May 22, 2020

CTS INSPIRATIONS

CTS NEWS

EDITOR'S NOTE

In lieu of our usual President's message, we offer this moving remembrance of Dr. John Murray by Dr. Philip Gold. In part story of mentor and mentee, it is also a history of CTS and pulmonary and critical care medicine told through the perspective of two former society presidents. Our profession was founded in response to a great scourge, battled HIV and now finds itself at the frontlines of another devastating pandemic. This marvelous essay encapsulates our rich heritage not just of excellence, but of compassion and integrity. National Teachers Appreciation week was May 5-8 and we humbly acknowledge the debt we owe to mentors such as John Murray and Phil Gold who illuminate and help us realize the good within ourselves. We also thank our CSRC liaison Krystal Craddock from UC Davis, who gives us an important update regarding NIV and competitive bidding. (good news for now)

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On Mentors and Mentoring
The Murray Standard

by Phil Gold

I recently adopted a virtual presence on Zoom. Doing so enabled me to connect with and teach students, residents and fellows on line. My first assignment was a Stump the Professor session billed as the last our division would host. I sharpened my diagnostic reasoning tools but, as so many have done in the past, I committed the fatal and most common sin of anchoring. I got "stumped". Upon reflection, one of my priors was a patient that I cared for as a resident in medicine in the 60's at UCLA, a woman with disseminated histoplasmosis. At the time the diagnosis

was made by a clinical laboratory technician who noted tiny yeast forms within the macrophages on her peripheral smear. What I remember most about the case was the brilliant analysis and discussion of her illness by the Chief (in fact the only) Chest Physician at UCLA, Dr. John F. Murray, then a young, charismatic, Assistant Professor.

The Stump the Professor session was held not long after the death of Dr. Murray, my friend and mentor for more than 60 years. Following the denouement and discussion of the stump case, I took the opportunity to make a teaching point about mentoring with my zoom colleagues and students by sharing memories of Dr. Murray as an example of what they should aspire to as doctors, teachers and mentors themselves.

In 1959 when I was a sophomore medical student a flash of insight convinced me that I was not cut out to be a psychiatrist, my goal on entering medical school. A small but gifted faculty in medicine at UCLA provided several role models and, among them a standout was John Murray. He was accessible, brilliant and considered a “triple threat”, a great bedside clinician, an inspiring teacher and a top notch, productive scientific investigator. I boldly sought him out and asked if I could spend the summer working in his laboratory. He listened carefully and asked me why I was interested in his work. I must have convinced him I was serious for he generously supported my application for a summer research grant offered by the Lung Association of Los Angeles County. I received funding and the project led to my first two publications, one in the Journal of Clinical Investigation and the second in the Journal of Applied Physiology. In addition to learning much about how physiologic research is done from John, I learned that he was an excellent writer who cared not only about valid data and interpretation but about punctuation, spelling and grammar. His example prepared me well for the sharp editing pencil wielded by Dr. Julius Comroe when reviewing my pulmonary function reports some years later at the Cardiovascular Research Institute (CVRI).

Most importantly, after that first summer in Dr. Murray’s laboratory, I spent the next six years working in his lab. He trusted me with the keys to his laboratory/office which became a safe and quiet haven for study and a surreptitious source of ethyl alcohol for student and resident parties.

During those exciting years of learning I watched as Dr. Murray and other young faculty members prepared for the challenge of Internal Medicine Board examinations not knowing that less than ten years later I would do the same. Several months after I passed my written Board examination in 1968, I flew to San Francisco for the final hurdle, the oral exam. I remember it as if it were yesterday. The examination was held in the dimly lit VA hospital and I was assigned two patients. The first was in a noisy open ward and had chronic pancreatitis with a pseudocyst, the second had a stroke following aortic valve surgery and was aphasic. When the day was done, I returned to my hotel room exhausted and dejected, certain I had failed. Later that night Dr. Murray called to say hello and let me know he had just finished enjoying dinner with my senior examiner of that day, Dr. James Hammarsten. After a suitable pause during which I might have suffered a stroke myself, he told me I passed the examination saving me six weeks of anxious waiting. Mentors look after their mentees.

