# **Pathways of Promise**

#### **Promise? Please!**

It was a perfect evening, warm and balmy as we sat on the lawn awaiting the fireworks.

Chair after chair sat upon blankets, except one, which wrapped a young woman who had joined us for a special evening. She looked stunning in a lovely dress appointed with a silk scarf. She donned a jacket, though the evening was warm, but we understood, as her hair was gone and she had become slighter. For you see, the chemo and radiation were at work.

People stared, caught unaware by the sharp contrast between the beauty of her smile and the smooth contours of her scalp. Her spirit was indomitable and her determination intense. A little chill would not deter her from enjoying the 4th and the simple pleasures of potato salad and ice cream.

Twilight had arrived and the first twinkles emanating from the stars had emerged. As I looked to my left, there she was: bundled in that blanket, hand in hand with the friend who makes her happiest, staring up at the sky, smiling, gazing and wondering.

I froze this moment in my memory: What could she be thinking? "Will I get better? What lies ahead? What path will my disease take? Can I just be like everyone else? Promise? Please!"

#### A hearty welcome

Good afternoon!

It remains a privilege to welcome you to this year's Convocation and Investiture Ceremonies. It is wonderful to have so many members of our community come together as we mark the opening of another academic year.

Martin Meehan, the president of our University System extends his warmest regards. His constant support and advocacy for our medical school is much appreciated.

Let me add a warm welcome to Patrick Muldoon and all of our colleagues from UMass Memorial Health Care and our other teaching affiliates.

It is so special to welcome those who have been so generous to our institution. Your philanthropic support provides much needed resources and confidence to all that we do.

## Heartfelt challenges

We come together at a challenging time for our country and our world. In our local communities, across our nation and in places beyond, both near and far, there is uncertainty; violence; a deepening divide of income inequality amongst those who prosper and those who benefit little from economic conditions; and racial tension. These challenges should create concern for all who care about the human condition and the dignity of each person.

Health care disparity is too prevalent. A person of color who has pain may not receive adequate relief, or any relief at all. Children who are poor have only a marginal chance of proper immunization. Food insecurity stifles learning and the economic wellbeing of the many it afflicts. The poor elderly are lonely, without access to necessary and adequate services, and have mortality that carves years off their lives.

It is not comfortable to recite this litany or to grapple with the challenges that exist within our midst.

Our pipeline efforts are vigorous but not sufficient to assure that we can attract and enroll those who are underrepresented in medicine, nursing and science so that the learners and patients of our community can see their faces in those of our learners, educators and caregivers.

Our recruitment efforts are sincere but not sufficient to bring diversity to our faculty, staff and student body.

Our welcoming efforts are genuine but not sufficient to assure that those who are underrepresented in our community thrive and desire to remain with us.

We are not immune from unconscious bias. We share this frailty, even as we intensify our efforts to recognize this reality and inform our actions.

I am encouraged by the efforts of the Executive Council who have developed a 10-point plan to address issues related to those who are underrepresented minorities in the academic health sciences; and by our willingness, now, to embrace this report and to work together to address the issues with diversity and inclusion on our campus.

I am heartened that our students care deeply about these issues and call us to action, gather us as a community, and constructively embody their resolve to care for and about those who may be disconsolate, disenfranchised or affected by disparity, however manifested.

I am confident that the leaders and members of our police force perform their duties with understanding and valor to the benefit of us all.

I am grateful for the efforts of Dr. Deborah Plummer and her colleagues in the DIO for their competence, readiness and determination to help us achieve our earnest goals.

I was so proud to celebrate the 20th anniversary of the Worcester Pipeline Collaborative and to welcome so many members of our local community to recognize the work of Dr. Deborah Harmon Hines, Robert Layne and their colleagues for all that they have done to interest and engage our communities' students from underrepresented backgrounds in careers in science and medicine.

I am so pleased that we have recruited to our School of Medicine the largest class in our history with the largest presence of those who are underrepresented in medicine.

I am delighted to welcome our new chairs Drs. Shlomit Schaal and Mark Johnson as well as those faculty members who have received promotions to full professor or who have been awarded tenure.

I am resolved that we can and will work together as a community to be fair, just, inclusive, diverse and understanding. This I promise!

