41st John H. Gibbon, Jr., Award Lecture

Find Your Element

Robert C. Groom, MS, CCP

Maine Medical Center, Portland, Maine

Presented at AmSECT’s 54th International Conference, San Diego, California.

Thank you, Jeff Riley, for the kind introduction. It was deeply moving to hear your summary of my career and see the choice photographs that you obtained from my wife, Holly, and daughter, Hannah. It is true that there are few photographs of me from the ages of 2–8 years when I did not have a gun in my hand. It was my dream to someday become a cowboy, but I am not disappointed about the way things have turned out in my life.

I am grateful to the Society for selecting me to be the recipient of the 2014 John H. Gibbon, Jr., Award. The award is designed to honor an individual who has made a significant contribution to the cardiopulmonary discipline interrelating with the field of extracorporeal circulation. It is fitting for the Society to give this award in memory of John H. Gibbon, Jr., a pioneer surgeon. Gibbon was described by his colleague, Robert Finley, as a superb teacher, good clinician, excellent at running his department (1). Finley further remarked that he approached every problem as a soluble problem. People really liked him, because he liked people and he was optimistic, encouraging, and supportive of others. Clarence Crafoord, another of his surgical colleagues, described him as one of the noblest, consistently straightforward, honest, and loyal friends one could ever have. Crafoord further remarked that he never ceased to admire Gibbon’s intellect, spirit of discovery, work capacity, and the quality of his leadership. In David K. C. Cooper’s book, Open Heart Surgery—Radical Surgeons Who Revolutionized Medicine, he describes Gibbon and other pioneers in our field as individuals who shared three important attributes: they were radical, passionate, and curious.

This afternoon, I want to reflect with you on these attributes and the importance of nurturing and sustaining these attributes in our Society. We are fortunate to have so many in our field who continue in this tradition and embody these attributes, some of whom were nominated for the award this year. I congratulate those who were nominated for this year’s award: Douglas F. Larson, Donald S. Likosky, Theron A. Paugh, Yehuda Tamari, Ross M. Ungerleider, and Craig R. Voelkel.

I cannot believe that I am standing before you today. Growing up, I was a quiet, painfully shy, and rather average boy with the exception of one trait, probably more of a genetic disorder that I inherited mostly from my mother, that I will refer to as “volunteerism.” I have always been one to step forward and volunteer, even at an early age. When I was 8 years old, my mother sent me to the YMCA for swim lessons. The first lesson was a breeze—we learned to hold our breath and float like a turtle. The second lesson was equally benign—we were given kickboards and instructed to kick across the pool in the shallow water. However, the third lesson was quite memorable. Our teenaged instructor lined us up on the deep end of the pool and said, “Okay, which one of you will be the first to jump in and kick to the other side?” There was a pregnant pause, nobody moved, and then I stepped forward and leaped into that pool. Within seconds, arms flailing, gasping for air, and choking, I began to sink to the bottom, prompting two lifeguards to come to my rescue. The lesson ended early that day and there was considerable attrition. There was a story of my life. In my professional career, I have been most fortunate to have friends and colleagues who believed in me and encouraged me to leap into the deep and attempt things seemingly over my head. However, somehow, by God’s grace and with the help of others, I have managed to keep my head above water. It has been a wonderful ride.

I am indebted to my wonderful parents. My mother, now 90 years old, has been, and is to this day, an incredible inspiration to me. Mother grew up during the Great
Depression and her father had a philosophy that, as soon as one of his seven children were “of age,” they were to quit school and find work to bring money home to the household. That time came for my mother when she was 16 years old and she was hired at “Joe Workman’s Men’s Clothing Store” in our small town of Coraopolis, PA. However, the principal of her school protested and negotiated a deal with my grandfather, in which Mother would attend 3 days of high school each week and work 3 days per week at Joe Workman’s as a sales clerk and seamstress. She was able to graduate with her class. Mother always wanted to be a nurse but never realized this dream. However, that did not prevent her from ministering to the sick. After my sister, my brother, and I all finished middle school, she became a nurse’s aid at Ohio Valley General Hospital in McKees Rocks, PA, doing those seemingly menial but important tasks of bathing and comforting sick patients. I learned the value of caring for others from my mother. I learned from her that it is not about your station or title. Rather, there is nothing greater that you can do in life than reaching out to others who are ill and helpless. Mom worked at Ohio Valley General Hospital well into her 70s, eventually as an emergency department admitting clerk.

