

Our Shared Journey - Lessons Learned

James MacDonald, CPC (R), CCP (Emeritus)
Ilderton, Ontario, CANADA

I would like to thank our President, Jimmy Beck, the Reed Memorial Lecture Committee, the Council as well as my fellow members of the American Academy of Cardiovascular Perfusion, for your invitation to present this address. The Charles Reed Memorial Lecture is presented each year by invited Cardiovascular Perfusionist and cardiac surgeons from around the world. Traditionally, it has been a time set aside to explore and to discover the common clinical threads that have served, and continue to serve, to bind us together as a world community as well as to also recognize and to discuss our specific commitment to cardiac patient care. This Memorial Lecture has, therefore, served as a communal response which would allowed ourselves to collectively explore our common heritage and has caused us to reflect on, and to share in, our unique specialty throughout the cardiac world. As a member of The American Academy of Cardiovascular Perfusion (AACP) for the last 37 years, and as one of the founding member of The Canadian Society of Clinical Perfusion (CSCP), and as your Canadian friend and professional colleague, eh, I am both humbled and honored to have been asked to deliver this prestigious lecture this afternoon in New Orleans. In doing so, it is my hope to direct this Memorial Lecture towards a specific focus, that is, to respectively remind ourselves, as a profession, we must from time to time revisit our historical beginnings and, in doing so, remind ourselves that our professional role in our communal care of the cardiac patient is both a formidable as well as a privileged clinical responsibility "chosen by each of us". Likewise, we would also recognize that our individual professional journeys, no matter how long or short their tenure, is representative of "our shared journey" and the friendships and collegiality gained within our specialized profession.

There may well be individuals present here this morning who would appreciate the many unique personalities that were to become involved in the growth and development of our profession, and indeed, as well as within other Perfusion societies throughout the world. Charles C. Reed, would be one of the American visionaries who would carve out the initial era from "pump tech" to that of a sustainable and ongoing recognized professional role as Cardiovascular Perfusionist. The principle mission of Charlie's influential life was to have our selective clinical expertise recognized both within our own ranks as well as by the surgical colleagues we would work with to this very day. From these individuals grew the realization the time had come to share the clinical lessons learned both within and outside the domain of the cardiac open-heart room. These earlier years of career development would serve to form the very back bone of our unique and specialized profession. It was a time when cardiac surgery was in its infancy and the professional role of the thoracic surgeon was being transformed into a new specialty, that of the cardiac surgeon. Likewise, this initial era of extracorporeal technology, while in its infancy, was to grow out of a surgical necessity with the many milestones of historical developments being clinically realized and employed within the domain of the open-heart operating rooms throughout Canada, the United States and, indeed, the world. I am reminded of the philosopher, George Santayana, who once said, "those who do not remember the past are condemned to repeat it"! Much of this historical past would form the building blocks of our profession and the lessons learned would serve to transform the evolving theory of cardiac surgery into the clinical reality of today. In a step by step fashion, our historical past to this present day would teach that humility, compassion and the recognition of the need for ongoing improvement in cardiac patient care, would serve to form the essential characteristics that would define all members of the cardiac team to the present day! As I prepare to exit our principled profession and with the realization those of us who lived through this initial era are decreasing in numbers, I thought it beneficial to share my personal introduction into those formative years when cardiac surgery and extracorporeal technology were still in evolution.

I began my Perfusion career in 1968, more through serendipity - that of being fortunate enough to be in the right place at the right time - a reflection of the clinical reality of those formative years. I was the youngest of the older poisoners. I would now be introduced into this initial era of open heart surgery

