaluating abstract presentations at the annual meeting and making decisions on which of these presentations merit award recognition. This is a difficult task and I appreciate their work. Bill's team is comprised of John St. Onge, Mickey

Continued on Page 2

Continued from Page 1

Wheeler, Julie Tinitus-Juliani and Richard Ginther.

The Nominating Committee (Linda Mongero, Ed Darling and Dan Fitzgerald) is comprised of the three most recent past Presidents of the Academy and are responsible for providing names to the Academy's membership on all of these volunteer positions to be voted upon. This is a extremely important responsibility and these individuals have done a remarkable job.

The Student Liaison Committee is comprised of Rich Melchior, Bill Riley and Richard Ginther. These guys have done a tremendous job of creating and organizing the AACP's student membership. We now have a Student Council that is comprised of Amanda Best (University of Arizona) – President, Laura Riggs (SUNY) – Vice President, Allyson Aquino (LIU Northshore) – Secretary and Phil Mann (Cleveland Clinic) - Treasurer. I want to thank the Committee and Student Council for their outstanding work.

Finally, I want to give my special thank you to the AACP Program Committee for the 2014 Conference in Orlando next January. These volunteers are some of the most committed within our profession. They have done an excellent job of comprising the program for our next conference. The AACP Program Committee is; Bill Harris, Ed Darling, Haven Young, Greg Smigla, Vince Olshove, Kenny Shann, John Toomasian, Bob Groom, Colleen Gruenwald, Steve Sutton and David Fitzgerald.

The Program for the 2014 Conference in Orlando next January 23-26, 2014 is featuring to great panel groups:

Quality Initiatives: Controlling the Cost of Cardiac Care on a Local, Regional and National Level:

Co-Moderators: Robert Groom, MS, CCP and David Fitzgerald, CCP

Experience of UPMC using the Toyota production system based methodology - Dr. Michael Culig

The Quality Movement in Cardiac Surgery: The Michigan Experience -Dr. Richard Prager

The Perfusionist's Perspective - Kenny Shann, CCP

Trends in Cardiac Care:

Co-Moderators: Edward Darling, MS, CCP & Haven Young, RN, CCP

Update on Heart Failure - Michael Sobieski II, RN, CCP

Update on Ex-Vivo Perfusion - Cyril Serrick, MSc, CCP, CPC

Update on the Perfusionist's Role in the Cardiac Catheterization Laboratory - William Harris, CCP

Update on Drug Shortages in Cardiac Surgery - Dr. Mark Twite

I would like to invite you to become a volunteer for the Academy by submitting an abstract for the conference. Please send your abstract to: OfficeAACP@aol.com.

Thank you,

Scott Lawson
President, AACP

The Academy Changes Its Host Hotel For The 2014 Conference

The Academy was forced to change its original host hotel for the 2014 meeting due to double booking of the meeting space. We were able to move into the Buena Vista Palace Hotel & Spa, which is in the same area of Orlando. If you have already made your hotel reservation for the 2014 conference, you should be receiving a phone call from the Orlando Hilton informing you of the change. Feel free to cancel your original reservation (407-827-4000) and then contact the Buena Vista Palace Hotel & Spa at 866-246-6563.

Our New 2014 Host Hotel



Buena Vista Palace Hotel & Spa Orlando, Florida January 23 - 26, 2014

Single/Double Occupancy—\$165.00 per night
Reservations: 866-246-6563

Buena Vista Palace, an official *Walt Disney World*® Resort, is a contemporary haven offering totally refurbished accommodations, a majestic new lobby and unsurpassed hospitality. Footsteps from the *Downtown Disney*® area, guests can also enjoy complimentary transportation to the *Walt Disney World*® Theme Parks. Plus, park tickets are never a problem. Admission is guaranteed for Buena Vista Palace guests, even if the parks are full.



2014 Annual Academy Meeting



**Orlando, Florida
January 23 - 26, 2013**

Thursday, January 23, 2014

9:00 AM – 1:00 PM	Council Meeting
10:00 AM – 3:00 PM	REGISTRATION
2:30 PM – 4:30 PM	Fireside Chats (Session #1)
4:30 PM – 5:30 PM	REGISTRATION
5:00 PM	Opening Business Meeting <i>Fellow, Member, Senior and Honorary Members</i>
6:00 PM – 8:30 PM	Sponsor's Hands-On Workshop & Reception

Friday, January 24, 2014

7:00 AM	REGISTRATION
7:30 AM – 9:30 AM	Scientific Session
9:30 AM – 10:00 AM	Break
10:00 AM – 11:30 PM	Scientific Session
11:30 PM – 1:00 PM	Lunch
1:00 PM – 3:30 PM	Special Scientific Session (Panel)

Quality Initiatives: Controlling the Cost of Cardiac Care on a Local, Regional and National Level

*Co-Moderators: Robert Groom, MS, CCP and David Fitzgerald, CCP
Experience of UPMC using the Toyota production system based methodology - Dr. Michael Culig*

The Quality Movement in Cardiac Surgery: The Michigan Experience - Dr. Richard Prager

Perfusionist's Perspective - Kenny Shann, CCP

3:30 PM – 5:30 PM Fireside Chats (Session #2)

