Dr. Win Phillips

UF Vice President for Research Win Phillips recently assumed a new role as the university's senior vice president and chief operating officer. *Explore* Editor Joseph Kays sat down recently with Dr. Phillips to discuss his 12 years as the leader of UF's research enterprise and discuss the future of research at the university.

What do you think makes the University of Florida uniquely positioned to be successful in the 21st century?

The thing that makes the University of Florida unique is that our researchers can find collaborators in virtually every discipline right on campus. In addition to having agriculture, the health sciences, engineering and liberal arts and sciences, we also have one of the 28 veterinary schools in America, and we have a dental school and a public health school. So all of those pieces come together to make the University of Florida a unique institution and I think the best poised to seize the research opportunities and needs of this nation in the future.

When you became vice president for research in 1999, UF's research awards totaled \$301 million. Last year they were \$619 million. To what do you attribute this dramatic increase in UF's research enterprise?

I think there are two critical elements. The first is that the university set research as an agenda. We said that we really believe our faculty should be at the forefront of their discipline. So adopting this philosophy that research was everybody's business, that increased the size of the army.

Then when Bernie Machen became president he made a commitment to build new space specifically devoted to research, and that was a commitment that we had never had before.

All of those things put together made the research program boom. We were already a major research university, now we're a noticed major research university.

UF's technology commercialization efforts have also grown dramatically during your tenure. How do you think the role of universities in economic development has changed over the last decade and how do you think UF is performing in this area?

The 1980 Bayh-Dole Act was very important for universities because it said they could own the patents and seek to license inventions resulting from government-funded research.

The University of Florida embraced that opportunity right away because we are very diverse and interdisciplinary and we have some of the most creative people in the world. Over the last decade we have grown our technology licensing office so we could more effectively mine our research enterprise and be sure we weren't leaving things that could be licensed on the table, hidden in the laboratory. In the beginning the only reason we were able to invest like that was because we had the royalty income from Trusopt (a glaucoma drug) and Gatorade.

Gatorade is a real example of someone doing basic inquiry, looking to solve a problem and "Eureka!" comes out of it. So our faculty are a little more encouraged by the fact that what they're doing may look like pretty basic science, but it might also produce something that's really useful to mankind. I think most faculty are driven more by the fact that they've contributed to something useful to mankind than they are the profit motive.

The recently opened Florida Innovation Hub is the cornerstone of one of the university's biggest initiatives right now, Innovation Square. What do you envision for Innovation Square and our technology incubator efforts?

There are two great advantages of incubators the way we have developed them. These companies need a place to grow from idea to a point where they have enough production that they can build a facility. If the ability to rent space with laboratories was not available, a lot of these companies would never get started.





Dr. Wolfgang Sigmund and doctoral student Shu-Hau Hsu

Dr. Martin Cohn

But an incubator also creates a community of people with like problems who can share resources like attorneys and accountants that you need to get your business started. The CEOs of these small companies meet regularly and can say "Well golly, I've got this problem. How did you solve this problem?" So instead of reinventing the wheel they get free advice.

With Innovation Square we've got a fascinating point of presence that's in an interesting part of town, connected to the community, in a space that can accept other buildings. It's getting national interest, and venture capitalists read the news. So there are lots of reasons why this process has evolved into a very healthy situation for a town like Gainesville.

In the late 1990s UF began increasing its graduate student enrollment and now awards more than 3,700 master's and 950 doctoral degrees annually. Why do you think graduate students are important to both the research and teaching missions of the university?

When your small child learns to talk and begins to interact with the world, they drive you crazy because they only have one question, "Why?" Everything you say, they say "Why?" And it makes you think of an answer. The same thing is true with graduate students and their faculty mentors. They ask about the relevance of your research, the application of your research, the place where it's going to go, what it means. When they are assigned an experiment their creative mind says "What about this? Why not that?" Many times research leads to unexpected results that are very beneficial.

As a faculty member, having graduate students come in every day with bright ideas, irrelevant ideas, rascal questions, that don't make any sense at first blush, but then all of a sudden cause you to reflect on those questions and integrate them into your thinking, that's the unique thing about university research.

The average parent of an undergraduate student might not fully appreciate the connection between research and their child's education. Why do you think research is important to the undergraduate experience?

My philosophy has always been that you want your kids to have the most knowledgeable faculty member they can have, faculty who are teaching tomorrow's science today. And, by the way, being knowledgeable and being at the forefront of your research does not mean that you're less of a teacher, it means you're more of a teacher. It's much better to have Einstein talking about physics than some guy who's read a book about physics talking about physics. It's important for the University of Florida as the flagship institution of the state of Florida to provide its sons and daughters the most competitive education possible, so that when they come out of here they're ready to deal with today's world, which is a very complex world.

What do you think are the greatest challenges to the university's research enterprise?

I think one of our greatest challenges is maintaining imagination and creativity when the constant pressures of budget and regulation consume time and energy and create distractions. We've tried to create an infrastructure that takes some of that burden off of the individual faculty member.

In times of economic stress there is no reason for creativity to diminish. Some of the greatest creations in the world came along in the Depression. Creativity doesn't go up and down with recession, as long as government and society don't place such a burden on it that it can't happen.

What have been your most satisfying achievements during your tenure at the University of Florida?

I think seeing the research program grow, seeing our faculty seize the opportunities in research and contribute to the needs of the nation has been particularly satisfying. We committed to growing the research enterprise and the faculty responded. To have been a part of that in some small way is my most satisfying achievement.