# Gratitude and pride

There is so much that is special about this health sciences university!

We should take great pride in being the first medical school in our Commonwealth to heed the call of the Governor and respond by creating an Opioid Conscious Curriculum and then, for assuring that each of our recent graduates benefited from this educational experience.

We express gratitude to our colleagues at Commonwealth Medicine for their extraordinary efforts to partner with those in government, both at home and elsewhere in the nation, as well as around the world, to maximize the resources available to care for those in greatest need; and while so doing, to provide our university with much needed resources.

We are impressed by the efforts of MassBiologics to continue the development of therapeutics to benefit mankind and for their successful initiation of vector manufacturing at their new Fall River facility.

Our health care system partner, UMass Memorial Health Care, has been so ably led that the needs of the patients in our communities can be better served. The fiscal health of the system has greatly improved allowing for increased investment in the school, in systems and in capital, all bettering the system's ability to respond to patient needs.

We are so fortunate that our faculty share their talents and international renown to bring more than \$280 million in research awards to our campus, bringing us to a top quartile national ranking in National Institutes of Health funding amongst American medical schools.

How great is it that more than 60 percent of our graduates are entering primary care specialties and that such large numbers of our students match for their residencies at UMass Memorial or remain in Massachusetts.

Special mention should be made of all the efforts that were expended by Dr. Mariann Manno and all who participate in the admissions process to allow us to increase our class size and admit outof-state students to the School of Medicine.

We are most appreciative that Cape Cod Health Care has become an affiliate and has welcomed our third year students, providing them with an outstanding clinical experience.

In an extraordinary way, appreciation is directed to Dean Flotte and his education colleagues for all of their efforts to create a regional campus in collaboration with UMass Amherst and Baystate Health in Springfield. We welcome Dr. Andrew Artenstein, our new regional dean at Baystate, to today's ceremony. The efforts of so many have resulted in our receiving LCME and NEASC accreditation and, now, to be in the position to enroll the first cohort of students who shall experience the specialized track focused on Population-based Urban and Rural Community Health at Baystate Health.

Our university is so pleased to have welcomed the Veterans Administration and our VA colleagues to our campus as we have partnered to provide primary and specialty care for those who have so ably and willingly served our nation. Bob Jenal, Jim Leary and their colleagues expended considerable effort to accommodate our facilities in response to the needs of the VA and to prepare a Request for Proposal document that, hopefully, will entice the VA to partner with us to build an ambulatory care facility on our campus so that we can provide even greater service to veterans in need of access to care in our community.

Each of these efforts represents a pathway of promise that bolsters the reputation of our institution and creates opportunity for a brighter future as we fulfill our mission of serving the Commonwealth and beyond.

#### **Chancellor's Medals**

Now, I am pleased to present this year's Chancellor's Medals. I am grateful for the stewardship of the selection process by Provost Flotte and for the leadership of the committee chairs and members who have forwarded to me the finalists who have been nominated for the medals in each category. It is a great honor to have become a finalist and I congratulate all those who have received this recognition. Please know of my admiration to our entire faculty who bring such a seriousness of purpose to their academic endeavors.

#### **Chancellor's Medal for Distinguished Teaching**

Caring, consummate, empathic, excellent, innovative, modest, novel, passionate, and unique are all qualities that have been used to describe the personal attributes of this year's recipient of the Chancellor's Medal for Distinguished Teaching. Dedication, encouraging, fortunate, genuine, incredible, invaluable, mentor, model, and steadfast are all characteristics that have been used to describe the relationship this year's recipient shares with learners. It is a distinct privilege to

recognize this year's recipient of the Chancellor's Medal for Distinguished Teaching, Dr. David Hatem.

Dr. Hatem, you begin your statement of Teaching Philosophy as follows: "Teaching and learning are personal, learning is a relationship ... Teaching means sharing knowledge, great teaching means sharing oneself." Our medical school is greater because of your personal commitment to teaching and learning; our learners have benefited greatly because you have dedicated yourself to their education.

Over nearly three decades at our institution, you have been the embodiment of distinguished teaching. Both architect and builder, you have played a formative role in the development and design of our curriculum while co-creating the learning communities that have become such a meaningful experiential locus for our learners. In fact, you have elevated mentoring to an essential and prominent paradigm in the lives of faculty colleagues and students alike.