when the cardiac surgeon and the pump technician shared a unique and evolving relationship - a relationship that would be the genesis of both mutual respect, cooperation as well as ongoing structure in other our professional lives. We were there to witness the continued evolution, modification and refinement of this important, but yet primitive, extracorporeal tool called cardiopulmonary Bypass (CPB) into what is presently considered to be the state of the art technology. This time period was representative of an ever-evolving era where extracorporeal technology and corrective open-heart surgery for both congenital heart defects in the infant and acquired valvular disease in the adult were fraught with every day concerns. In the words of the late Dr. W.G Bigelow, a pioneer Canadian heart surgeon, "a new specialty evolved with the advent of the heart lung pump, that of Perfusionist. The responsibility of running the pump was indeed an extremely important one, shared by anesthesia. There was the careful cleaning and assembly, adjustment of blood flow, pressure and temperature, blood analysis and the addition of additives. There were hair raising experiences in these early days that would tax their stability, courage and judgement but the shared responsibility of both the surgeon and the Perfusionist were still evolving". In reflection of the patient of those days, Dr. Bigelow would go on to make the following statement, "I always thought that patients never got enough credit for having courage to move forward with their surgery". A reflective realization, indeed!

Across North America and elsewhere in the world there was a common thread of clinical similarities. The day would start very early and often ended late into the evening - often with less than desirable surgical results. The Pump Technician has frequent problems with leaking pump components and excessive foam production caused by excessive cardiology suction return. Blood leaks, which were a daily reality, were remedied by the generous use of sternal bone wax and excessive foaming of returned cardiology suction blood was treated with a trusted but generous spraying of Silicone Antifoam Defoamer - directly into the cardiology reservoir. Of note, cognitive impairment, as well as other pathophysiologies associated with Cardiopulmonary Bypass, would not appear in the literature until many years later. These were also the days of whole blood primes, stainless steel connectors, and hospital made tubing packs being cut and assembled by the pump tech and then sterilized within a steam autoclave. The experimental animal lab would serve to hone the collective expertise of both the surgeon and the pump technician and was the testing ground where pump research was initiated and surgical techniques explored prior to being introduced into the open heart room. The desire for clinical success in the late 1960's would be witness to continued pump modifications, daily frustration as well as the willingness to move forward given the reality of varying degrees of clinical success. The learning curve was indeed steep and the malfunctions of the heart lung machine would mirror the surgical challenges of the day. These earlier heart-lung machines were the developing tools for cardiac surgery, used to meet a surgical demand and discontinued as soon as was possible. The textbook on the pathophysiology of extracorporeal circulation was being revised on a continued basis. The Mayo Gibbon Vertical Screen oxygenator and the Viking Bjork Kay Cross rotating disc oxygenator (the oxygenator I trained on) were the tools of extracorporeal circulation within North America and their associated pathophysiology and mechanical complexities were being realized daily. The extracorporeal circuit was complex, non-disposable and had to be hand washed, reassembled and packaged in muslin wrappers to prepare for steam autoclaving, a process that took several hours. Their inherent complexity, to this very day, would form a lasting impression on the young Pump Tech such as myself. It became clinically apparent that a more reliable means of supporting the circulation and providing extracorporeal gas exchange would be required for the repair of more complex heart pathologies. The pioneering work and initial clinical success experienced by the Lillehei/DeWall in their use of their disposable bubble oxygenator design would, in the early 1970, pave the way for the introduction of low prime commercially available disposable bubble oxygenators thus opening the doors for the growth of daily corrective open heart surgery. The disposable bubble oxygenator, with its simplicity of design and ease of use, was a welcomed change to the pump tech of that era. Gone were the hours of meticulous cleaning and assembly. Myocardial protection via anoxic arrest (beating the clock) and electric fibrillation were the reality of the day and, unfortunately, ischemic contracture of the heart (stone heart) was too often our clinical reality. Myocardial protection would demand further refinement and would usher in the introduction of direct coronary ostial perfusion with oxygenated blood via hand held cannula. But that's another story!

Throughout all of this scenario, the heart surgeons and pump technicians of this era would share in and develop a professional interdependency. Respect would grow out of the need for mutual cooperation within a newly shared clinical accountability. From these initial beginnings grew my deepest love of, and

respect for, my initial and continued professional journey in the care of the cardiac surgical patient. To this very day, I have always been both humbled and very proud of this initial era of open heart surgery and to have worn the professional recognition of being labeled OJT - ON THE JOB TRAINED!

