COMMENTARY

Who do I serve?

An address to the class of 2008 at the White Coat Ceremony* on October 11th, 2005 in the Faculty of Medicine - McGill University

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This talk is inspired by the story of Matthew about whom you will hear in a few moments.

This ceremony acknowledges a transition in your medical education: A rite of passage from the study of basic medical science in classrooms to new encounters with patients at bedsides and in clinics.

On choosing and being chosen

You are an exceptional group of women and men. In the style of praise we have come to know from Lake Woebegone one could say that all the men here are strong, all the women are beautiful, and being the children of your parents, you are, of course, all well above average.

You chose to study medicine I assume it was a matter of free will that led you to this choice, but what was your motivation to make it? Was it to serve your patients, or was it for the prestige of being a doctor, or to be blunt, was it for the money and the lifestyle? Did you have an epiphany of vocational passion and compassion, as described perhaps in your application essay to wherever it was sent, and will that essay make

While you made a choice and applied accordingly, you were also chosen. Many were called, but fewer were chosen to become members of the Class of 2008. Some of you may wish to question and evaluate the criteria by which the selection process operates, but having been chosen you are privileged; and as a result, you have acquired responsibilities: to yourself; to your family and friends who helped you to succeed; and also to your mentors -who have expectations of you.

At this stage of your life, you have chosen to acquire a body of knowledge about the illnesses and diseases from which your fellow human beings can suffer; in due course, you too will suffer from one or other of those illnesses and diseases. Therefore, it is fair to say that while they are conditions that undermine our wellbeing, the diseases also reveal the importance of our health. Accordingly, the good physician has two roles: one to diagnose, to explain and to treat disease; the other to listen, to heal the person with the illness, and to bring that person back to a state of health.

Life and now

"Life can only be understood backward but it must be lived forward." The philosopher Kierkegaard, whose aphorism this is, was echoing an enduring theme about life and its trajectory, equally apparent in a little folk rhyme: Yesterday is history, Tomorrow is a mystery; Today is a gift, and we call it - the Present. Whichever version you prefer, it refers to the gift of life in past, present and future terms. You have chosen to serve the present lives of your patients. Your encounters with those lives may primarily involve events around procreation, birth and childhood; or they may be

interesting and honest reading 25 years hence? A better question: Who will you serve all your days as a physician and in so doing, will you be true to yourself?

^{*} The White Coat Ceremony of McGill Faculty of Medicine is entitled "Donning the Healer's Habit" and pays homage to the late Dr. Joseph Wener, a cardiologist, internal medicine specialist, and a popular teacher. Faculty, students and their loved ones are gathered in a ceremony which focuses on the white coats, a symbol of compassion and patient care rather than power. The Ceremony takes place during the second year of the medical students' education at McGill Faculty of Medicine and marks their transition from being in the classroom to being in regular contact with patients. Dr. Charles Scriver was invited to give the keynote address at this Ceremony.

[†] Dr. Rita Charon, Keynote speaker at the White Coat Ceremony to the class of 2007, spoke about choosing and being chosen to study medicine; her address was titled "Levitation of Care". Her thoughts find echoes here.

encounters contained within the odyssey of an individual's lifespan; or they may be encounters mainly with the ending of a life.

Ever since humankind began to describe and record its view of life, for example in the Sumerian epic Gilgamesh, or in Homer's The Odyssey, we have been told that our mortality (call it death) is what makes life itself so interesting and important. In our profession of medicine, there is a counterpart to that awareness: it is disease and illness that make health so important. But life with disease is suffering, and if, as physicians, we do not address the suffering, we will have ignored the place of healing in our profession. Our medical expertise, no matter how extraordinary it may be, has assisted in only part of the journey back to health. Physicianship is a term that embraces both the fixing of the disease and the healing of the person. We use knowledge about the illness to understand its effect on health; we use compassion and empathy for the process of healing; and when we are complete physicians, we are also aware of the role that culture plays in our views of health and disease.