You have been described as "composed" and "collegial." Engagement infuses your teaching. Enthusiasm imbues your efforts. Exceptional effort instills your commitment and example.

Respect embraces you as you have grasped the mantle of mentorship for your students. As a "pillar of support" you are known as a "role model; ...as a physician; ... [and] as a mentor and person as well." "Approachable, insightful and "encouraging" you are a constant and consistent support to all those who rely upon you for mentoring. As this is a gift both given and received, many have benefited from the richness of your talent and commitment.

Your influence extends beyond the borders of our campus. You have served as president of the American Academy on Communication in Healthcare and as president of the New England Region of the Society of General Internal Medicine. You have been recognized repeatedly as an outstanding educator and your commitment to learners has resulted in outstanding research "contributing to the theory, practice, and teaching of effective health communication and related skills."

As a clinician who cares deeply for and about his patients, you have been a model for educators and learners. Most of all, your personal interactions become a "positive force advocating for the best interests of students, patients and our [institution]."

David, as a fitting recognition for the recipient of this medal, you have been awarded *The Manning Prize for Excellence in Teaching*, and a \$10,000 stipend emanating from the generosity of Donna and Trustee Robert Manning, that is annually presented at each university in our UMass System to recognize excellence in teaching along with exemplary dedication to students and the campus community.

Furthermore, I invite you to present this year's Last Lecture so that our community can benefit from your example as all of us become your learners. Please accept my congratulations as this year's recipient of the Chancellor's Medal for Distinguished Teaching.

## **Chancellor's Medal for Distinguished Scholarship**

A reputation for exceptional and fundamental discoveries defines outstanding achievement in research. The recognition that such a reputation can bring to a scientist and our institution is noted each year with the presentation of a medal for distinguished scholarship. "Long distinguished and unparalleled" are words that have been used to describe the research conducted by this year's medal recipient. It is a privilege to introduce this year's recipient of the Chancellor's Medal for Distinguished Scholarship, Dr. Steven Reppert.

Dr. Reppert, you have "made seminal contributions to our understanding of the physiological, cellular and molecular basis of circadian rhythms, a burgeoning area in the biological sciences." You defined the "field of fetal circadian clocks in rodents. These remarkable studies showed that the master circadian clock ...begins to tick *in utero;*" in fact, you have shown that the mother provides their offspring with "neuroendocrine time clues." Later, "you defined the molecular nature of a family of G-protein coupled receptors for the pineal hormone melatonin." This work "opened the field of circadian neuroendocrinology, rendering [it possible to manipulate] the pineal-hypothalamic axis in ways previously unimaginable." "In unraveling the cellular and molecular basis of the circadian clock mechanism," your laboratory has been described as a "juggernaut."

A "true breakthrough in the [field of] mammalian rhythms" was discovered by you when you identified "two novel factors, CRY1 and CRY2, in the mammalian clock that are not seen in model systems." "Understanding the molecular clock has already revealed how some clock gene mutations contribute to disorders of sleep timing and could illuminate the involvement of clock gene mutations in neuropsychiatric disorders, like major depression and seasonal affective disorder."

More recently in your career, you "pioneered studies of the mechanisms behind monarch butterfly migration and [you have] used ...butterfly research to inspire and educate the public." "In a spectacular series of studies, [you have made] huge inroads by identifying the sensory world of the monarch butterfly, the redundant cues they use to find their way to Mexico for overwintering, and the stimuli that trigger diapause and the eventual return migration to the North."

Within each of your several areas of research—the development of mammalian circadian rhythm; the elucidation of melatonin receptor structure; the explanation of circadian clock mechanisms in insects and in mammals; and the definition of sensory mechanisms underlying monarch butterfly migration—you have achieved international renown. In fact, you have been described as "THE world leader in molecular neurobiology."

Steven, it is a pleasure to invite you to present the plenary lecture at this year's research retreat. This is a fitting recognition for one who has accomplished so much in science and who has served our institution with distinction. Please accept my congratulations as this year's recipient of the Chancellor's Medal for Distinguished Scholarship.