THE EXCHANGE OF IDEA AT ORGANIZED MEETINGS

The worldwide period of intense activity in cardiac surgery occurred between the years 1950 and 1960. The exchange of ideas at surgical meetings in the early 1950 would provide the fertile soil that would result in a coordinated attempt towards continued investigation and refinement in both surgical techniques as well as that of extracorporeal technology throughout the world. Independent theory and research involving hypothermia, oxygenation and blood pumps were now becoming a shared vision at these surgical meetings. A surgical milestone occurred on May 6, 1953, when Dr. John Gibbon of Philadelphia performed the world's first successful closure of an ASD in an 18-year-old female while using the IBM Gibbon heart lung machine. In Canada, a similar milestone occurred in October, 1956 when Dr. John Callaghan, at the University of Alberta, performed the first successful open-heart surgery utilizing the Lillehei/DeWall bubble oxygenator while he closed an atrial septal defect, with direct suture technique, on a ten-year-old child.

Perfusion related meetings, such as we are attending to this very day, had its beginnings in the shared vision of individuals such as Charlie Reed as well as others in these two pictures. Early attempts in our sharing of experiences at local and national perfusion meetings would serve to recognize similarities in clinical realities between individual institutions within the United States and would become the venue for open discussion of both our clinical success as well as our failures. Within the desire for ongoing collegial support and professional recognition of ourselves, as well as our attempt to glean better insight and understanding into the daily reality of other colleagues during these formative years, individuals, such as Charlie Reed would necessitate, the recognition of and support for, educational development via the American Board of Cardiovascular Perfusion (ABCP) and organizational development by way of the American Society of Extracorporeal Technology (AMSECT) in 1975 as well as being a founding member of the AACP in 1979, serving as its president in 1984. As was similar in Canada, the genesis of our present Canadian Society of Clinical Perfusion (CSCP) grew out of a similar pursuit for professional recognition thereby providing Canadian pump techs a more professional approach by way of the first national Canadian Society of Extracorporeal Circulatory Technology (CANSECT) meeting being held in Halifax, Nova Scotia in 1968. I remember only too well. My job, as a student, was to serve coffee, speak when spoken to and to hope that I just might be invited out for the evening's festivities.

For both our countries, the genesis of involved collegial support, ongoing professional growth and continued commitment was now a shared reality - a continuing professional commitment to this very day as is witnessed by your attendance at this AACP meeting.

SO, WHAT OF THE LESSONS LEARNED

Within the scope of our clinical accountabilities, our professional growth would depend on several interdependent factors which might be viewed as building blocks or lessons learned within one's shared journey. Our attendance at this meeting today in New Orleans is an expression of YOUR and MY dedication in furthering our professional journey - to learn from our colleagues and to take that acquired knowledge home to your individual hospitals to interface within your cardiac team so as to improve outcomes for your surgical recipient, the cardiac patient. In doing so, we collectively continue to seek structured growth as well as "continued learning" through attendance at professional meetings by way of open discussion - open discussion that would serve as a platform for one's sustained professional development. Each of us, therefore, share in a common journey - that of ongoing improvement in cardiac patient care through a recognized reliance and acceptance of each other. This red cardinal, it's color faded with time, has sat in my garden for many years. Itched into the stone are the words of William Blake, "no bird soars too high if he soars with his own wings". To achieve career success in life we must share in a common journey for professional improvement in both our individual and collective care of our cardiac patients. The most sublime act we can show each other is to set another before oneself. Having

said that, and with humility and respect, here are but a few of the lessons I have learned which I still consider to be essential building blocks in supporting your and my ongoing career growth.