6:30 PM Induction Dinner
Fellow, Senior, Honorary Members & Guests

Saturday, January 25, 2014

7:00 AM REGISTRATION

7:30 AM – 9:30 AM Scientific Session

9:30 AM – 10:00 AM Break

10:00 AM – 11:30 AM Memorial Session

Charles C. Reed Memorial Lecture

Thomas G. Wharton Memorial Lecture

D. Scott Lawson, MS, CCP - President, AACP

11:30 AM – 1:00 PM Lunch

1:00 PM – 3:30 PM Special Scientific Session (Panel)

Trends in Cardiac Care

Co-Moderators: Edward Darling, MS, CCP and Haven Young, RN, CCP

Update on Heart Failure - Michael Sobieski II, RN, CCP

Update on Ex-Vivo Perfusion - Cyril Serrick, MSc, CCP, CPC

Update on the Perfusionist's Role in the Cardiac Catheterization

Laboratory - William Harris, CCP

Update on Drug Shortages in Cardiac Surgery - Dr. Mark Twite

3:30 PM – 5:30 PM Fireside Chats (Session #3)

5:30PM Closing Business Meeting
Fellow, Senior and Honorary Members Only

Sunday, January 26, 2014

7:30 AM – 9:30 AM Fireside Chats (Session #4)

10:30 AM – 12:30 PM Fireside Chats (Session #5)





PRE-REGISTRATION FORM

The 2014 Annual Meeting of
The American Academy of Cardiovascular Perfusion



MEMBER	FEE	Amount	FIRESIDE CHAT REGISTRATION (make your first three choices each day)
Registration Fee	\$340.00	_____	Thursday Sessions 1) _____ 2) _____ 3) _____
2014 Annual Dues	\$145.00	_____	
Adult Guest to Workshop	\$25.00	_____	
NON-MEMBER	FEE	Amount	
Registration Fee	\$400.00	_____	Friday Sessions 1) _____ 2) _____ 3) _____
Adult Guest to Workshop	\$25.00	_____	
STUDENT PERFUSIONIST	FEE	Amount	
Registration Fee	\$30.00*	_____	Saturday Sessions 1) _____ 2) _____ 3) _____
Adult Guest to Workshop	\$25.00	_____	
<i>*MUST include a letter from the school director with registration.</i>			
<i>To take advantage of the Student rate of \$30.00, you must be a current Student Member of The Academy.</i>			
FELLOW or SENIOR MEMBER	FEE	Amount	
Registration Fee	\$400.00	_____	Sunday Sessions 1) _____ 2) _____ 3) _____
2014 Annual Dues	\$170.00	_____	
Guest to Induction Dinner	\$100.00	_____	
Adult Guest to Workshop	\$25.00	_____	Choices will be assigned in the order they are received. Each Fireside Chat is limited to 30 attendees per session each day.

PRINT OR TYPE

NAME _____

ADDRESS _____

CITY _____ **STATE** _____ **ZIP** _____

HOME PHONE _____ **WORK PHONE** _____ **FAX** _____

E-MAIL ADDRESS _____ *(Required for confirmation)*

ANTICIPATED ARRIVAL DATE IN ORLANDO _____

Please read all instructions and information before completing this form.

If you have questions completing this form, please call the national office. Hotel Reservations must be made separately through the hotel directly.

Total Amount of Payment \$ _____ **METHOD OF PAYMENT:** Check** ___ Money Order ___ Credit Card ___

VISA/MasterCard # _____ **Exp. Date** _____ **3-digit security code** ___ ___

Credit card billing address if different from above.

ADDRESS _____

CITY _____ **STATE** _____ **ZIP** _____

Signature _____

**** There will be a \$25.00 service charge for any check returned for insufficient funds.**

Message From The Academy's Student Council President



To the Members of the Academy:

I am pleased to announce that the Student Council of the American Academy of Cardiovascular Perfusion is entering its second year! With that being said we are hoping to build on last year's successes and develop an even stronger presence within the Academy. The Student Ambassadors and Student Council look at our involvement in the Academy as a privilege, and are looking forward to furthering our impact within the society.

The Student Council in its first year was able to establish connections with the experienced Perfusionists in our field, with the induction of a student mentorship program. Development of this program, we believe, parallels the purpose on which the Academy was founded; to increase the knowledge and education of Cardiovascular Perfusionists. This distinct opportunity to interact with professionals in our field and establishing these connections early in our careers serves as an invaluable asset to us and we want to thank all of you who are a part of it and invite others to join as well.

As President of the Student Council, I am honored to be associated with such an esteemed and distinguished society. We as students want to thank the Academy and its members for taking an active interest in the future of perfusion. I look forward to seeing everyone at the annual meeting in Orlando!

Sincerely,

Amanda Best

Student Council President, American Academy of Cardiovascular Perfusion

INSTRUCTIONS and INFORMATION

o Complete each appropriate section of this form by printing or typing.

This form may be copied, but must include both pages.

o Members must pay their 2014 Annual Dues along with their registration fees by completing that portion of the form.

o You will receive acknowledgment of your pre-registration by January 15, 2014--bring it with you to the meeting.

o No pre-registration will be processed after January 3, 2014.