## Chancellor's Medal for Distinguished Clinical Excellence

In each and every encounter with a patient, a physician is accorded the privilege to affirm that person's human dignity. Over a lifetime in medicine, clinicians meet countless patients, but those who excel in our profession combine their professional knowledge with exceptional personal attention to the benefit of their patients. This year, it is a privilege to recognize a clinician who is a master of the science and art of medicine and who has always seen it to "Be worthy to serve the suffering," Dr. David Drachman.

Dr. Drachman, yours has been a most distinguished career. As an internationally recognized neurologist, you have made seminal contributions to your specialty, our medical school and the clinical system. You were the founder of our Department of Neurology and served as its chair for 25 years. Your clinical and scientific contributions are inspiring. You are a "co-author of the single most extensively referenced paper in the entire neurological literature, on the criteria for the diagnosis of Alzheimer's Disease." In fact, it "has been cited more than 24,000 times." Additionally, you organized the formation and secured approval for the UMMS chapter of Alpha Omega Alpha and have served as its councilor for 19 years.

But it is the excellence of your commitment to patients for which we recognize you today. In fact, the AOA motto "Be worthy to serve the suffering" defines your career. In your own words, you always "wanted to be a ;fixer: the person who could take apart a broken clock and make it run; someone to be called when anything went wrong." You "set the values for your colleagues" but, most importantly, you lived them as you applied your extensive clinical skills.

You were known as the physician to consult when all others needed answers. Your patients have sought you out because they knew that something was wrong. You listened intently. You cared deeply. You examined thoughtfully. You diagnosed expertly.

When a patient "could not properly hear music," you determined they suffered from a "stroke which resulted in 'amusia."

When a patient journeyed to Massachusetts because they were "dealing with a poorly controlled seizure disorder, quite literally ... [you] transformed [their] life."

When the patient had "back pain ...with strokes; [or] carpal tunnel syndrome that disturbed sleep; ... or had Alzheimer's disease... [and] emotional and behavioral problems that troubled family members" your care did not cease once the diagnosis had been made.

In your own words, "the ability to serve as a devoted 'fixer' for human medical problems has been the focus of my life as a physician...assuring that in my hands, and in those of my colleagues, patients would always receive the best possible medical, personal and scientific care."

David, I invite you to speak at next year's White Coat Ceremony, an appropriate recognition for a lifelong commitment to your patients. Please accept my congratulations as this year's recipient of the Chancellor's Medal for Distinguished Clinical Excellence.

#### **Chancellor's Medal for Distinguished Service**

Imagine a career fulfilled by a profound commitment of service to others. Imagine further, that this service made such an impact that the lives of generations of patients and clinicians in many communities will be improved. It takes no imagination to recognize the influence an individual can have on an institution and in this instance, to recognize a colleague who has served with distinction and who merits the recognition and appreciation of us all, Dr. Deborah Harmon Hines.

Dr. Hines, your service is distinguished in so many ways. You have "been recognized as a leader in promoting diversity in education and in medicine in regional, national [and international] arenas." You have mentored "individuals from disadvantaged backgrounds and groups underrepresented in medicine" and you have a created a pipeline to motivate our communities' youth to recognize that the pursuit of careers in science and medicine can become the conduit through which lives can be transformed. Our institution is grateful for your "wisdom, patience and time."

You have impacted the lives of thousands of students, many of them first generation students and many more underrepresented in science and medicine. Through your mentoring and instruction, each of your students "felt like [you were] speaking directly to [them] as [you] described the sacrifices it takes to get into medical school." Your message has provided your students "with the direction required to see [their] dream [through] to fruition."

Many of those on whom you have had a major impact comment that you recognized their "struggle" and in so doing, "focused on the strength [that they] gained from [their] individual hardships." Indeed, your keen interest recognized "potential and nurtured that goodness; fostered...character;" and built on ...strengths." Success was no longer seen as a hope; success became an expectation!

It is said by your mentees: "Those of us who know Dr. Hines know that she does not pull punches or withhold criticism that is constructive and can help build character. She taught ...us how to make appropriate eye contact. She taught ...us how to be more assertive. She taught us to always pack ...two handkerchiefs, one for decoration and the other in case someone sneezes."