Lesson 1 - ORGANIZATIONAL COMMITMENT

As is realized through attendance at meetings, commitment to our Perfusion profession does involve both our singular and our collective identification with our peers. Organizational commitment is an expression of your character, a dedication to our shared goals and your commitment to your collegial relationship with your peers. It should, as the years go by, demonstrate to each of us our continued desire to seek out improvement in our clinical competencies by way of commitment. Structured commitment would also serve to sow the seeds towards a shared productivity. Productivity is never an accident. It is always a result of a commitment to excellence, intelligent planning and a “shared focus” directed towards one’s ongoing development and personal career satisfaction. A decision to limit one’s commitment, within a structured organizational exposure, would limit the scope of your clinical knowledge and could reflect on your competency in providing optimal patient care. Each person present here this afternoon is representative of an expression of your individual commitment to the continuation of our specialized profession within this, as well as other, organized professional Perfusion related bodies. Organizational involvement with your peers is a professional journey which would complement one’s personal growth and, in all honesty, is an expectation presented you by your colleagues. Although this obligation cannot be demanded, one’s personal professional growth, as well as that of our peers, would depend on your singular commitment. Organizational commitment does not come easy and, for some of us, would require hours of self-imposed dedication to the professional values we should represent and the willingness to serve your colleagues, and in doing so your patients, the recipient of our specialized profession.

As I look around this very room on this afternoon in New Orleans for my last time in my attending this meeting, I see many individuals whose names are synonymous with organizational commitment. You also would know who these dedicated individuals are! They “walk the walk and they talk the talk”. Their ongoing involvement would form the brick and the mortar - the commitment that binds us together today and into your evolving future. Similar to David and Jill Palanzo, they too are representative of sustained commitment to our professional values as well as to our communal response to education, moral obligation, humility, compassion and, as importantly, the structured inclusion of others within our specialty of Cardiovascular Perfusion. The reality in simple words is that organizational involvement would open the door to your continued professional growth - organizational commitment would insure that the door is kept open!

Lesson 2 - PROFESSIONALISM REVISITED

What are the qualities that must be sought to insure that we can, indeed, call ourselves professionals? Professional behavior demands that we avoid situations, actions or decisions that would bring our profession into disrepute. We would realize for the collective WE to be considered a professional is to be held in high regard by society at large and is demanded of ourselves through continued education and training that prepares members of the profession with particular knowledge base and skills - skills necessary to perform their specific roles within that profession. In our everyday reality we are subject to strict codes of conduct which enshrine ethical and moral obligations. To obtain the status of a professional is one thing - to be able to practice and to act it out is quite another reality. Wilbert E. Moore, in his book entitled “The Professions, Roles and Rules” defines a professional as having the following enduring criteria: practicing a full time occupation which comprises the principle source of his/her income, a commitment to a calling, that is, the treatment of the occupation and all of its requirements as an enduring set of normative and behavioral expectations, authenticated membership in a formal organization that will protect and enhance its interests, advanced education which allows useful knowledge and skills obtained through specialized training, service orientation so as to perceive the needs of individual or collective clients that are relevant to his/ her competence and to attend to those needs by competent performance, and finally, autonomy that is restrained by responsibility thus allowing you and I to proceed by our own judgement and authority”. What I have just described is known and

practiced by everyone attending this memorial session and is representative of the basic criteria that would define our roles as recognized professional within our specialized field of medicine. Similar to other team members, the Cardiovascular Perfusionist should define these principles on a daily basis in their individual lives. Professional integrity describes "one who willingly adopts and consistently applies the knowledge, skills, and values of a chosen profession". Your everyday conduct within the confines of the operating room is witness to your professional integrity within the cardiac team. Likewise, professional autonomy is having the authority to make clinical decisions and the freedom to act in accordance with one's professional knowledge base having been acquired by way of specialized training. As Cardiovascular Perfusionist, we are cognizant of a high degree of professional autonomy and integrity that would allow you and I to practice our cardiovascular patient care on a daily basis within an established degree of both clinical acceptability and responsibility. Integrity would refer to trust, reliability, honesty, courage and would be reflective of the strength of one's character. It will be both recognized and expected by others within the coordinated cardiac team as an essential ingredient for overall team success. At the end of the day, professional autonomy blended with integrity in what we do every day should be a shared clinical reality within our everyday clinical environment. As such, it is an obligation of duty and responsibility incumbent on each of us to remind ourselves of this self-imposed reality.