Poets have ways of saying things that get to the core of a theme. Here is one example - from TS Eliot (1):

Where is the Life we have lost in living? Where is the Wisdom we have lost in knowledge? Where is the Knowledge we have lost in information?

It has taken me a fair portion of my lifespan to appreciate the density of the messages in those subtle questions. When I graduated with my MDCM in 1955, I was full of information; I was very proud of it and I was probably arrogant. I know now that I had too little knowledge at the time and very little wisdom. I would have been better prepared as a physician if I had been more humble; the poet again had something to say about that (2).

The only wisdom we can hope to acquire is the wisdom of humility - humility is endless.

Mystery, illness and individuality

Life and its emergent properties, for example the assembly of the fetus in the womb, remain imperfectly known; there is mystery here. It would be well for physicians to recognize that there is mystery because we can then begin to appreciate the hold that disease and illness have on the emotions of our patients; and, if we are honest, on ourselves.

With our medical expertise we will diagnose and treat disease. If we do only that, we may forget that there is a patient who has the disease, and in the forgetting we will dehumanize our practice of medicine, and at the same time, erode the dignity of our patient and of ourself. The disease will become the object of our interest and the patient will only be an appendage. We can do better than that and physicianship will help us to do it better by seeing things differently, for example:

- It is a person, with an illness, who has come to you for help.
- The person with the illness, and the disease in the person, are not equivalent.
- Every person (every individual human being) has her or his particular form of any nominal disease or illness.
- iv. Good doctors know that each patient is a different person, that medicine is a science of the individual, and that to treat only the disease is to treat the patient as an object.

A famous medical anecdote illustrates these ideas: Coleridge, the poet, has already written his great poems such as Kubla Khan and The Ancient Mariner. He is famous, he is in his mid-20s and he is profoundly addicted to opium. Kubla Khan was composed in an opium dream. His friends notice deterioration in Coleridge's health, they fear for him, and they arrange for him to be seen by Caleb Parry, the great physician in the nearby city of Bath. Coleridge goes, Parry receives, Parry cures Coleridge's opium addiction within the year. When asked how he did it, Parry replies: I did not treat his opium addiction, I treated Mr. Coleridge.

If I were to name the chief concerns I have for you, citizens of the Class of 2008, among them, I would name depersonalizing those you have come to serve. You will be drowning in a sea of information. You will be swimming hard to keep up with evolving facts and technologies, and you will be struggling hard to keep up with practice norms and recurrent accreditation requirements. As a result, you may have too little time to listen to your patients, to let them tell you about their own mystery and worries. Somehow, your education, your personal view of life, your profession, and the society that sets the standards for your professional practices, must allow you the opportunity to practice physicianship. Yet, it is possible to keep body and soul in focus even under the most technocratic conditions. Let me illustrate with the story of Matthew.

Matthew's story

The story is told using terms you will learn in the clinical curriculum that lies ahead. The story is simplified for clarity.

Matthew was born on Feb. 24th, 2005, the second child of older parents. His life in utero was monitored by the full array of modern technologies. Nothing adverse was observed except for mild polyhydramnios. Amniotic membranes ruptured at 36 weeks and premature delivery occurred by cesarean section.

Matthew weighed 3.26 kg, a normal weight for the fetal age. Extrauterine life did not begin well; severe respiratory distress required immediate intubation, and congenital anomalies were recognized. An operation on the first day of life identified a tracheo-oesophageal fistula, segmental tracheomalacia, and atresia of the lower oesophagus. The fistula was repaired and the stomach joined to the existing oesophagus. Matthew survived. Post-operative monitoring confirmed suspicion of a cardiac problem and on the third day of life a second trans-thoracic operation was performed to repair his total anomalous pulmonary venous return and to close a large ventricular septal defect. Again -Matthew survived. Friends of the family were correct in applauding both the effectiveness of the anesthesia that made surgery possible, and the awesome surgical and medical expertise that rescued Matthew; in their lay language - it was "a miracle".