But I digress. Little did I know that my time in the dog lab doing intubations, cut downs and right heart catheterizations was outstanding preparation for the skills I would one day need as an intensivist. When Dr. Murray travelled to the CVRI in San Francisco during my year as a senior resident, he returned with a blood gas machine, essentially a fabricated plexiglass water bath, housing Clark and Severinghaus electrodes. He taught me how to obtain radial arterial blood samples using a Seldinger needle and how to operate the blood gas instrument. The Seldinger needle was large and needed frequent sharpening. I was often a test subject until recurrent radial hematomas discouraged me from volunteering. Dr. Murray, a resident colleague and I were the only ones capable of analyzing arterial blood gas specimens at UCLA at the time and I honed my skills by

offering the service to fellow internal medicine house staff caring for patients with heart and lung disease.

When I was half way through my Chief Resident year, Dr. Murray, who by that time insisted I call him John, summoned me to his office. He wanted to tell me he had been recruited by Dr. Julius Comroe to join the CVRI and the UCSF faculty. I had, of course, developed a keen interest in the lung and in pulmonary physiology under John's tutelage. Dr. Comroe was a pulmonary rock star and his book, The Lung, was my bible. John indicated he had received permission to recruit one fellow and wondered if I might be interested in joining him in San Francisco at the San Francisco General Hospital where he was to be the Chief of the Pulmonary Service. I would split my time between the CVRI and the General Hospital, learning at one and learning and doing at the other. I was flattered and eager to accept but it took much cajoling before my wife, Roberta, gave her blessing and I was able to say an excited yes.

A mentor provides tools, opportunities and support. In San Francisco, the CVRI environment was intellectually and scientifically rigorous and challenging. Roberta and I met and were befriended by trainees and faculty from all over the world. Work was demanding and there was so much to learn. In those days before calculators and computers, I had to master the slide rule and obtain the rudiments of calculus, statistics and measurement theory. It was the heyday of the Haight-Ashbury and Flower Power, a movement which often caught my attention in Golden Gate Park as I hustled between our home in Marin, the CVRI on Parnassus Hill and the General Hospital in the Mission. John was always supportive and encouraging but had the wisdom and forbearance to allow me considerable independence in the completion of two critical tasks. The first was to build a Pulmonary Function Laboratory at the General Hospital and the second was to work with him to develop the General Hospital's Intensive Care Unit. Both opportunities provided an essential foundation for a career in pulmonology, a term which had not yet been coined. Much of what I learned at the time came from watching John's engaged, cooperative and enthusiastic style of leadership and problem solving. Indeed, there were many problems to be solved. San Francisco General was a busy, underfunded, inner city Hospital with a grand history, a remarkably talented staff and a serious lack of resources. I recall stashing antibiotic samples from pharmaceutical reps in my office drawer to meet the needs of patients when the hospital's pharmacy budget ran dry half way through the year. I spent hours in the darker recesses of Central Services scrounging for the bits and pieces of equipment necessary to make our pulmonary function laboratory functional. Small victories like finding the right piece of tubing or stopcock would make my day. Our radiology department contained decades of old films in dusty jackets and was so poorly staffed that physicians had to wander the stacks searching for needed old films. As often as not the searches were unsuccessful.

I must say none of these deficits or hardships made much of an impression at the time. Coming to work each day was a pleasure and an adventure. One thing we did have was an abundance of real estate. Tuberculosis was still a major problem in the inner city but the number of patients had declined over the years allowing us to repurpose some of the TB unit and create an ICU. It was in this unit that we began to learn about ventilators though there were not so many to choose from, and how to safely and effectively use them in the treatment of respiratory failure. After a brief trip to Los Angeles, John returned with a number of "floating" catheters acquired from Dr. Jeremy Swan. My experience with cut downs in the dog lab stood me in good stead as it would be several years before the availability of percutaneous insertion kits. One of most important lessons I learned from working beside John in the ICU was that as critical as excellent doctoring skills were, measurement and an understanding of physiology were equally vital in the care of the critically ill. In selected cases we floated catheters, measured pressures and flows and used the data to make inferences and arrive at understandings of why our patients were ill and how we might rectify their abnormal physiology. Who knew that in future years the zeal with which the Swan-Ganz catheter would be applied might lead to patient harms or, at least, not reach intended goals? Nonetheless, recognition of the importance of physiology in critical illness was a vital lesson John shared implicitly and explicitly until it became a way of thinking.