In our community, for the past 20 years through the Worcester Pipeline Collaborative, you have helped us to forge "an enduring and highly successful partnership with the local Worcester community, K-16 educational institutions and business partners. Nearly 1,000 students have matriculated through your programs as we have "strived to prepare underrepresented and economically disadvantaged students for health science careers in technology, research and the health professions." Similarly, our institution's outreach programs have attracted thousands in the High School Health Careers Program and a College Summer Enrichment Program. Well done!

Your "candor and compassionate spirit" have been demonstrative of a "positive role model and qualities" which have inspired and motivated students and contributed to their "continued growth and educational development." As a "champion of diversity and equality in medicine and education, [you have] constantly [taken] steps to provide opportunities and guidance to those who …otherwise might not [have had such good fortunes]."

Deborah, in recognition of your career-long service to our students, our community and our institution, in the year ahead I invite you to carry the mace at all university functions. This honor is reserved for one who has given such extraordinary service. Please accept my congratulations as this year's recipient of the Chancellor's Medal for Distinguished Service.

## "The Research University in Today's Society"

In a speech entitled "The Research University in Today's Society" that Gerald Chan, a renowned intellect and investor, presented at University College, London in July of this year, Dr. Chan spoke of the importance of universities and philanthropy. He made the case that great universities become so when they are able to benefit from a public-private partnership of support.

He stated, "The university now has a new identity as the locus of knowledge generation... The research function of universities also makes them the engine of progress in today's society...There is no doubt that university research is now the most powerful impulse for human progress ... With innovations come jobs and strength of the economy ... If the research function of the university produce[s] innovations, it is the educational function of the university that produces the human talent that will sustain innovation as well as translate innovation into tangible benefits for society."

He went on: "Because of the broad sweep of the university's purpose, the university is made up of contradictions and it lives with contradictions. It is at once practical and impractical, pragmatic and romantic, perhaps even quixotic and utopian. It is a place of convergence at times and divergence at others. The university offers a perch of aloofness from society; it also offers an avenue for engagement with society. A university is a large collective enterprise, yet scholarly research is an intensely personal journey. Like all large organizations a university has to balance its books but cannot be all about efficiency; it has to have planning but must also leave room for randomness and unplanned morphogenesis. We teach students to solve real world problems respecting constraints, but we also encourage them to cast off all restraints and do the hitherto unthinkable. A unique creature in human society, the university must not become monolithic in purpose, in conviction, in its constituents, in the time horizon of its endeavors, in the fields of study and in the methods of inquiry."

He concludes with the following premise: "In order to preserve the richness that comes with diversity and contradictions, the university must have adequate resources...Higher education is not cheap; what is more expensive to society are the consequences of not supporting its universities...An endowment is a statement of society's commitment to support the university.

"Each donation is a reaffirmation by someone that the university is worthy of support. In a democratic society, governments come and go, and government priorities come and go, but a properly managed endowment endures. While the university is being tossed to and fro by changing governments and changing policies, the endowment serves as ballast to the ship...Among the innumerable causes worthy of philanthropic support, I reckon that supporting universities has the greatest leverage in the sense that benefits will be most broadly dispersed and most lasting in time."

Dr. Chan's keen insights bear much relevance to our health sciences university. We find ourselves at a crossroads. The knowledge generation that exists within our midst is extraordinary. The economic impact that results from our activity is transformative to the economy of our region. The educational and scientific initiatives of this university are at the leading edge of innovation.

Ours is a unique university in the University of Massachusetts System and its richness must be preserved. But that richness is at the cusp of the contradiction explained by Dr. Chan in that the resources necessary to sustain our mission are neither adequate nor evident. What we do is not cheap and the consequences of not supporting our university are expensive!

At times, in recent years, I am certain that it has felt as if we were being "tossed to and fro by changing governments and changing policies." So it is and so it must change.

We have worked diligently to introduce greater efficiency and effectiveness into our daily activities. We have extended our reach to the other universities in our system and in our community. We have slowed our growth and appealed to the government to provide additional support. These actions have produced modest results and shall continue with greater effort.

That said, I do not believe it prudent to expect others to provide stability or to solve our problems. In the years ahead we shall endeavor to partner with those who are generous to provide us with the ballast to help us traverse these rocky shoals.

