

WELCOME REMARKS FOR THE 50TH MIAMI WINTER SYMPOSIUM

Presented by President Julio Frenk at the Hyatt Regency Miami January 23, 2017

Good morning and welcome to the Miami Winter Symposium, now celebrating its 50th year. Unique in its vantage point at the heart of the Americas, this impressive gathering of international scholars and scientists started under the leadership of Dr. William Whelan, a University of Miami professor of biochemistry and molecular biology, who is still very much involved in the planning of this meeting each year.

Please join me in congratulating Dr. Whelan and all the conference directors, organizers, and sponsors for reaching this wonderful milestone.

In addition I offer my congratulations to all the award winners for the breakthrough work that is being recognized here.

This seminal gathering of the world's leading researchers focuses on better understanding and addressing universal biomedical challenges like brain disorders, personalized cancer treatment, inflammation, and this year, diabetes, under the theme "Today's research, tomorrow's therapies."

Among those discoveries is work done at the Diabetes Research Institute led by Dr. Camillo Ricordi.

The mandate to convene leading scientists to present their latest findings in key disciplines is a hallmark of universities at their very best—that is to share knowledge, stimulate new discoveries, and fuel progress in key areas that ultimately impact the lives of people across the globe.

We must accomplish our work in a rapidly changing and interdependent environment. In fact, the three missions of our university—education, research, and health care—are facing unprecedented challenges but also transformational opportunities that require new and creative approaches.

For five decades the Miami Winter Symposium has provided precisely this kind of out-of-the-box thinking, which is why we have chosen this setting to announce a major new initiative at the University of Miami.

At my inauguration a year ago this week, I outlined four aspirations that are the pillars of the Roadmap to Our New Century—which are to be the hemispheric university, the excellent university, the relevant university, and the exemplary university by our centennial in 2025.

The University of Miami is already known for excellence in biomedicine, marine sciences, and other fields. But continued excellence cannot be sustained without critical investments in basic and applied science, engineering, and mathematics. These disciplines, which form the building blocks for innovation, must be strengthened to maintain our leading edge as a research community.

At my inauguration, I had the privilege to announce an extraordinary \$100-million-dollar gift from Phillip and Patricia Frost to support these disciplines for an initiative we are calling STEM@UM.

Phil and Pat are longtime friends of Dr. Whelan and the Miami Winter Symposium and have joined us today. I want to take this opportunity to once again thank them for their vision to elevate science and education in South Florida.

Phil and Pat are champions of projects that have made a tremendous impact on our community. They use their philanthropy to transform and inspire. The University of Miami is a proud steward of their philanthropic legacy through their support for the Frost School of Music and now, this significant, catalyzing gift for the STEM fields.

Over the past year, I have worked closely with Phil and Pat, Rick Pfenniger from Phil's team, Provost Thomas LeBlanc, College of Arts and Sciences Dean Leonidas Bachas, College of Engineering Dean Jean-Pierre Bardet, and a talented group of faculty members to develop a groundbreaking model for the future.

Today I am honored and delighted to announce the creation of the Frost Institutes for Science and Engineering.

We have borrowed from the National Institutes of Health the idea of using the plural term "institutes." This umbrella structure will provide a comprehensive framework for a coherent strategy regarding investments in science and engineering, and position the University at the forefront of the next wave of scientific revolution. The Frost Institutes will advance teamwork across departments, labs, and clinics.

The first in this set will be the Frost Institute of Chemistry and Molecular Science. Anchored in the fundamental discipline of chemistry, it will bring together other fields that work at the molecular level, including promising developments in the life sciences, nanotechnology, and new materials. Through approaches relying on molecular design, discovery, and development, research outcomes will be translated into solutions to significant real-life problems. The Institute will combine efforts from existing and new faculty members, primarily from the College of Arts and Sciences and the College of Engineering, as well as related disciplines in the Miller School of Medicine. The Frost gift will enable investments in new facilities and will allow us to attract and retain renowned researchers. To orient its work, it will convene a top scientific advisory board.

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

We will advance work in the basic and applied sciences and engineering through new problem-based academic clusters. These clusters will be championed by recognized leaders and will have the potential to attract external funding and draw upon a series of disciplines to address major challenges confronting the world.

These clusters, which will convene faculty and resources from a variety of disciplines, including the social sciences and the humanities, will require that we review, adapt, and expand our existing institutional structures for teaching and research in science and engineering to maximize quality, impact, and innovation.

We will explore new facilities to enhance interdisciplinary work in STEM fields including shared offices and research and maker spaces to encourage cross-institutional collaborations.

Beginning with the Frost Institute of Chemistry and Molecular Science, the set of Frost Institutes will also enrich the educational experience by producing better trained students in the sciences for the 21st century.

Just as importantly, the synergies created by the Frost Institutes will help to draw external expertise from prominent science and engineering leaders to inform and advance this initiative. In this respect, we seek to build on the success of the Miami Winter Symposium and similar programs to bring together scientific leaders and innovators from throughout the hemisphere the rest of the world.

As scientists and scholars we understand the value of collaboration and working together as a community. We also understand the extraordinary contribution that individuals can make—from advancing discovery in a laboratory to philanthropic investments like the Frosts'. We hope their generous lead gift inspires others to invest in future institutes. This first institute and the set that will follow during the next years will contribute in a major way to make the University of Miami a magnet for talent.

Thank you for this opportunity to share our exciting news with you and for joining me in recognizing Phil and Pat Frost.

I wish you productive discussions and stimulating interactions at the 50th Miami Winter Symposium.

We are a family. We are One U. Welcome! Thank you!