Observing John and working beside him in the ICU at that time, I arrived at another epiphany. I came to understand that his listening skills, humanity and compassion were every bit as important, if not more so, than his mastery of data. Although, or perhaps because he was the boss, he took ownership of each patient on our service, another indelible lesson in how one should care for patients. Reflecting now on those days at SFGH, I am so grateful for the privilege of working as John's fellow. I knew then that he would always be the yardstick by which I would measure the kind of doctor I hoped to be and the kind of doctors I would one day train.

All good things must come to an end and so they did for me in the second year of fellowship when I received a draft notice and the "opportunity" to apply for a military commission. John had surrounded himself with a close-knit group of bright and devoted workers and they provided me with great comfort and support. I was more than fortunate to parlay my experience at the CVRI and San Francisco General Hospital into a position as Assistant Chief and later Chief of Pulmonary Diseases at Tripler General Hospital, the "pink palace" overlooking Pearl Harbor in Hawaii. Upon my return from basic training in San Antonio where I had been joined by a number of former UCLA and UCSF residents, my family and I were met at the San Francisco Airport by members of the SFGH crew and transported, with mountains of luggage, to the Matson Terminal where we boarded the Lurline and hosted a monumental and memorable Bon Voyage as we said our goodbyes.

The opportunities John afforded me at the SFGH were of enormous benefit in developing a Pulmonary Laboratory at Tripler where the transition from fellow to faculty was a profound growth experience. I tried my best to model John's example as a bedside teacher. He was thorough in obtaining a history and meticulous and skilled in performing a physical examination. He was patient, encouraging and asked many questions of his students. He thought out loud so students could learn the art and science of clinical reasoning. He was gentle and kind and it was obvious that he loved what he was doing. Those lessons were the gifts John gave me and that I tried to pass on as I assumed the role of teacher. During my time at Tripler, one of the highlights was the opportunity to welcome John as a Visiting Professor.
His lecture was a classic John Murray endeavor, important, well organized, clear, erudite and eloquent.

After years of John's mentorship, I knew I could count on him for objective and sound advice. Months after the Internal Medicine Boards, I asked him if he thought I should take the Pulmonary Board examination. At the time few specialty physicians, even academics, had specialty credentials. John told me in no uncertain terms I should take the Boards. At that time there was no official requirement as to the length of fellowship training and John said he would endorse my candidacy. He correctly predicted that within a relatively short time subspecialty credentialing would become a specialty practice requirement.

I applied for the Board examination and with John's blessing (he was by that time a member of the Board) was accepted. In the fall of 1969 I travelled, once again, to San Francisco to, of all places, SFGH where I joined the eight others taking the examination. It was in two parts the first of which was the examination of a patient and presentation of the findings, x rays, clinical and pulmonary function data and pathology slides if available. My patient was a delightful and cooperative elderly woman with stage IV cavitary sarcoid with a large right upper lobe mycetoma. Yes, she had amphoric breath sounds in the right upper chest. Dr. Arthur Olsen of the Mayo Clinic was my examiner. When he finished my interrogation, I met with Dr. Attilio Renzetti of Utah. For an hour he peppered me with questions about pulmonary function tests, threw up x rays and asked me to interpret them (the most anxiety provoking was a normal chest radiograph) and then sat me down at a microscope and asked me to interpret a number of pathology slides. Finally, after 4-6 hours the entire ordeal was over. I returned to my hotel room exhausted. Once again, later that evening John called. On that occasion he wasted no time on preliminaries but, with a beaming smile in his voice, told me how proud he was and how well I had done in the examination. I was his first Board Certified Pulmonary Fellow. Since what was for me a memorable occasion, there have been legions of

fellows, among them ATS Presidents, Trudeau Medalists and Amberson Lecturers, who, with me, owe an unredeemable debt to John Murray. I can imagine nothing John would appreciate more than the knowledge that we are paying that debt forward.