#### The Pathways of Promise

Today, I am pleased to announce the public initiation of a comprehensive campaign that shall identify much needed resources to support all that is great about our health sciences university. In so doing, we shall highlight the many attributes of our university and, ask others to join with us to preserve its greatness and to assist us to reach ever greater heights.

In recognition of the many ways in which we can benefit society and fulfill our mission to transform the lives of those for whom it is our privilege to serve, we endeavored to create and enliven a theme for our campaign as together. We worked to define our university's academic and research enterprise and to explain why our enterprise is worthy of donor support.

Pathways of Promise emerged as our choice. Much more than a campaign slogan, this phrase shall become our rallying cry that celebrates the accomplishments of our community and reaffirms our commitment to the mission of our university.

This \$250 million comprehensive campaign shall identify resources to assist us to make necessary investments in research, teaching and learning, and global and community health.

Our campaign began, silently, on July 1, 2012, and with the great support of our faculty and generous donors, we have exceeded \$150 million in gifts, pledges and the support of corporations and foundations. Our faculty have worked tirelessly to attract financial support for their research efforts from non-governmental sources and, in campaign counting convention, these funds have been included in this achievement.

That said, as we look to the future, we shall strive to identify gifts that can help us to transform our efforts and be transformational for our health sciences university. We have worked this spring to establish worthy priorities in these three mission areas and we shall embark on the public phase of our campaign to identify the resources that will allow us to make a lasting difference.

## **Research vision**

Our medical school is composed of a uniquely collaborative network of scientists and physicians who seek to unlock the mysteries of biology in order to change the course of history of disease. Two fundamental observations garnered from the past century of biomedical research will drive the central thematic priorities of our research vision: Family history passed down through genes and the regulation of genes underlie every form of human disease. So too, abnormal regulation of the immune system, when activated to produce inflammation, is at the center of most of the diseases that complicate human existence.

These two threads, genetics and inflammation, carry forward throughout the four thematic areas that we will aspire to address through enhanced research support. These pathways of promise were selected because each builds upon unique existing strengths of our health sciences university. Specifically, we have identified funding opportunities in the neurosciences through the establishment of our NeuroNexus Institute; in RNA biology through our RNA Therapeutics Institute; in precision medicine; and in host defense.

In each of these areas of emphasis, the Pathways of Promise campaign could have dramatic impacts upon our ability to truly change the course of disease throughout the world. We shall seek transformational gifts that will bolster our research efforts and allow us to make even greater contributions to the worlds of science and medicine.

#### **Education vision**

As Massachusetts' only public, health sciences university and one of the world's leading academic health sciences centers with an enduring commitment to its community, our university is educating the leaders of science, nursing and medicine for the commonwealth, the nation and the world. This campaign will identify funds that will allow us to advance our position beyond the leading edge of curricular innovation.

Our strategic education goals shall create pathways of promise that envision a highly innovative, inter-professional community of learners and educators who will shape a health care delivery and biomedical research workforce that makes lasting impact on human and community health, and especially in primary care. We shall endeavor to expand collaborative learning experiences in nursing and medicine to advance patient-centered practice and research through inter-professional, team-based learning; we shall implement innovative, self-directed and experiential learning using evidence-based methods and technologies; we shall pursue additional support for scholarships so that our students can focus on their studies and not on their mounting debt levels; and we shall evaluate and right-size the number of learners along the continuum and within and beyond the reach of our three schools and graduate medical education programs.

Our new generation of students must become "master learners" who can acquire what needs to be learned flexibly and over their life time. They shall become adept at adaptability to the rapidly evolving environment in science where change is ubiquitous. Those who will become our future workforce represent a generation of digitally savvy learners who are immersed in online and mobile formats, virtual reality environments and gaming technologies that are becoming the cutting edge educational platforms for new ways of learning. We envision the creation of an Innovation Lab that shall become a physical hub and digital studio, housing all the essential elements for incubating, developing, testing and implementing curricular innovations for our master learners.