Lesson 3 - COMMITMENT TO THE PATIENT - A SHARED RESPONSIBILITY

Another essential building block of our professional identity is representative of one's ongoing commitment to the recipient of our care, our cardiac patients. As individuals, each of us recognize the varying degrees of stress that can and does exist in our daily clinical lives within the hospital environment. Within the cardiac team, we must support each other in the recognition that stressful situations can and do exist in one's daily reality. I am sure that all here present would feel that our Perfusion related practices are beyond reproach and would follow acceptable standards of conduct and practice such as adopted by the AACP and other Perfusion organizations worldwide. As is true of this meeting we will share in our methodologies that would, hopefully, result in an organized and acceptable approach to our specific involvement in cardiac patient care. We know that the scope of duties of a Cardiovascular Perfusionist is much more than establishing the extracorporeal circuit of choice and conducting Cardiopulmonary Bypass as well as other clinically related duties. More is expected of us by society at large.

In a chapter from the book entitled, "The Heart of The Healer" by Ernesto Contreras, MD, "Passion, Compassion and Medical Practice" reminds the reader not to consider the human body purely as a complex machine that can be repaired by only advanced technologies". As Cardiovascular Perfusionist we speak of interfacing the extracorporeal circuit with all its associated pathophysiology. Collectively, as an organized group of professionals, we should from time to time speak openly of our commitment to our patients, the recipients of our specialized technology. Today we are doing so by our attendance at this very meeting. Have you ever felt, from time to time, that others within your Operating Room, save the other Perfusionist, really understand the true responsibility that you as a Perfusionist have? I realize that we seek guidance, support and recognition from the surgeon for example. After all, if you and I perform our job without incident or mishaps, the result might be that our autonomy will not be noticed - a kind of penalty for performing your everyday clinical duties without mishap. We collectively know that we belong to a quality-controlled profession. We must rely on the success of each other and we learn from our professional misadventures. For the well-being of the patient, we cannot make a mistake. When mistakes are made, it can be just as devastating to the Perfusionist as it would be to our patient. If I had one wish for each of you this afternoon, it would be that I could shield you from the reality of a Perfusion mishap. Should this reality be experienced by a colleague, extend that person an understanding hand - rather than push someone down, we should push someone up! With that understanding comes the realization that "there but for the grace of God, go I". Into your hands the cardiac patient has trusted their very well being. We must be protective of and preserve that trust. We must review and reflect on our personal and unique commitment to our specialized field of patient care. Think, once in a while, of those who have laid the foundation of your career. As a professional group within the health care field, we represent a selected few in numbers. Our shared accountability is to positively affect the lives of others by offering them freedom from pain and suffering. Similar to the physicians and the nurses we work with

every day, we as Cardiovascular Perfusionist must also follow a fundamental rule: do to your patient as you would have done to yourself. Is this not a basic precept in our training of our students? Do we not teach our students to treat the patient as if they were a family member. Moral/ethical decisions must be demanded of ourselves in our daily care of our cardiac patient. Our caring for the patient is not constrained to the heart lung machine! Within our day to day routine, we must outwardly demonstrate our caring for the patient if others, at a given moment, are too busy to recognize the patient's immediate concerns. Go over to your patient, hold his/her hand and introduce yourself as a member of the cardiac team. A sincere jester, such as this, has served to connect myself to my patient and has caused me to revitalize my specialized roll within the organized cardiac team. Don't be the gap within the OR - stand out by what YOU do every day - your actions and deeds are what you are! Humility and compassion is what will define you. Such demonstrated commitment, shown your patient, might serve to remove the temptation to only treat the disease pathology and not the patient. This is not reserved for only the surgeon, nurse or the Anesthesiologist - you and I must share in this cardiac team reality. The acronym for the word TEAM is "together, everyone accomplishes more"! Recently as I was ruminating through my recollection of the past to the present, I came across a letter from the family of a previous patient who had a difficult recovery after rather difficult surgery. We have all shared in this reality. The letter reads as follows:

October, 1990 - 28 years ago.....

Dear Cardiac Team - although a long time in coming, I wanted to express my thanks and appreciation to your team for the care given my Dad while in the OR and the ICU. Your concern, support and encouragement was there when my family and I needed it most. Even though we were frightened, we were completely trustworthy of the whole health care team caring for Dad. He was in God's hands but ALL OF YOU WERE THOSE HANDS while in your care. Dad went home on September 17th and, to date, is coming along slowly but steadily. In his name, and behalf of our Mom, please accept our heart-felt gratitude".