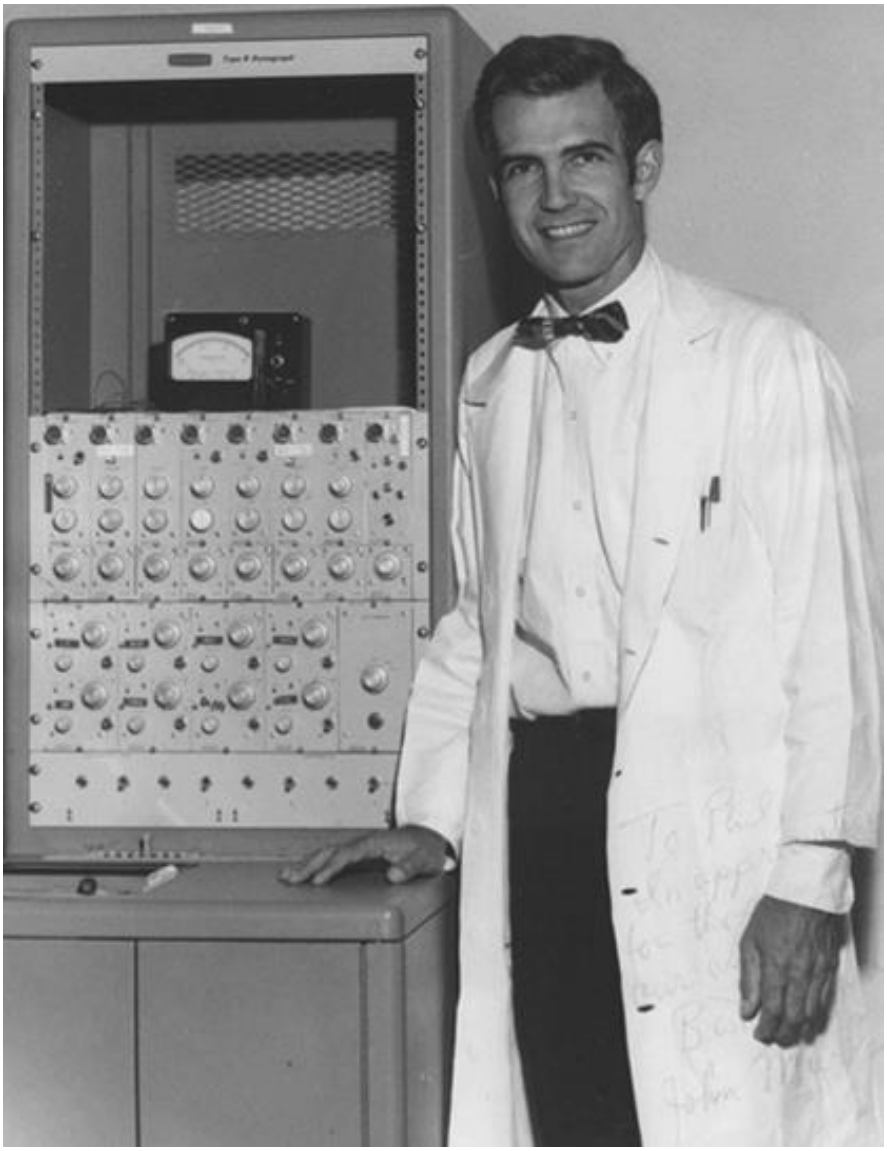
As my time in the army drew to a close, I knew I was better suited to the role of a clinician-teacher than that of an investigator. I had planned to return to the CVRI and begin a career in clinical research but it was time to rethink my future. As I had in the past, I turned to John for advice. It was an awkward conversation but John was gracious, thoughtful and clearly committed to my best interest. He agreed that my evaluation of my strengths was likely correct and supported me with valuable insights as I evaluated opportunities within the UCLA system. Ultimately I chose a position at the San Bernardino County Hospital. I knew former teachers and co-residents at the hospital and within the area but, most importantly, there was no pulmonary/critical care program there and I would have the opportunity to begin something of my own. It turned out to be another incredible opportunity for growth. At the end of my first year, having opened a pulmonary and blood gas laboratory and a six-bed respiratory care unit, I chose to celebrate with a day-long pulmonary symposium for the community. Ever supportive of my career, John and another excellent CVRI mentor, Jay Nadel, flew down from San Francisco and Dr. Ken Moser, a helpful friend and mentor drove up from San Diego. Together they presented a *tour de force* learning experience I will never forget.