Matthew required assisted airway ventilation for various reasons, and because of his oesophegeal problem, it was not possible to feed him on his mother's breast milk by the normal enteral route. He was fed intravenously by total parenteral nutrition (TPN) - another neonatal technology. He gained weight and showed normal cognitive parameters. It was even possible for the parents to cuddle Matthew occasionally, despite all the tubes, monitors and attached equipment.

By the third week of life, it was impossible to ignore another problem. Matthew had chylothorax, probably due to anomalous flow of lymph, explained by extending the field of congenital anomalies to include the thoracic duct. A drain to the exterior was installed to prevent lung compression; and because of the drain, there was a portal for infection; serious infection occurred. Antibiotics were effective and again Matthew survived. Some of his caregivers began to call him "little cat with all those lives"; others referred to a series of "rebirths". Meanwhile, a large community of friends and family praying for Matthew recognized the Spirit at work.

Matthew's set of congenital anomalies might be explained by a single post-zygotic somatic mutation. There was no evidence for an inherited germ-line mutation or syndrome in this scenario. The parents were counselled accordingly.

The story continues. Matthew had received only TPN for his nutrition. TPN can be a poisoned chalice and some infants harboring unknown susceptibility alleles will develop a particular form of lethal liver damage. Matthew developed hepatic cirrhosis and TPN feedings had to be terminated. In the 5th month of life, a jejunostomy tube was inserted and enteral feeding with his mother's milk initiated by this artificial route, because it was still not safe to feed by mouth. All was

well, until the bowel perforated, perhaps because its structural integrity had been compromised early by the failure in utero to ingest amniotic fluid and thus condition the bowel. A reaction to the perforation set in and Matthew developed an Abdominal Compartment Syndrome where pressure compromises abdominal organ function and will cause death. The pressure was relieved by opening Matthew's abdomen and covering the gap with artificial material. Once again, Matthew survived. He was 5 months old.

How to feed Matthew without unhappy consequences became the ultimate awesome challenge. The difficulty was never overcome, his muscles to support respiration did not strengthen and a life connected forever to tubes, ventilator and catheters lay ahead. The family and caregivers chose to end his suffering and Matthew was taken home where for the last day of his life he was free of the technologies. He was held in the arms of his family where he died peacefully.

And who is Matthew? Matthew was our grandson who lived and died in Adelaide, Australia. My wife and I have contemplated again and again the little life of Matthew, all 7 months of it, minus one day, spent in an intensive care unit. Matthew became a hub for physicianship and intensive care. Matthew became the maker of links between the members of his extended family who came from different places on Planet Earth to be with him in Adelaide. Matthew was the sum of us, of the parents who made him, of the grandparents who made his parents, and so on back through the generations; Matthew in life and death is the sum of us all. His role on Earth, has been to make that sum much more than a bit of biological arithmetic and in so doing to bring out the best in expertise and compassion in all those who cared for him.

And what is the role for grandparents who fly half way around the world to be with grandson and family - day after uncertain day. My wife and I discovered the wisdom in Milton's sonnet on his own illness (3); we became aware that: They also serve who only stand and wait. Just being there, we discovered, was - to serve.

Matthew's story has multiple references to being reborn, an unmedical term but perhaps allowable when the person is an infant recently born and rescued back to life. Here, the term reborn implies there was a death or near death, as there would have been had there not been remarkable medical and surgical expertise and intervention.

To return then to the theme of an odyssey in life's journey; where there is a birth, a life, and then a death. You will have noticed that a death gave you the cadaver from which you learned some anatomy. Indeed that person gave you a gift of his or her body at the beginning of your education in medicine. From

another viewpoint, we have each been born and we have survived that perilous journey that began in the union of two haploid genomes. With the awareness of our own odyssey, of the journey, and of the end that comes to all of us, we are privileged to know about the gift of Life. And as I said earlier, with privilege comes responsibility. Each one of us will meet those responsibilities, and experience an odyssey, in our own individual way. Nonetheless, there are but two ways to approach the end, as was the case with Matthew; in one, we move on into eternal, ethereal life after this one ends; in the other, we return to the void from which we came. In each case, we did experience Life - a privilege never to be known by the inanimate objects of the universe from which we were made.