-- **After this date you must register at the meeting.**

o Your receipt and meeting credentials will be available for you at the Pre-Registration desk at the meeting.

o There will be **NO ADMISSION to any Fireside Chat without proper admission credentials.**

o If you are joining The Academy with your registration you must:

- 1) complete appropriate areas of the form;
- 2) you **MUST INCLUDE** the membership application form;
- 3) include the \$25 filing fee;
- 4) include \$145 for the 2014 Annual Dues;

(Your membership begins with the closing business meeting)

o **ONLY VISA/MasterCard** credit cards are accepted - with VISA/MasterCard you may FAX your registration to (717) 867-1485

o The AACP Federal Tax ID Number: 63-0776991 (for hospital use only)

o Refund policy: Anyone that is pre-registered for this meeting and is unable to attend will receive a full refund minus \$50.00 for handling, mailing, and processing upon written request before January 12, 2014.

o **Make checks payable to AACP (US dollars). Mail completed pre-registration form and check to:**

**AACP
515A East Main Street
Annville, PA 17003**

IF YOU HAVE QUESTIONS FILLING OUT THIS FORM, PLEASE CONTACT THE NATIONAL OFFICE (717) 867-1485.

o If paying by VISA/MasterCard you may FAX this form to (717) 867-1485 or mail to above address.

ON BYPASS

A Look Back At Travenol

It can be aptly stated that Travenol Laboratories was the *original* perfusion manufacturing company. First launched in 1949 as a subsidiary of Baxter International, the name Travenol was intended as a marketing label for the company's new artificial organs division. As a first effort, Travenol representatives met with Dr. Willem Kolff in 1954 to discuss building the world's first commercial dialysis machine. This apparatus, named the UA 10 Twin-Coil Artificial Kidney, featured the familiar Sigmamotor "finger" pump to propel the patient's blood. A couple years later, Travenol engineers were invited to Minnesota to discuss commercial production and design of Dr. Vincent Gott's revolutionary "pillowcase" bubble oxygenator (see Figure 1). This project fell perfectly in line with Travenol's mission as an artificial organs company. In turn-key fashion, Travenol arranged to manufacture, sterilize, package, and deliver Gott's sheet-type oxygenator to the perfusion community. Unfortunately, the Minnesota group proved reluctant to go forward with market release during the final stages of development. In response, Travenol shifted its focus to Houston. Partnering with Dr. Michael DeBakey and Dr. Denton Cooley, further refinements to Gott's original design led quickly to the commercial production of the Miniprime disposable bag oxygenator in 1962 (see Figure 2).

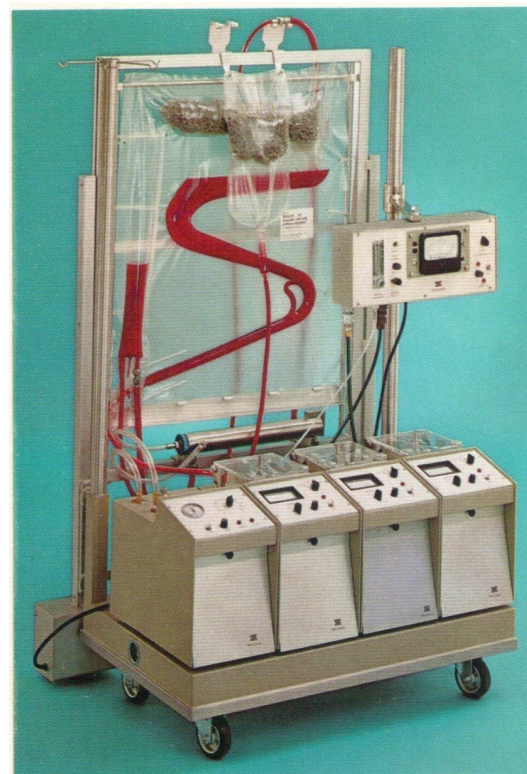


Figure 2. Miniprime disposable bubble oxygenator developed by Travenol in 1962.

In 1967, Travenol announced plans to build a \$4.5 million facility in Hays, Kansas. At its core, Travenol was a thermoplastics company. The ability to extrude and heat-seal polyvinyl plastic led to numerous product advancements in the 1960's such as IV tubing (formerly silicone rubber), IV bags (formerly glass bottles), and of course disposable oxygenators (formerly metal screens and discs). At the outset, the Hays plant was intended to produce IV needle and tubing sets, small volume parenteral containers, and rubber products such as cystoscopy catheters and latex gloves. With open-heart surgery on the rise however, Travenol began using the Hays plant to ramp up production of its cardiopulmonary line. As the 1970's approached, emphasis on patient temperature control led to development of the disposable Miniprime heat exchanger (see Figure 3).



Figure 1. "Pillowcase" disposable bubble oxygenator developed by Dr. Richard DeWall (left) and Dr. Vincent Gott (right) in 1957.

Kelly D. Hedlund, MS, CCP
and Brent Swart, MS, CP

The Michael E. DeBakey
Heart Institute

Hays, Kansas



Figure 3. A worker at the Travenol plant in Hays, Kansas inspects a Miniprime disposable heat exchanger (circa 1972).