This is but another example of what we share in within all our hospitals - within our cardiac team. Together everyone accomplishes more!

Lesson 4 - THE MENTOR/MENTEE RELATIONSHIP

For many of us within our careers, who have accepted the added responsibility in teaching students within the clinical area, your commitment is deserving of special mention. You then become the Mentor who would share with the Mentee clinical experiences gleaned within one's own career path - to provide guidance, motivation, emotional support as well as that of role modelling. The development and exploration of theory into clinical reality is promoted and then matured into daily clinical reality for the student. It has been, for me, an exciting and humbling experience to share one's years of acquired clinical experiences and knowledge with students (Mentee) who have had clinical rotations within The London Health Sciences Hospital and also to instruct many students since 1978 at The Michener Institute of Applied Health Sciences in Toronto. In teaching students one must, from the beginning in the classroom and later within the confines of our individual Operating Rooms, demonstrate an atmosphere of respect, honesty, cooperation, integrity and a reality of clinical expectations being realized within our professional scope of duties. The student should not be shielded from the reality of the clinical world but, instead, be taught the lessons of success and the enduring threat of clinical failure. I am very proud and encouraged by the participation of the students at meetings such as the AACP. By way of The Student Ambassador Program, "the student is guided in the areas of Perfusion related research and education", as is very obvious at this meeting. Their ongoing participation is most impressive and is representative of a more structured and educational introduction into our profession - given the reality presented to myself and others in our earlier careers. By way of mentorship, we must encourage and share in the full development of their maturing clinical skills even when it means our not always knowing the answers to questions being asked. This is where collegiality comes into focus - to seek clinical experiences and the answering of clinical questions and concerns. Acquired clinical experience and associated skills as well as "inspired continuous learning through education" should be synonymous with humility. I know, within

my career growth, continued experience has taught me both humility and pride in what we do every day. The clinical teaching of our students into our everyday clinical reality must also be exercised within the scope of integrity, mutual trust and demonstrated respect. Theory taught within the confines of the class room should be the reality being realized within your individual operating rooms. As the Mentor, the student must decide if your actions would be representative of the role model to be followed - should your related teachings and attained clinical skills being taught the student be emulated? The desired goal would be the successful integration of the student into the very fabric of our specialized profession thereby insuring the continuation of our clinical interface through recognized educational institutions. Our student are the future! Their integration and acceptance within the AACP, as well as other Perfusion organizations, must be encouraged by the example given them within the Mentor/Mentee relationship. As is equally true of any profession, the student must also accept their new clinical accountability and maturing responsibility - take ownership and make those choices and actions that will insure constructive connectivity between theoretical knowledge, attained clinical skills and their successful integration into the clinical domain. During their training and after successful graduation, the clinical application of their attained theoretical knowledge, within the clinical relationship of the Mentor/Mentee, should serve to mature their ongoing application into a clinical reality - a clinical reality that will provide them ample opportunity to hone their maturing clinical skills. They will realize soon enough that their learning has just begun! To all the students present, as well as to recent grads, welcome to our shared journey - for You will now become the Mentor! Please give some serious thought towards exercising your new voice by donating your time to the successful continuation of your new profession. If, indeed, you are the future, you have a voice. Use your newly acquired voice. Take an active role in others professional growth. Involvement with your new peers, will provide you the avenue to express your commitment to our specialized profession - that of Cardiovascular Perfusion.