John's mentoring duties did not end at that time. In fact, they never did. John had assumed a role in the California Thoracic Society and within a short time became CTS President. The CTS was the "medical arm" of the California Lung Association. John's goal was to secure more resources for research and education and he recruited a new breed of physiologically trained lung doctors while respecting and celebrating the contributions of the old guard of Tuberculosis Specialists. John's advocacy for priority change within the Lung Association was vigorous, consistent and ultimately effective. It presaged the ideas he would later sow as ATS President, a path which ultimately lead to ATS independence. John wasted no time and had no difficulty recruiting me into the CTS. As soon as I joined, he assigned me the task of developing a CTS educational program. With other young recruits we established the CTS Advanced Course in Pulmonary Disease. This was to be a small meeting with a narrow focus and an invited faculty of international reputation. It would last 2-3 days and, in addition to formal lectures in the morning and early evening, afford many opportunities for the faculty and attendees to share dining, skiing, conversation and ideas in an informal setting. Over the years pulmonary hypertension, cough, emphysema, ARDS and breath sounds were subjects we tackled. As important as these were, perhaps even more educational were the sessions during which participants would bring troubling and interesting cases along with x-rays and laboratory data to either stump colleagues or solicit thoughts and recommendations. These were held each evening after dinner and, for many were the highlight of the meeting. No doubt the venue of the Advanced Course at the Ahwahnee Hotel in Yosemite contributed to its success. Over time, the Ahwahnee increased in popularity and price, eventually becoming too expensive to continue the program. Needless to say, the opportunity John provided several young pulmonary physicians to develop an extraordinary educational program was priceless.

Over the years, though less so in recent times, John and I communicated by mail or email. I would look forward to getting together each year at the ATS meeting where we would fill each other in on our latest comings and goings and, as is the wont of those in their 80's and 90s reminisce. Happily, we had many fun and funny times to remember. In addition to teaching me medicine and science, early on John shared his passion for opera and fly fishing with me. That sharing I consider one of his greatest gifts. Whenever we would get together it was our ritual to share our latest fishing and opera experiences.

Throughout their careers, most professionals will have mentors some of whom serve either a particular or multiple roles. Listening, offering experienced advice, constructive criticism, moral or material support, serving as a role model, facilitating professional connections, providing opportunities and teaching life lessons are all within a mentor's job description. Relationships with mentors may be

short term or life-long. I was incredibly fortunate to have a mentor who, as he did with medicine, teaching, science, writing, editing and administration, took his role as mentor seriously and at the same time enjoyed it thoroughly. I wrote this piece as a tribute to my mentor of 61 years, Dr. John F. Murray, with the hope that those who read it and are in search of a mentor or are engaged in mentoring might know how critical that role may be and what the gold, I should say Murray standard is.



John Murray

John Murray 5th from left, Phil Gold 7th from left

CSRC Corner

By Krystal Craddock, RRT

2021 CMS Competitive Bidding Update

The Centers for Medicare and Medicaid Services (CMS) has announced that they will remove the addition of noninvasive ventilators (NIV) from the 2021 competitive bidding program. For the past several months, respiratory therapists and physicians had known of the possibility of NIV to be included in competitive bidding, which would have decreased access to these devices along with the expertise of a qualified respiratory therapist to manage them. Due to the challenging access of ventilators as a result of the COVID-19 pandemic, the American Association for Respiratory Care (AARC) directed a sign-on letter addressed to congress from 17 organizations, including the ALS Association, the National Association for Medical Direction of Respiratory Care (NAMDRC), CHEST/ American College of Chest Physicians, requesting to remove NIV in the next stimulus package prior to CMS' announcement (AARC, 2020). According to Anne Hummel, AARC's Associate Executive Director for Advocacy and Government Affairs, "If CMS had gone forward with its policy, it could have resulted in lower reimbursement rates and a reduction in access to both ventilators and the clinical support of respiratory therapists, resulting in a devastating impact on patient care and quality of life and an increase in acute care interventions" (AARC, 2020).

According to CMS, this decision was based on the novel COVID-19 pandemic, the President's exercise of the Defense Production Act, public concern regarding access to ventilators, and the NIV product category being new to competitive bidding (Medtechdive, 2020). The AARC, along with other leading healthcare organizations, have three years until the next competitive bidding cycle. This unfortunate virus has bought durable medical equipment (DME) companies, clinicians, and patients time before this device is brought in again as a competitive bidding possibility, but the fight is not over. The CSRC joined the AARC lobbying efforts last year, highlighting the devastating effect CMS' decision would have on patient care and access to needed clinical support (AARC, 2020). The AARC, along with the CSRC and other state respiratory care societies, continue to work with CMS to update coverage policies that reflect peer-reviewed science and advances in technology with the goal of improving our patients' access (AARC, 2020).

References

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