This device was popularized by Charlie Reed’s favorable article which appeared in the very first issue of the CanSECT journal published in 1972. More Miniprime heat exchangers were assembled at the Hays plant than in any other Travenol facility. Early cardiotomy reservoirs were basically plastic collapsible bags that contained a stainless steel defoaming sponge. As perfusionists swung their preference in favor of hard-shell devices, Travenol began making a disposable rigid polycarbonate reservoir (see Figure 4).



Figure 4. Workers pictured at the Travenol plant in Hays, Kansas in 1976 (note the rigid disposable cardiotomy reservoirs atop the rack in the background).

Again, the Hays assembly line for this product was one of the largest in the country. Towards the end of the 1970’s, a great debate was centered around membrane oxygenators. Considered by most perfusionists at the time to be complicated in design and operation, membranes were also more expensive than bubblers. Comparative data, however, suggested that membranes offered less postop-

erative bleeding than bubblers. Furthermore, Karlson’s group reported that patients perfused with a membrane appeared to have a “clearer mental status” postoperatively. Beginning in 1971, Travenol used a variety of materials in their membrane oxygenators including silicone, Teflon, and polypropylene. In 1979, the Hays plant began producing the Travenol TMO membrane oxygenator (see Figure 5). Featuring a fan-folded sheet of polypropylene, the TMO also utilized an inflatable shim to control the blood film thickness.



Figure 5. A worker at the Travenol plant in Hays, Kansas inserts a shim tube into a TMO membrane oxygenator (circa 1979).

In 1980, Travenol agreed to market and distribute a novel bubble oxygenator originally developed by Delta Medical (see Figure 6). The Hays facility was chosen exclusively to assemble the device. Upon further evaluation however, Travenol discovered that the oxygenator contained nearly 32 feet of aluminum coil for heat exchange. The device was deemed too costly and was never brought to market. In 1983, Travenol released the LPM-50 membrane oxygenator (see Figure 7) utilizing the same fan-folded polypropylene sheet configuration used in the reliable TMO. The Hays plant assembled the LPM-50 for approximately one year. In 1984, Baxter International (Travenol’s parent company) decided to close the Hays facility. The doors were officially shut in 1986.

In 1998, during a visit to the Travenol facility, this author recovered a brand new LPM-50 membrane oxygenator from a storage closet. The oxygenator’s outer wrap was intact, as well as the original cardboard shipping container. For me, this clunky device is a daily reminder of a previous time – a time when real people (not machines) assembled perfusion devices with great care. And for a brief time, it happened right here in my small community.

Continued on Page 10

Continued from Page 9

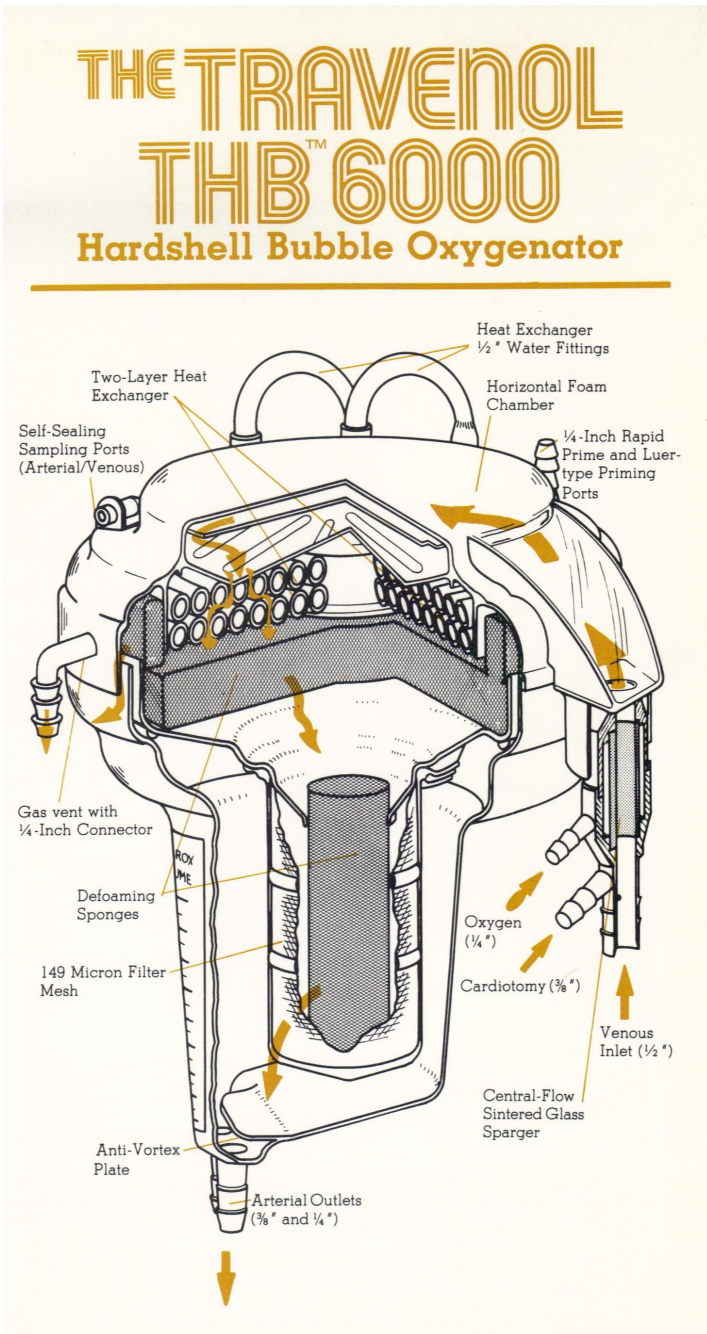


Figure 6. Schematic drawing of disposable hard-shell bubble oxygenator developed by Delta Medical in 1980 and marketed by Travenol. This device was never released for clinical use.