My father’s life was deeply affected by heart disease on multiple fronts; early in his life he suffered through the untimely loss of four family members and then as an adult, he was personally tormented by health issues related to diabetes and atherosclerotic heart disease. My grandfather, Samuel Craig Groom, was born on October 23, 1896 (Figure 1). He lived in western Pennsylvania and was the father of seven children. On December 24, 1931, he had a fatal stroke. His children lived with the memory of taking down the Christmas tree in the parlor of their home to make room for his casket. My father was 12 years old at the time. After Samuel’s death, the family of eight

Figure 1. Photograph of my father’s family taken in 1925. My grandfather, Samuel Craig Groom (center), and my father, John Wilson Groom (far right).
moved from their home to a small two-bedroom house and lived on public assistance (Figure 2). My dad dropped out of school to carry water at a WPA project, to bring home a few dollars to give his mother. However, that was only the beginning of this family’s loss from heart disease. Subsequently, three of my father’s brothers died at early ages (Figure 3). Glenn and Russell contracted rheumatic heart disease and died cruel deaths from congestive heart failure at ages 14 and 16 years, respectively. A third brother, Clyde, also had rheumatic fever, which led to aortic insufficiency. Clyde had an aortic valve replacement with a Huffnagel valve prosthesis in the early 1950s, during that era before Gibbon’s first case. My uncle Clyde died in 1961, five years after I was born, from complications secondary to a gangrenous bowel caused by valve thrombosis (Figure 4).

Although my father had only finished seventh grade, he went on to be employed by the town and was subsequently elected to serve two terms as Justice of the Peace. He volunteered many hours of service to the YMCA, obtaining donations for Y memberships for children in need and also taught woodworking classes to boys and girls. Dad was known around town as the guy who could fix anything. I have fond memories of accompanying him on missions to fix friends’ cars or repair faulty wiring. It was my job to carry his tool bag.

So you see, I am from a small town in western Pennsylvania, from a very humble family. Growing up, never in my wildest dreams did I expect to be part of such an exceptional organization as AmSECT, much less to receive the John H. Gibbon, Jr., Award. Today, I accept this award on behalf of my family and many truly extraordinary individuals who have influenced me throughout my life and my career, helping me to find my element.

In his fascinating book, *The Element—How Finding Our Passion Changes Everything*, Ken Robinson describes the importance of finding what he refers to as “your element.” The element is the place where the things that we love and our true talents come together. It is a most gratifying state in that it brings out the very best in us and we become engaged and energized. It is personally rewarding to be in your element. Moreover, as Robinson points out, it is crucial that each of us find our element because the very future of our communities and institutions depends on it (2). Individuals who find their element, whether it be in the arts, sciences, technology, or economics, are the catalysts for progress in our world. Think about it. In our field, if Gibbon and others had not been in their element—obsessed with radical ideas, full of passion to overcome the barriers, and consumed by a never-ending curiosity—perhaps the devastation of heart disease that my ancestors experienced would have prevailed. I am certain that I have found my element in our field and I know so many of you have as well, and for that, I am most grateful.

For me, finding my element began one day in the mid-1970s when I came to realize that there were so many possible roads in life and that there was nothing more uncertain in this world than the future. It was very clear to me that I really was not smart enough to figure out what was the best path for me. I decided to put my trust in Jesus Christ for my future. I believe that this was the nexus for me that began a cascade of important events that have brought me here today. A promise from God is recorded...
in Proverbs 3:5,6: "Trust in the Lord with all of your heart, lean not on your own understanding, acknowledge Him in all of your ways and he will make your path straight and crown your effort with success." This promise has been one that I have held fast to over the past four decades. It has been my compass, my Global Positioning System. I have strayed off course many times; however, God keeps His promise, bringing me back on course when I trust and acknowledge Him.

When I attended Geneva College, Professor Calvin C. Freeman was my advisor. Dr. Freeman had a tremendous impact on my life in that he saw worth in me at a time when I felt worthless. Cal reminded me that I am fearfully and wonderfully made by God for a specific purpose that could be generally described as reflecting His love to others. Cal advised me to enroll in the Life Support Technology Program at Fairfax Hospital, a program that he cofounded with a former student, Ken Applegate. The program at Fairfax was my introduction to health care, cardiology, and cardiac surgery. I remember, Mother commented at the time that it was fitting that I should work in this field because so many of my family members had heart disease. Only recently would I understand this important connection in my life.

