



OFFICE OF THE PRESIDENT

KEYNOTE REMARKS FOR EIGHTH ANNUAL SEEDS NETWORKING DINNER

Presented by President Julio Frenk
at the University of Miami's Robert and Judi Prokop Newman Alumni Center
on April 4, 2017

Thank you, Professor Tosney. I am honored to be here with all of you for the 8th annual SEEDS networking dinner.

Ever since I joined the University, I have been deeply inspired by the creativity and energy of SEEDS and its dedication to nurturing achievement, success, and collaboration among every member of the UM scientific community.

As scientists and educators, you all know that one of the most critical problems facing society is that of "climate change." It's an issue that has been acknowledged as extremely urgent by every scientist who has examined with an open mind the growing body of evidence on global warming and the catastrophic effects it will cause if not reversed.

But today we are facing yet another type of critical climate change.

For example, plans for the new federal budget, which would drastically reduce funds for the Environmental Protection Agency and research funding through the NIH.

It is the climate of skepticism in the most powerful halls of this country about the value of scientific research, of quantifiable facts, of rigorous scholarship, and of accessible education.

It is a climate of disregard for the vital role played by people of different ethnicities, heritages, and cultures in enriching the colorful mosaic of society and representing the true spirit of the United States.

I know that everyone in this room is not only dedicated to advancing understanding of the world we live in, and harnessing those insights for the advancement of life on earth; we are also committed to ensuring that that world is a hospitable place for energetic and creative minds, whatever their socioeconomic situation, cultural heritage, or religious beliefs.

In the current climate, your commitment to these values is more important now than ever.

I hope that these challenges will not discourage you, but will instead convince you even more strongly of the central importance of your work to the University of Miami, to institutions of advanced research and higher learning like it across the country and around the globe, and to the world at large.

The need to foster, focus, and leverage our productive energy, not just in isolated bursts, but consistently over many years, is why initiatives such as SEEDS are so important.

SEEDS was implemented at the University, and deemed worthy of support by the National Science Foundation, because of its deep dedication and comprehensive approach to combating “stereotype threat” in the sciences and in higher education. This concept, proposed by Professor Claude Steele, refers to the risk, fear, and resulting impacts of confirming a negative stereotype about one’s ethnic, racial, or gender group.

Unfortunately, it’s probably something that many of us have direct experience with—that extra cognitive and emotional burden of worry that you won’t measure up, or even just the experience of being female, a person of color, or both, in a roomful of white males taking a test.

And even if you haven’t experienced it consciously or overtly, these stereotypes can still chip away at the determination of a smart, curious young scientist, student, or doctoral candidate from an underrepresented group.

Addressing the stereotypes for women in STEM fields is vitally important not only to help them overcome their doubts about their prospects as scientists, but because encountering and meeting challenges is the very nature of scientific inquiry itself—and validating the importance of intelligence, persistence, and the scientific process is essential to every type of significant progress.

So all this makes it more important than ever to mentor and encourage students and peers, actively recruit women into the sciences, encourage women and students of color to embrace a “growth” mindset. The University, in partnership with many other peer institutions, is trying very hard to deal with the challenges facing young women at various stages of their education and career quests as they study and pursue work in STEM disciplines. SEEDS represents a major stride toward that goal.

The challenge of bringing more women into science is not a new problem. Educators have been working for over 20 years to encourage more girls and women to participate in science from childhood on. But the insidious effects of gender bias are still with us. So we have to be constantly aware of those effects—and combat the environment in which they take root.

As the Australian science educator Eileen Byrne put it, “If a plant doesn’t succeed in a garden, we ask what it is about the soil, water, sun or fertilizer that is causing the problem, we don’t blame the plant first.” So it is up to us to provide high-quality soil, adequate water, and sunlight for young minds who are entranced and inspired by science—wherever they have first taken root.

The issues women and people of color who aspire to careers in the sciences continue to face—and our potential to make real progress in addressing them—are why the University’s Culture of Belonging, a key component of the Roadmap to Our New Century, is so important.

As Dean Prilleltensky shared, the Culture of Belonging is defined as an environment where all constituents have the freedom to be themselves and connect with others while contributing to our common future.

As we all know, great ideas, insights, and discoveries can spring from a multiplicity of minds, experiences, approaches, and perspectives.

So our commitment to a culture of acceptance, diversity, and inclusivity isn’t just about being an exemplary institution—it’s also about being an excellent institution. In other words—it isn’t just the right thing to do, it’s the smart thing to do.

With the leadership of Dean Prilleltensky in his capacity as Vice Provost for Institutional Culture, the University’s Culture of Belonging initiative is developing various fast-track strategies to raise awareness and expand ownership and acceptance of the initiative, and identification of metrics, data points, and systems to measure its adoption and success.

This endeavor, in particular, represents exciting opportunities for SEEDS faculty and students.

In addition to its natural partnership with the Culture of Belonging initiative, SEEDS is also, of course, very much part of our STEM@UM Roadmap initiative to advance education and research in basic and applied science, engineering, and mathematics.

An extraordinary \$100-million-dollar gift from Phillip and Patricia Frost was announced at my inauguration to launch “STEM@UM.”

Over the past year, I have worked closely with Phil and Patricia Frost, Provost Tom LeBlanc, College of Arts and Sciences Dean Leonidas Bachas, College of Engineering Dean Jean-Pierre Bardet, and many others to develop a groundbreaking model: the Frost Institutes for Science and Engineering.

This overarching structure is designed to comprise an array of multidisciplinary sister institutes, advancing work in the basic and applied sciences and engineering through problem-based “clusters” that cross academic units and disciplines to address major challenges confronting the world.

The Frost Institutes for Science and Engineering will advance collaboration across academic units, labs, and clinics, and position the University at the forefront of the next wave of scientific revolution. The Frost Institutes will also enrich the educational experience we offer and help us to produce better trained students in the sciences for the 21st century.

The first in this innovative set will be the Frost Institute of Chemistry and Molecular Science.

Anchored in the fundamental discipline of chemistry, the Institute will bring together fields that work at the molecular level, including the life sciences, nanotechnology, and new materials.

It will also serve as a blueprint for future institutes that will take the University of Miami to the next level of excellence and relevance.

Everyone here understands the value of collaboration and working together as a community. This first institute and those that will follow in the years to come will contribute in a major way to make the University of Miami a magnet for talent.

And, of course, there will be many opportunities to dovetail the diverse and dynamic programs and activities of SEEDS with those of the new Frost institutes.

Ultimately, just as each of you can do so much by modeling inclusion and acceptance among your peers and students, the University aspires to become a model for other educational and scientific organizations in the creation of environments where all are valued—and all are empowered to make their own unique contributions of value toward shared goals.

As we continue to implement and enhance the Roadmap to Our New Century, as we identify urgent societal needs, and as we confront emerging societal challenges, we have not only an opportunity to achieve all of these things, but an obligation.

So keep your vision in your sights. Hold your values close. Take pride in all you have accomplished thus far. Meld your lifelong curiosity with fresh persistence and courage.

Embrace and face the inevitable challenges and emerge stronger from them, as you make strides toward new discoveries and innovations that will ultimately benefit us all.

Thank you.