Figure 7. Travenol LPM-50 membrane oxygenator (circa 1983).

References

Direct Communication: Ed Breit, Former Supervisor, Travenol Plant, Hays, Kansas, 09/21/13.

Cody TG. Innovating for Health: The Story of Baxter International. Deerfield, Illinois: Baxter; 1994.

Gott VL, DeWall RA, Paneth M, et al. A Self-Contained Disposable Oxygenator of Plastic Sheet for Intracardiac Surgery. Thorax. 1957;12:1-9.

Reed CC, Phillips PA, Coleman PA, Clark DK, Cooley DA. A Disposable Heat Exchanger for Normothermia and Hypothermia: Initial Evaluation and Utilization in Avoiding Ischemic Contracture of the Heart (Stone Heart). Can-SECT Jour. 1972;1:4-6.

Karlson KE, Massimino RJ, Cooper GN, Singh AK, Vargas LL. Respiratory Characteristics of a Microporous Membrane Oxygenator. Ann Surg. 1977;185:397-401.

Reed CC, Stafford TB. Cardiopulmonary Bypass (Second Ed.). Houston: Texas Medical Press; 1985.

The Student Section

The Clinical Experience With Perceval Valve: Perfusionist Perspective

Introduction

The Sorin Perceval is an aortic valve made of bovine pericardium and is mounted on a super-elastic alloy frame that produces a stentless aortic valve, which is currently being used in Europe and researched for use in the United States. The Perceval valve is a 100% sutureless aortic valve that does not require extensive debridement by the surgeon. The advantage of this design will decrease the cross clamp and bypass time. The purpose is to open the clinical window for patients that were candidate that were rejected for surgery because of their conditions and secondary lesions.

The inclusion criteria for the research study are patients 65 years or older with aortic valve stenosis or steno-insufficiency with preoperative evaluation indicating the need for native or prosthetic aortic valve replacement with a biological prosthesis.

The Perceval S valve will widen the clinical horizon of the future of aortic cardiac surgery which will drastically decrease the cardiopulmonary bypass times. Currently there are three sizes of the Perceval S aortic valve prosthesis are available: small-S (19-21mm); medium- M (22-23 mm), and large-L (24-25mm). The valve sizers are designed in a specific manner so that the intra-annular(yellowish) head of the sizer has the same external diameter as the support. Clinical advantage of reduced exposure to the cardiopulmonary circuit are well documented. If the experience and outcome in North America matches those in Europe which have been us-

ing this technique since 2007, then the future for perfusion practice for aortic valve surgery will drastically be affected.

Case Report

A 79 year old woman with a height of 145 cm, weighs 60.8 kg with a BSA of 1.52 with severe aortic stenosis was considered for replacement with the Sorin Preceval bio-prosthesis. She had a past medical history of diabetes mellitus (orally controlled), hypertension, hyperlipidemia and stable angina. The patient had no history of medical allergies and was consulted for an Aortic Valve Replacement. The patient is being treated with aspirin, glimerpride, benzepril, Lipitor and Tramado.

Cardiac Cath Lab Report: showed fibrocalcific disease of the aortic valve, mild aortic valve regurgitation and severe aortic valve stenosis. The aortic valve peak gradient was 52.9 mmHg. The aortic valve area was 0.57 cm².

Extracorporeal Equipment: Stockart S5 Cardiopulmonary Bypass Machine, Terumo FX 15 Oxygenator with integrated arterial filter, sorin DHFS 0.6 haemofilter, Sorin Heater/ Cooler, Sorin Revolution centrifugal head, 3/8 x 3/8 A-V loop, Sorin BCD Vanguard Cardioplegia system, and Fresenius C.A.T.S

Operation

The patient was taken to the operating room and placed in supine position on the operating room table. The anesthesia team administered proper

Autumn Gibbs and
Richard Chan, CCP

NSUH-Long Island University-
Post School of Cardiovascular
Perfusion, Great Neck, NY



Continued from Page 11

general anesthesia on the patient and an endotracheal tube was placed, along with anesthesia monitoring lines. The patient was properly prepped and draped for surgery.

A median sternotomy skin incision was made and the sternum was open via a sternal sterna saw. The sternal retractor was placed into position and spread. The thymic tissue was divided in the midline and the pericardium was opened, with the pericardial stay sutures placed.