While at Fairfax Hospital, I met Aaron Hill, whose friendship and mentorship has had a profound effect on my career. When I learned that I would be receiving this award several weeks ago, after regaining my composure, the first person I called was Aaron. So much of who I have become as a professional was from Aaron’s influence over many decades. I was smitten with perfusion the first time I saw Aaron in a cardiac operating room, where he exhibited his skill as a technician and as one who would serve as a resource to every person in the operating room. Aaron taught me about generosity. He taught me that you should

Figure 3. My uncles Glenn, Clyde, and Russell taken in 1936. Glenn died at age 14 years and Russell at age 16 years, both from congestive heart failure secondary to rheumatic heart disease.

Figure 4. My uncle, Clyde Groom, taken in 1949. Clyde died in 1961 from thromboemboli complications secondary to Huffnagel aortic prosthesis.
do everything you possibly can to help others to succeed, especially in the operating room. Through observing Aaron, I learned that no task was too menial and no day was too busy to share a good word or listen to someone who needed to be heard. When I had an idea for a project or professional goal, Aaron was and is a constant source of encouragement and a trusted advisor (Figure 5).

When I called Aaron, he congratulated me and reminded me that I was such a wise man in that I pursued and had the good fortune of winning over Holly as a lifemate, wife, and mother of our five children. I am so fortunate that she has stuck by me. She has taught me so much. I remember our first meal together as a married couple in our tiny apartment on Tobin Road in Falls Church, VA. She had prepared a beautiful roast with all of the trimmings. I proceeded to pay her what I thought was one of the highest compliments possible by saying, “This is almost as good as my mom’s!” Holly, thank you for your patience over all of these years and for not leaving me after that first week of our marriage. Every step along the way, you have supported me, relocated with me, and to this day, we share wild dreams about the future. I learned a lot about being radical and passionate from Holly; she has this very strong desire to help others. Talk about radical. Shortly after we were married, we shared this dream of going to Africa (Figure 6). I am not exactly sure how it started. We both were very
serious about this. Our families and most of our friends thought we were quite disturbed. Few people took us seriously, but one who did was Richard Chan. Richard, at that time, worked for Bard Cardiopulmonary and had connections on every continent. Richard introduced me to perfusionists in South Africa and helped me to get a perfusion license from the South African Medical and Dental Council in 1984. However, there were other barriers and we did not move to South Africa. So, we decided to try something different and over the next 9 years, we were foster parents to over 20 children. Through this experience, I learned that it was not always about me and that probably the most important things you can do in your life are for those who are helpless. During the process, we had four of our own children. We also adopted Sarah, our second oldest child. Sarah has a slightly darker complexion but is all Groom. They are all out of the house now. I privately looked forward to that day when I would have Holly all to myself. However, that never really worked out the way I expected. Now, I rank 49th in her life. You see Holly is a middle school teacher now and has an extraordinary sense of purpose and passion for students. I admire the way she finds time to push the bright ones but not at the expense of those who need a hand up. Just 3 weeks ago, it was not always about me and that probably the most important things you can do in your life are for those who are helpless. During the process, we had four of our own children. We also adopted Sarah, our second oldest child. Sarah has a slightly darker complexion but is all Groom. They are all out of the house now. I privately looked forward to that day when I would have Holly all to myself. However, that never really worked out the way I expected. Now, I rank 49th in her life. You see Holly is a middle school teacher now and has an extraordinary sense of purpose and passion for students. I admire the way she finds time to push the bright ones but not at the expense of neglecting those who need a hand up. Just 3 weeks ago, it is like 11:30 at night and I say, are you coming to bed soon? Well not really; I promised to bake brownies for my advisory group... Okay. Holly is in her element.

Although our dream from the 1980s of living in Africa did not materialize, we did participate in several short-term mission trips to Uganda and Kenya. Our love for Africa and its people has persisted over the years. In the late 1980s we became acquainted with Doug Atkins, a missionary from Tenwek Hospital, a World Gospel Missions hospital in rural Kenya. The main services provided at the hospital were internal medicine, general and orthopedic surgery, and community health. We corresponded with Doug over many years but lost contact with him in 2000. Through unusual circumstances in 2011, I heard that there was an effort to start a cardiac program at Tenwek Hospital. I learned from Tom Klein that teams from Brown and Vanderbilt Universities had been making regular cardiac mission trips to Tenwek since 2007. In January of 2012, I was invited to visit Tenwek Hospital and observe John Galat and his team from Ocala Heart Institute on a 1-week mission. On the first day of that visit, I had a profound and moving experience. In clinic that day, the first patient was a 12-year-old boy with severe mitral and aortic valvular disease. When he removed his shirt, his immense heart was visible through his chest. From his labored breathing, it was evident that just walking into the clinic placed a tremendous demand on his failing heart. However, it was not until I looked into his eyes and saw his look of mixed desperation and hope that I made the connection to my uncles who had died of rheumatic heart disease. I was witnessing heart disease as it existed in the 1930s in the United States. That night I got a surprise FaceTime call from my mother, who was demonstrating her newly learned skills with the iPad that I had given her as a Christmas present a few weeks earlier. I told her, “Mom, I saw my uncles today in clinic.” Once again, we reflected on what she had said to me years before, about how fitting it was that I should work in this field.

