

COMMENCEMENT 2015 THE PROMISE DEAN DENNIS S. CHARNEY, MD

Mount Sinai Graduates will use their talents to provide an unprecedented quality of medical care, scientific investigation, and public health that will cure today's incurable diseases through innovation, creativity, and an indomitable spirit, thereby turning Promise into Reality.

Welcome to the 46th Commencement of the Icahn School of Medicine at Mount Sinai.

Family Members, Trustees, Faculty, Alumni, and Honored Guests; Today we celebrate the Class of 2015, who, I predict, will provide the leadership needed to move Medicine and Biomedical Science toward a global health care system that provides exceptional healthcare not only to all Americans, but to disadvantaged people throughout the globe..., and to make fundamental discoveries in the laboratory and in the clinic resulting in more precise, personalized care, leading to cures of the most serious diseases that plague mankind.

This is a tall order. What evidence do we have that the Class of 2015 have the strength of character, the creativity, and the indomitable spirit to accomplish these goals?

TODAY'S GRADUATES:

- Founded the Progressive Health Partnership, a non-profit that addresses issues of maternal and child health in Uganda.
- Established new initiatives Studying Race and Racism in Medicine and Health.
- Developed the Human Rights and Social Justice Scholars Program that has become part of our culture at Sinai.
- Organized a research site in Nicaragua to study renal disease in the local farmers.
- Identified novel therapeutic targets that can promote resilience to stress.
- Conducted groundbreaking research on the most dangerous emerging pathogens, such as Ebola, leading to novel therapeutic insights.
- Investigated cancer with induced pluripotent stem cells leading to a new model for studying inherited cancer syndromes.

Clearly, as a group, your accomplishments are impressive. But with these, my parting words to you, I wish to speak of the work that remains to be done.

GRADUATING PHYSICIANS, DO YOU HAVE WHAT IT TAKES TO BECOME A GREAT DOCTOR?

- When all the treatments have failed, when the disease cannot be conquered, when your patient looks to you in the eleventh hour, in that world with no answers, what will your answer be?
- When the pain and suffering of your patient's family becomes your own, will your clarity of thought abandon you? And when the years pass and you begin to become immune to that pain and suffering, will you have the mental fortitude to overcome this natural tendency?

GRADUATING SCIENTISTS, DO YOU HAVE WHAT IT TAKES TO BECOME A GREAT RESEARCHER?

- Will you have the creative intelligence to come up with ideas that no one else has thought of?
- And when your greatest insights are first ridiculed, then violently opposed, will you stay the course and arrive at the third and final stage that Schopenhauer teaches us all truths must pass, that of universal acceptance?

Let me tell you the story of a patient that illustrates the challenges you will face as physicians and scientists.

Josephine Julia (Jo Jo) Daly was born on September 16, 2014. She was the second child of two loving parents, Meredith and Neil, two sets of doting grandparents, and an army of aunts, uncles and cousins eagerly awaiting her arrival. She had a 2-year old sister, Alexandra, who could not wait to have a roommate. Meredith's pregnancy and Jo Jo's delivery was uneventful. Jo Jo weighed in at 9lbs 1oz.

However, shortly after birth, Jo Jo developed a respiratory distress syndrome and after some diagnostic uncertainty was diagnosed with a very rare form of surfactant deficiency caused by a mutation in the ABCA 3 gene, one inherited from each of her parents.

It was devastating news.

Effective treatment options of this disease are essentially nonexistent. Systemic Corticosteroids and Hydroxychloroquine have limited beneficial effects. Lung transplantation is the only definitive treatment option, but is highly problematic in young infants. The majority of infants with severe dysfunction of ABCA 3 do not survive beyond 3 to 6 months of life.

Everything possible was done to save Jo Jo's life. Her parents showed incredible resilience – were always by her side, loving her. She received exceptional, compassionate care by the NICU staff.

Her physicians initially tried the standard therapeutic options. None of them worked. They engaged researchers using advanced bioanalytic methods to repurpose approved drugs. Again it did not work. They contacted pharmaceutical companies to get access to drugs in development – to no avail. They refused to give up until the very end.

Josephine Julia Daly died on January 6, 2015. SHE NEVER LEFT the hospital.

- She had Big BLUE EYES
- Her Mind was PERFECT
- Her Smile was MAGNETIC
- · Her Dad sang songs to her, playing his ukulele each night

She donated her organs to save others.

"Like a perfect flower, that is beyond your reach, gone too soon".

She was my granddaughter.

As Dean, I was able to engage many friends and colleagues to help save Jo Jo.

We knew the gene.

We enlisted innovative scientists.

We had doctors thinking out the box.

We ran out of time. We could not save her.

Class of 2015, why did I tell you our story?

For you to make PROMISES.

GRADUATING PHYSICIANS:

Promise me you will to be the leader your patients and their families need. Guide them through the darkness of their illness toward a meaningful recovery or a dignified death.

Promise me you will think outside the box when all else fails.

- Be prepared to move beyond the standard treatment algorithms.

Promise me you will lead the revolution in precision and personalized medicine. Take advantage of discoveries in genomics, immunology, and molecular biology that will pinpoint specific novel treatments for individual patients.

GRADUATING SCIENTISTS:

Promise me you will be Bold.

Promise me you will Challenge Convention.

Promise me you will take Risks, and learn from Failure.

It is not enough to publish papers in top journals and be awarded highly competitive grants.

Just not enough.

Your goal needs to be to make discoveries that allow those that die today, to live TOMORROW!

MY GENERATION OF PHYSICIANS AND SCIENTISTS HAVE NOT FULFILLED OUR DREAMS.

We dreamt of that world where each individual had a fair shot to thrive from infancy into old age. Instead, we have a world where in many cases the treatment for the disease is known but the patient does not have access to it! A world where too many of our patients are still dying from cancer, heart disease, and mental illness. A world where many times we know the genes causing disease, but cannot fix them.

Martin Luther King, Jr. delivered a sermon, "Unfulfilled Dreams", on March 3, 1968, a month before he was assassinated.

You should read it.

In the sermon, Dr. King preached from the eighth chapter of first Kings and talked about its "cosmic significance because it says so much in so few words about life".

He tells the story of King David, whose dream to build a great temple was left unfulfilled.

He tells of the shattered dreams of Mahatma Gandhi, whose life of nonviolence ended with an assassin's bullet.

Perhaps Dr. King was reflecting his own fear that he would not see the fulfillment of his own dreams.

For Dr. King, the disappointment of shattered dreams was made bearable by "a voice crying through the vista of time saying, "It may not come today or may not come tomorrow, but it is well within thine heart. It is well that you are trying. You may not see it, the dream may not be fulfilled, but it is just good you had the desire, the intention, to bring it to reality. It is well that it's in thine heart".

Class of 2015, I know it is in your heart and mind to pursue great dreams. Stand on the Shoulders of our generation so you can turn these Promises into Reality.