The patient was heparinized with 21,000 units of heparin which resulted in an ACT of 514 seconds. The aorta was cannulated with a 20 Fr EOPA and was connected to the arterial side of the cardiopulmonary bypass circuit. The arterial line was retrograde autologous primed and the line pressure was checked and deemed appropriate for bypass. The right atrium was cannulated with a 29/37 Fr triple stage venous cannula and attached to the cardiopulmonary bypass circuit. The patient was placed on cardiopulmonary bypass. The aortic cross clamp was placed and cardioplegia was administered both antegrade and retrograde for a total of 1500 cc. An aortotomy was made and the aortic valve was exposed with four silk sutures. The valve was excised in its entirety and the annulus debrided of all calcium. Three sutures were placed one under each of the valve cuffs. The valve was then sized to a small Sorin Perceval aortic valve. The valve was prepared and collapsed by the Perfusion team and brought to the field. The sutures made on the valve cuffs were passed through the eyelets of the valve. Once properly oriented, the valve sutures had tension placed on them in the axial direction of the aorta. The valve was lowered into position, confirmed to be in good position and was released from its holder. The valve was then ballooned under 4 atmospheres of pressure with the appropriate size balloon and then was immersed with warm saline for 30 seconds. The valve was extensively inspected and was found to be in good position. The aortotomy was closed and the heart was de-aired. Once there was no longer air the patient was weened and then taken off of cardiopulmonary bypass. The total cross clamp time was 45 minutes with a cardiopulmonary bypass time of 71 minutes.

The patient was taken to the CSICU and was extubated within a few hours post-op. The patient was discharged from the hospital a week later.

Discussion

The Perceval S Aortic Valve has been shown to decrease the cross clamp and cardiopulmonary times which has greatly decrease the risk for patients needing aortic valve replacements. It greatly decrease the surgeon's duties since it is a sutureless valve and is easily reproducible. But the Perceval can potentially negatively effect the perfusion community if implantation attempted in the future without the adjunct of extracorporeal circulatory support. However, a perfusionist is still needed to standby during the procedure. With cardiac surgery steering toward minimally invasive procedure there is a need for perfusionist to embrace other avenues. The perfusionist can take charge in priming and preparing the valves which requires training to become proficient. The perfusionist should always explore the opportunity to be part of the cardiac team and find ways to support the cardiac surgeon and the team during the period of standby. Should there be a conversion to CPB, be ready and efficiently convert this process.

Conclusion

The Sorin Perceval Valve is a new innovative way of performing an Aortic Valve Replacement. The valve is a sutureless valve which has the ability to decrease cardiopulmonary bypass and cross clamp times. With the decrease in bypass times, there might be a decrease in the demand for the perfusionist. The perfusion community needs to start embracing other areas in which they can become experts in, which will prove that we are an integral part of the cardiac team, as they venture into minimally invasive surgery.

References

- Folliguet, Thierry A., *et al.* "Sutureless perceval aortic valve replacement: results of two European centers." *The Annals of Thoracic Surgery* 93.5 (2012): 1483-1488.
- Santarpino, Giuseppe, *et al.* "Perceval Sutureless Aortic Valve Prosthesis: Easy, Fast, and Safe." *Innovations: Technology and Techniques in Cardiothoracic and Vascular Surgery* 6.6 (2011): 378-381.

AACP Student Council

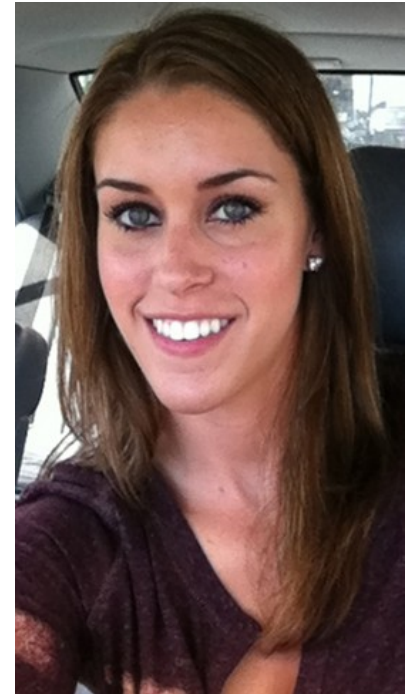
The AACP Student Society has selected the AACP Student Council for this year. The following students will make up the second AACP Student Council officers, President - Amanda Best - University of Arizona, Vice President - Laura Rigg - SUNY Upstate Medical University, Secretary - Allyson Aquino - North Shore-Long Island Jewish Hospital/Long Island University CW Post, Treasurer - Philip Mann, Jr. – Cleveland Clinic School of Perfusion.

These positions will play an important role during the Student-Only Fireside Chat at the annual AACP Symposium.

Amanda J. Best - President

University of Arizona; Class of 2014

I grew up in a small rural town east of Seattle in the gorgeous, but very rainy, Pacific Northwest. I am a sports fanatic! I grew up playing basketball and played in college at the University of New Mexico, which was a blast! Currently, I love keeping in shape through a variety of activities including weightlifting, crossfit, biking, and any other challenge that comes my way. I stumbled into the perfusion career through a random meeting with a perfusionist. After shadowing him and doing my own research, the perfusion profession appealed to me on many levels. Through my experiences thus far, I have discovered the great rewards and opportunities to give to others that a career as a perfusionist provides. The ability to connect, invest, and impact people's lives everyday, makes this career fulfilling and gives me the drive and commitment to be a perfusionist.