Lesson 5 - PEER INVOLVEMENT AND ITS RESPONSIBILITIES

Lastly, but another essential building block gleaned over the last five decades - that of peer involvement and its responsibility in the ongoing success in one's continued professional growth. Peer involvement would serve to provide an avenue for the exchange of relevant clinical research and experiences - to inspire each other to recognize we serve a common cause - to encourage ongoing participation. As you would know, "the purpose of the AACP is therefore, to encourage and to stimulate investigation and study which serves to increase the knowledge of Cardiovascular Perfusion by inspiring continuous learning through education, research, mentorship and collegiality". In my opinion, collegiality and peer involvement are synonymous! In doing so, we are collectively provided an educational avenue whereby one can focus on common concerns, share in collective knowledge and, as importantly, to establish an identity with your peers. In other words, it would allow direct interaction, study and reporting of relevant clinical knowledge via ongoing investigation as it would now relate to Evidence Based Perfusion and/or an established standard of recognized cardiac patient care. In our involvement within a peer group, we become a reflection of one another and therefore should preserve, enhance and compliment the professional image of each other. Collegiality is a journey within itself - a shared journey that would promote organized self-confidence and provide oneself another essential building block for one's continuing professional career. Peer recognition, as well as its associated responsibility, should NEVER be taken for granted and should NEVER lead to a feeling of superiority. A feeling of superiority is a self-imposed identity problem which can result in less desirable realities: it can disfigure one's professional image and secondly, may serve to untimely deform your acceptance as a respected and valued colleague. We should be as concerned with our character as we might be with our reputation. Reputation is just what people say you are. Character is what you really are! The ability to listen and to learn from each other, within the scope of our specialized profession, is the high hanging fruit from the tree of peer involvement. On a personal note, individuals, such as myself, would have had to work a little harder in my seeking the additional responsibility of peer involvement, but the ongoing effort did provide the nourishment for both my ongoing as well as my sustained professional growth. Involvement with one's peers is what separates empty participation from meaningful involvement. It is a work in progress and is representative of an opportunity given each of us! It is your and my decision to take on this concept of added responsibility! Our patients, the silent recipient of our specialized profession, as well as society at large, would expect nothing more nor less! Peer involvement is an added responsibility within the scope of our professional journeys. I would once again remind you of the words of William Blake, "No bird soars

too high if he soars with his own wings"! These words would be representative of our shared journey, and as such, is but another shared lesson I have learned over these last five decades. Hopefully, these words would suggest to each person present here today, our reliance on each other for continued professional growth and sustained development. Please remember the words, "the most sublime act is to set another before you". The ability to listen and to learn from each other is the corner stone of our profession. It was in the dream of the early Pioneers, and as such, has become the reality of today by your attendance at this meeting. Your involvement with your colleagues will not be easy. It requires continued work and sustained commitment. The example of dedication and commitment may be sitting next to you today? I know an example of continued commitment is sitting next to me on this very podium this very afternoon.

CLOSING STATEMENT

As your Canadian neighbor, as Charlie Reed would often call me, you have accepted me into your professional fold in ways I could never have imagined, that of being your former Secretary and then, in 1993, my being elected as the President of The American Academy of Cardiovascular Perfusion.

As I prepare to leave our rewarding profession, I humbly thank you, once again, for YOUR allowing me this final opportunity to meet with you, my colleagues and friends, and to share in but a few of the lessons I have learned from my association with you and many other colleagues over these last 50 years. Time waits for no man! I am reminded of the words of wisdom my beloved mother would often remind me of while growing up - "Jim, it is not only important what you might say, it is also as important in how you might choose to say it"! I hope I have been successful in saying it to the collective you this afternoon. Please continue to share in each other's professional journey. While I will never set aside my acquired love and respect for our chosen profession, our specialized patient related clinical responsibilities, nor my caring for each of you as my colleague and friend, please know our enduring friendship will have no closure as of this day in New Orleans. Please continue to teach, to learn and to professionally share with each other within the culture of an organized and efficient team environment.

I am both strengthened and encouraged by the realization that each of you will continue to share in each other's journey as well as to continue to share in those communal lessons gleaned within our specialized profession, that of Cardiovascular Perfusion.

I thank each of you for allowing me to become the beneficiary of your friendships! And lastly, as a reminder of who WE ARE, I would like to once again repeat the words in the letter cited within my presentation from that very thankful family member from October, 1990

"ALL OF YOU ARE THE SHARED HANDS IN THE CARE OF THE CARDIAC PATIENT"!

May the Extracorporeal Gods protect and guide each of you in your continued care of our cardiac patients. I will think of you often!

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