Kenya is a little larger than the state of Texas in land area and has a population of 43 million. That would be comparable to the population of Maine, New Hampshire, Vermont, Massachusetts, New York, New Jersey, Rhode Island, and Pennsylvania. However, unfortunately, Kenya has only three small active cardiac surgery programs. To make matters worse, the rate of rheumatic heart disease in this sub-Saharan region of Africa is the highest in the world (3). In Kenya, and many other African nations, the ratio of doctors to the population is 1:25,000, compared with a rate of 1:320 in the United States and in other developed countries. Since my first visit to Tenwek Hospital, in 2012, I have returned four times, twice with a team from Vanderbilt, once with Malik Nouri, an anesthesiologist from Indiana, and most recently this past week with John Galat, a heart surgeon, and Vincent Palmire, a cardiac anesthesiologist from Ocala, FL. I have plans to return in May of this year with a small pediatric heart team from Maine Medical Center and then again in February of 2015. Holly and I are overwhelmed by the way this wild dream from our past is rapidly becoming a reality (Figure 7).

I thank you for this magnificent award and for the opportunity to share my story with you. If you have not already done so, find your element. It makes all of the difference in the world. I am most grateful to my family and colleagues who have been so invested in helping me find my element. It is incumbent on each of us to be invested in helping others to find their element, for this is our greatest opportunity to transform our society and our world.

REFERENCES


ADDENDUM

My dear friend and colleague, Bruce Searles, was present during the Gibbon Lecture. On March 23, Bruce forwarded the following e-mail that his wife, Erica, had received from her friend, Albright from Ghana.
Begin forwarded message:

From: Albright .......... 
Date: March 23, 2014, at 1:29:12 PM EDT 
To: Erica Searles and multiple recipients 
Subject: Elah’s ECHO

Dear Friends:
Praise God!
Here is the latest on our lovely daughter, Elah... (Figure 8)
The ECHO has confirmed the initial diagnoses of acyanotic congenital heart defect and specified the type as ventricular septal defect (VSD). Basically what this means is that there is a shunt (or opening) in the ventricular septum, that is the wall dividing the left and right ventricles of the heart. The pressure built up from this defect has caused one half of the heart to enlarge.
The most effective way to correct the defect is by surgery. According to the doctor, the surgery is however ONLY possible in Ghana when the child weighs at least 10 kg. Meanwhile the shunt is quite big and that is why, although she is pumping in a lot of calories, it is not making up the weight. So, Elah is still hanging in at 4 kg. She has only put in 1.2 kg since birth 5 months ago. Left uncorrected, VSD can increase pulmonary resistance leading to the reversal of the shunt and corresponding cyanosis (lack of oxygenated blood to the body).

The doctor indicated that there are three places she can recommend where there is the expertise to perform her surgery even with her weight: the United Kingdom, the United States, or India.

Figure 8. Elah with optimistic parents, Albright and Oliva, in a photograph taken March 2014, 2 months before her surgery.

Figure 9. Photograph of Elah taken in June 2014, 1 month after heart surgery at Tenwek Hospital.
In the United States and the United Kingdom she said, it may cost around $25,000 but in India, it may be around $10,000; all of these exclude visa, air ticket, and accommodation/feeding.

As the doctor rightly guessed, this is a lot for us to think through for a number of days. However, despite all this, we are very optimistic that He who has called us into His service is able to see us through it all.

Again, many thanks for your prayers.

*You are so special to Jesus!* 

Albright

Olivia

...blessed is the man (and woman) who trusts in the Lord, whose confidence is in him. Jeremiah 17:7 NIV

Through a series of miracles involving prayer and financial support from many individuals in Ghana, at Eastern Hills Bible Church, Syracuse, NY, Tenwek Hospital, Bomet, Kenya, and a cardiac team from Maine Medical Center, Elah had primary closure of a large perimembranous VSD at Tenwek Hospital on May 20, 2014. At the time of the surgery, she was 7 months old and weighed 4.3 kg. Elah is the smallest patient to undergo open heart surgery at Tenwek Hospital to date (Figure 9).