Laura Rigg – Vice President

SUNY Upstate Medical University

I have been a student athlete nearly my entire life. These two activities have molded me into the professional that I am today. The motivation and determination I learned have, lead me to my leadership positions and accomplishments that I currently hold. As a class President, Vice-President of the student ambassadors to the Academy, and with the opportunity to present my research at a national perfusion conference I have fully immersed myself in the field. It is my goal to never stop learning, continue contributing useful research to the field, and to inspire others to explore the field of perfusion.

Continued on Page 14

AACP Student Council

Allyson Aquino - Secretary

North Shore-Long Island Jewish Hospital/Long Island University CW Post; Class of 2014

I am an energetic, ambitious New York City transplant who left her home in Issaquah, Washington ten years ago with the intention of becoming a hybrid performance artist and healthcare professional. I succeeded in this goal by working as a registered nurse and freelance artist until my last job as an intensive care nurse exposed me to perfusion. Already fascinated with the world of cardiothoracic, ECMO, and assistive devices, I knew that this was the field in which I wanted to pursue my higher education and new career. My experiences thus far have only strengthened this commitment, and throughout my career I hope to contribute to the world of cardiovascular perfusion in a positive and meaningful manner.



Philip Mann, Jr. – Treasurer

Cleveland Clinic School of Cardiovascular Perfusion; Class of 2014

I knew about perfusion when I was in high school and went to The Ohio State University for my undergraduate degree with pre-circulation technology as my declared major. Two years into taking prerequisite courses, OSU discontinued the program and I was forced to deviate from my chosen career path. I graduated from OSU in 2011 with a Bachelor's of Science degree in Allied Health Professions with a specialty in Respiratory Therapy. I then worked for a year and a half as a respiratory therapist at a level one trauma center before moving to the Cleveland Clinic where I now work in the intensive care units. I only work part time now that I am a full-time student, but I like to stay very busy. I am very excited to enter the field of perfusion and look forward to meeting you all!

ACCP Student Council

Jennifer Tounshendeaux - Ambassador

Milwaukee School of Engineering; Class of 2014

My undergraduate degree is in Biomedical Engineering (also MSOE, class of 2012). I have done adult rotations at Aurora St. Luke's Medical Center and Froedtert and the Medical College of Wisconsin in Milwaukee, WI. These rotations have allowed me to pump 80 cases to date including DHCA and VAD implant as well as a wide array of other adult procedures. I will soon do a pediatric rotation at Children's Hospital of Wisconsin. I have an interest in working in a group that is open to the changing technology of the cardiac surgery field.



Rosanna Falco - Ambassador

Rush University; Class of 2014

I grew up in a southwest suburb of Chicago, Willow Springs, and have lived in the city of Chicago for the past five years. I am extremely close to my family and have two sisters, one younger sister and a twin. I attended DePaul University, also in Chicago, for my BS in Biological Sciences and this is where my interest in the Medical field began. I volunteered at Children's Memorial Hospital, now known as Ann and Robert H. Lurie Children's Hospital, for four years and attended a medical mission trip to Tegucigalpa, Honduras. These amazing opportunities led me to expand my knowledge and interest in the Perfusion field. I truly feel honored and privileged to be part of such an amazing field, and look forward to continuing to learn more each and every day.

Molly Hageman - Ambassador

Vanderbilt University Medical Center's Cardiovascular Perfusion Program; Class of 2014

My name is Molly Hageman and I am a second year perfusion student at Vanderbilt University Medical Center's Cardiovascular Perfusion Technology Program. I graduated from the University of Minnesota - Twin Cities in 2011 with a BA in Chemistry and a BS Biochemistry. I'm originally from Minneapolis, MN and worked in childcare throughout my years of high school and college. I have two older sisters and an adorable nephew. I really enjoy baking, especially pies from scratch! I love being a perfusionist and am excited to see where my future leads me.



AACP Student Council

Kailin Bellows—Ambassador

The University of Nebraska Medical Center Clinical Perfusion Program

I grew up in Council Bluffs, Iowa as the youngest of my three siblings and the comedian of my tight-knit family. Although it is deceiving based on where I am from, I am a huge Nebraska Husker football fan! I also enjoy many outdoor activities ranging from a leisurely run or a competitive round of disc golf to an intense game of sand volleyball or even an exhilarating skydive from 13,000 feet above the ocean. I completed my undergraduate degree in biology at Nebraska Wesleyan University in Lincoln, Nebraska. It was here I learned about the incredibly fascinating and unique field of perfusion. I just recently started my second year of the program and my first rotation in Madison, Wisconsin. It is truly unbelievable how much knowledge and confidence I gain with each daily clinical experience! It makes me very eager to participate in my other clinical rotations in Kansas City, Missouri, Omaha, Nebraska, and Birmingham, Alabama and even more excited for the opportunity to become a practicing member of the perfusion field.



Michelle McLean - Ambassador

Quinnipiac University; Class of 2014

I am from Windsor, Ontario Canada and came across perfusion as I was finishing up my studies at Wayne State University in Detroit. After some shadowing and research into the field I knew that this was definitely the field for me. I am very excited to begin my perfusion career and hopefully become an integral part of the perfusion community!