Whichever view I may hold about my own odyssey, I can still enrich my life and that of my patients, and of all other persons known to me, by making my life and their lives as meaningful as possible. In its simplest form, it can be done by being kind to others, to all living creatures and to life on Earth; and by opposing bad things; and in the physician's case, by healing the suffering associated with illness and disease.

This essay has the title: Who do I serve? Several types of service exist in this room at this moment: Service in medicine: to patients, families and communities. Service in education; to you and to the lifelong students that we are. Service in research: to the knowledge of tomorrow's medicine. Service to the unknowable: to the mystery of Life and Self.

Envoie

I mentioned my lack of humility when I graduated with my own medical degree. When I joined the faculty of McGill University some years later, I became aware that my life had to be lived forward and I became more humble because of the responsibilities I now had to family, myself, and my new appointment. I was also aware of global contexts which for you today are particular, and which for me then included the Cold War, the nemesis of nuclear war, the social crimes of

segregation and poverty, the emerging war in Viet Nam and the assassination of a President, among other things. I needed a moral guide and I found him in the person and writings of Thomas Merton, a cloistered Trappist monk. He reached across denominational boundaries and cultures and touched people like me. Merton kept a diary and in it he describes an epiphany he experienced en route to an appointment with - his physician. He wrote (4): "At the corner of Fourth and Walnut, in the center of the shopping district, I was suddenly overwhelmed by the realization that I loved all those people, that they were mine, and I theirs, that we could not be alien to one another even though we were total strangers. It was like waking from a dream of separateness ...". Merton goes on to describe "those people" in all their diversity and individuality, and ends with this extraordinary insight: "And if only everybody could realize this! But it cannot be explained. There is no way of telling people that they are all walking around shining like the sun. "

As I stand here, and gaze at you, I see extraordinary men and women. What is there to say to you, as you go forth to meet your patients, except this: Remember your humanity, listen to your patients, explain their mysteries to them, be kind, love your fellow beings, be informed, be humble and wise - and shine like the sun.

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REFERENCES

- Eliot TS. Choruses from 'The Rock' in The Collected Poems 1909-1962. Faber and Faber. London, 1963. p. 161.
- Eliot TS. East Coker: Four Quartets in The Collected Poems 1909-1962. Faber and Faber. London, 1903. p. 199.
- Milton J. from the Sonnet On His Blindness.
- Merton Th. Conjectures of a Guilty Bystander. Image Books, Doubleday. New York, 1968. p. 157-158.

Dr. Scriver is currently Professor Emeritus of Pediatrics, Biochemistry, Biology and Human Genetics in the Faculties of Medicine and Science at McGill University and Alva Professor Emeritus of Human Genetics. Dr. Scriver received his M.D.C.M. degree from McGill University in 1955. He completed residencies in both medicine and pediatrics at the McGill University teaching hospitals and the Harvard University Children's Medical Centre, respectively. He first became interested in human genetics as a McLaughlin Travelling Fellow at the University College Hospital Medical School's Human Metabolism Unit. Throughout his career, Dr. Scriver has been President of many Societies devoted to scientific research in pediatrics and human genetics, including the American Pediatric Society (1995) and the American Society of Human Genetics (1987). He has also been actively involved in many other organizations such as the National Academy of Sciences, the World Health Organization, and the American Association for the Advancement of Science. Dr. Scriver was Director of the Medical Research Council Group in Genetics (until 1994) and co-Director of the Canadian Genetic Diseases Network (until 1997). His current research focuses on, among others, the human genetic and phenomic variations at the PAH (PKU) locus and new ways to treat genetic diseases. Dr. Scriver has over 600 publications.