As scientific knowledge expands, it becomes impossible to teach all essential information. Scientists must become skilled in continuous learning; extracting and organizing knowledge from the primary literature; identifying true knowledge gaps; devising strategies to find and create new information; integrating new knowledge into existing frameworks; and articulating their work. Our Graduate School of Biomedical Sciences recognizes that the teaching and research experience of their learners must result in a transformative research education experience.

## Global and community health

Ours is an engaged and vibrant community. We recognize the responsibility as professionals to promote the human dignity of each and every person. The borders of our campus represent wall-less boundaries through which we strive to bring the impacts of our intellect and ingenuity to the benefits of a local and global community. The generosity of spirit that infuses our actions shall enable us through pathways of promise to address the health of populations; to search for methods to improve the human condition; to engage with community partners and our university system colleagues; and to strive to be present to those most in need, both in our local community and beyond.

Key strategic areas for which we shall seek funding include eliminating infectious diseases and preventing future pandemics. We shall focus on host-pathogen interactions while driving discoveries and developing novel products. So, too, our efforts must endeavor to bring about health systems strengthening by directly improving population health and enhancing our ability to prevent or control epidemics. Here we shall focus on the elimination of health disparities and improving global public health infrastructure.

Through a Precision Medicine Initiative our growing capacity for global health research, along with our particular ability to engage populations not traditionally engaged in research, will facilitate the translation of precision medicine to the world. Sustaining our commitment to global health will require the training of a next generation of leaders in global health research. The investment in a Global Health Scholars Program will provide support as our trainees undertake degree programs along with mentored, high impact global health research.

At home and abroad, our health sciences university is a force for all that is good and just. This campaign shall identify funds for new collaborative efforts and programs related to community and global health. These shall build upon our legacy of achievement and create a foundation for even greater commitment and accomplishments.

#### The path forward

Later today, all shall be able to visit the Pathways of Promise website to explore the details of the many initiatives for which we shall pursue funding. Our community has worked diligently throughout the past year to refine our thinking and to outline, for those who may wish to support us, ways in which that support can be directed.

To return to Dr. Chan's vision, let me reiterate one of his sentinel points: "Among the innumerable causes worthy of philanthropic support, [he] reckon[s] that supporting universities has the greatest leverage in the sense that benefits will be most broadly dispersed and most lasting in time."

Our institution's culture of collaboration is one of our greatest strengths. There is a generosity of spirit extant in our community that is reinforced by the high calling of our mission and professional oaths. There is an interconnectedness throughout our mission imperatives that provides us with a unique opportunity to achieve our objectives.

When caring for a patient, educating a learner or pursuing a novel pathway, the promise of our ethical commitments directs the work of our hands and inspires the kindness in our hearts. Our actions and pledges do not occur in isolation but are interrelated for the benefit of another. These points of intersection shall afford us with unique opportunities to advance medical education, biomedical research, human health and community engagement in myriad ways from basic science through clinical translation to population health. Gifts to the campaign shall foster an even greater number of such intersections, both intentional and serendipitous.

The Pathways of Promise campaign shall represent an unprecedented opportunity for those who believe in the promise of this singular place to demonstrate that confidence through their generosity. Through this private-public partnership we shall be given the chance to make a vast impact as we work together to make our campaign an enormous success.

#### Prominent pathways. Bold promises.

On that beautiful July 4th evening, I froze a moment in my memory: What could she be thinking? Will I get better? What lies ahead? What path will my disease take? Can I just be like everyone else? Promise? Please!

Illness is so disruptive. Families can fracture; lives can become so difficult and relationships can shred.

It is hard to imagine what one who is ill must think when they look to the stars and wonder about their future. They tremble, even in the scant chill of a warm summer night.

We can respond to their pleas. We can encourage those entrusted to our care. We can support the discouraged. We can bring hope to the human condition.

Like David Hatem, we educate those who will provide expert and tender care and educate those who shall come behind us in our noble professions.

Like Steven Reppert, with our science, we bolster confidence and we reassure those with dashed hope.

Like David Drachman, through our commitment, we hold the hands of those most in need and mend hearts when we can.

Like Deborah Harmon Hines, it is our privilege to serve those most in need, close to home and across the globe.

We have always been bold in our ambitions, confident in our abilities and serious in our purpose.

Together, let us make valiant our pathways of promise.