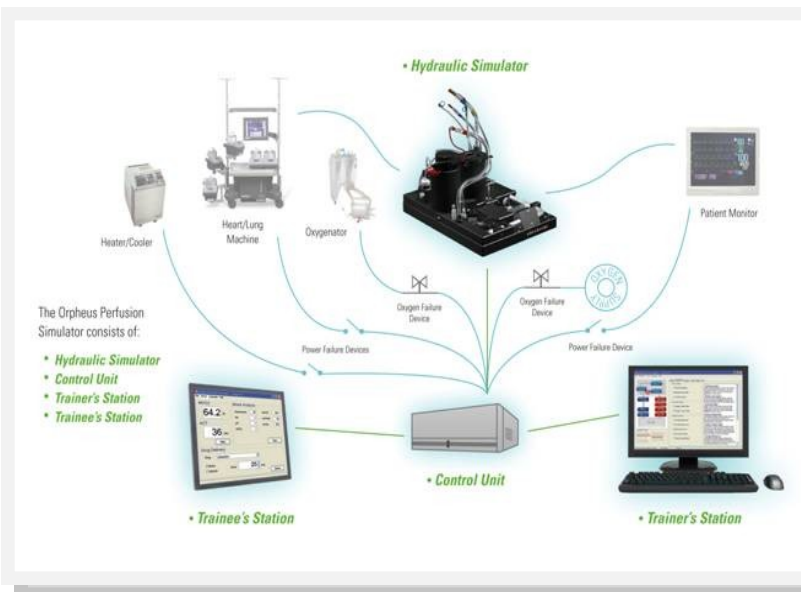
AACP Student Council



Christopher B. Carter—Ambassador
 Medical University of South Carolina Class of 2014

I am originally from Michigan, but grew up in a small town in the upstate of South Carolina. After high school, I attended Clemson University where I obtained a Bachelors of Science in Biological Sciences. I love the outdoors and am a huge college football fan (Go Tigers!). I discovered the profession of perfusion while shadowing a cardiothoracic surgeon for medical school. I met with the perfusionist after the surgery and one thing lead to another and I eventually applied to the program at MUSC in place of medical school. I enjoy working with my hands, engineering, cardiac surgery, and helping others, so what better way to combine all those things than a career as a cardiovascular perfusionist. I look forward to graduating and being able to build upon and contribute to a profession that has already progressed a long way since its creation.

AACP to Offer Simulation at the Annual Conference



The Academy will be offering you the opportunity to experience high fidelity perfusion simulation at the 35th Annual Seminar in Orlando. There will be several sessions with specific situations. Edward Darling and Adam Fernandez will be coordinating the sessions. More details to follow.

**Abstract Deadline
 for the 2014 Meeting
 October 30, 2013**

Contact Information for Our Sponsoring Partners

CASMED MEDICAL

Phone: 800-227-4414 or 203-488-6056
 Fax: 203-488-9438
 Website: www.casmed.com

COVIDIEN

Phone: 303-305-2370
 Fax: 303-305-2865
 Website: www.covidien.com

INVO SURG

Phone: 401-439-1695
 Fax: 617-507-6462
 Website: www.invosurg.com

MAQUET MEDICAL SYSTEMS, USA

Phone: 888-627-8383
 Website: www.maquet.com

MEDTRONIC PERFUSION SYSTEMS

Phone: 763-391-9000
 Websites: www.medtronic.com
 www.perfusionsystems.com

NONIN MEDICAL INC.

Phone: 763-553-9968
 Fax: 763-553-0363
 Website: www.nonin.com

QUEST MEDICAL, INC.

Phone: 800-627-0226 or 972-390-9800
 Fax: 972-390-2881
 Website: www.questmedical.com

rEVO BIOLOGICS

Phone: 508-620-9700
 Fax: 508-370-3797
 Website: www.revobiologics.com

SORIN GROUP USA, INC.

Phone: 800-221-7943 or 303-467-6517
 Fax: 303-467-6375
 Website: www.soringroup.com

SPECTRUM MEDICAL, INC.

Phone: 800-265-2331
 Fax: 803-802-1455
 Website: www.spectrummedical.com

SYNCARDIA SYSTEMS, INC.

Phone: 520-545-1234
 Fax: 520-903-1783
 Website: www.syncardia.com

TERUMO CARDIOVASCULAR SYSTEMS

Phone: 734-663-4145 or 800-521-2818
 Fax: 734-663-7981
 Website: terumo-cvs.com

Important Academy Dates

The ACADEMY ANNUAL MEETING DEADLINES

ABSTRACT DEADLINE	October 15, 2013
MEMBERSHIP DEADLINE	November 23, 2013
PRE-REGISTRATION	January 3, 2014
HOTEL REGISTRATION	January 3, 2014
2014 ANNUAL MEETING	January 23 - 26, 2014

Others Meetings

Congress on ECMO Therapy

Fourth International Conference
 Hershey Lodge
 Hershey, Pennsylvania
 October 19, 2013
 Contact: pennstatehershey.org/hvicontinuinged

Update on Perfusion Devices Workshop 2013

Embassy Suites Hotel
 Charleston, SC
 October 24-26, 2013
 Contact: Kristina Hill
 Phone: 843-792-6505
 Website: http://academicdepartments.musc.edu/chp/cvp/conference_2013/index.htm