

THE SCRIPPS RESEARCH INSTITUTE

# ENDEAVOR



*Celebrating Scripps Florida*

THE SCRIPPS RESEARCH INSTITUTE

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FEATURES:

- 01 **SCRIPPS FLORIDA OPENS:**  
MORE THAN FIVE YEARS IN THE MAKING,  
THE NEW CAMPUS HAS ARRIVED
  
- 10 **SCRIPPS FLORIDA SPEAKS OUT:**  
A ROUNDTABLE DISCUSSION



ALSO:

- 16 THE DISCOVERIES OF TOMORROW

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This issue of *Endeavor* magazine celebrates the opening of the Scripps Florida campus of The Scripps Research Institute. Scripps Florida, which was made possible by a one-time appropriation of federal economic development funds by the State of Florida and substantial support from Palm Beach County, is dedicated to expanding biomedical research, educating future scientists, and improving human health.

Scripps Florida researchers focus on basic biomedical science, drug discovery, and the application of the latest research technology to the drug discovery process. Areas of research include cancer biology, infectious disease, aging and metabolism, neuroscience, chemistry, and molecular therapeutics.



## ❖ *Scripps Florida Opens*

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MORE THAN FIVE YEARS IN THE MAKING, THE NEW CAMPUS HAS ARRIVED

It took nearly a dozen workers all day on Wednesday, February 25, 2009 to put up the 50 x 145 foot tent for the official opening of Scripps Florida the next day. They started at eight in the morning and finished at sundown, tacking down the blue sparkled carpet stretched over a temporary wooden floor, arranging the 10 potted palms and putting a raised platform in the front for the dignitaries and another in the back for the television cameras. In between, they set out some 850 folding chairs for guests. The next morning, a program and an ornate box filled with chocolates would be placed on each chair. →

## Opening Ceremonies : 2-26-09



*Above:*  
Scripps Florida  
prepares to celebrate  
the opening of its  
permanent new  
campus.

The tent was set up on an empty, grassy field close to the new Scripps Florida facilities — three distinctive state-of-the-art buildings providing 350,000 square feet of laboratory space. Until just a few months ago, the field was a crowded construction village filled with trailers, pick-up trucks, stacked pallets, and posses of men and women in hardhats plowing the dust. In another year or so, the same field will become the home of a new Max Planck Society facility, the renowned German academy's first in the United States, drawn to the site by the proximity of Scripps Florida and its innovative researchers.

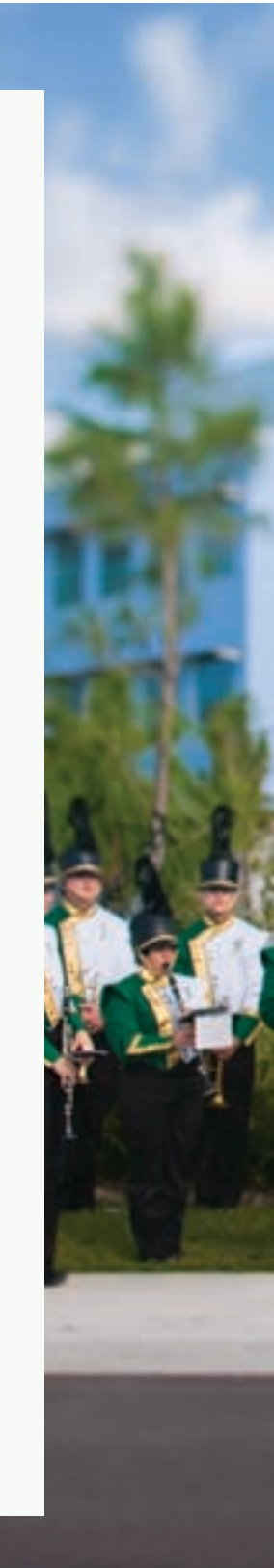
The morning of the Scripps Florida opening ceremonies on Thursday, February 26, 2009, brought a surging breeze with the perfect blue skies as the guests started to arrive. They included Palm Beach County Commission Chairman Jeff Koons, Commissioner Karen Marcus and other members of the Palm Beach County Commission, State Senator Ken Pruitt, Florida Atlantic University (FAU) President Frank Brogan, members of the Scripps Research Board of Trustees and Board of Scientific Governors, and Scripps Florida faculty, staff, supporters, and friends. Florida Governor Charlie Crist, whose flight had been delayed, made a dramatic entrance later in the program.

The Jupiter High School "Spirit of Jupiter" Marching Band opened the ceremonies with a stirring version of the national anthem and a drum-powered rendition of "The Horse," a late 60s soul instrumental. Flag duties were handled by the William T. Dwyer High School Junior ROTC.

"The road has been long and sometimes bumpy, but today we all join together to celebrate the completion of this magnificent campus," said Scripps Research President Richard A. Lerner, M.D. "We are open for business."

Lerner reiterated his confidence in Scripps Florida and the groundbreaking advances its investigators will produce.

"It is our responsibility, those of us who have some administrative responsibility, to build the houses worldwide where science can be done," he said. "What we can promise is that something important will happen in those buildings. We don't yet know exactly what, but that's how the scientific enterprise works. It is the unpredictability of science that makes it so exciting and so interesting." →





*“We are open for business.”*

*RICHARD A. LERNER, M.D.*



*“As we face growing economic challenges,  
we must support the growing biomedical  
and life sciences industries.”*

GOVERNOR CHARLIE CRIST

The Scripps Florida campus is dedicated to expanding biomedical research, educating and training future scientists, and improving human health.

#### MANY REASONS TO CELEBRATE

The Scripps Florida opening marks a milestone in the history of The Scripps Research Institute. Plans to establish Scripps Florida were first announced in October 2003, after months of discussions with then-Florida Governor Jeb Bush, who was looking to expand the state’s economic development in biotechnology. To date, total investment in Scripps Florida from the state and from Palm Beach County has been nearly \$500 million, which, in addition to supporting the construction of the new campus, enables the recruitment of top scientists from around the world.

Initial plans called for construction on a parcel of land made available by Palm Beach County in the western part of the county, but legal and other issues caused the county, in

collaboration with Florida Atlantic University, to offer instead 30 acres of the FAU campus and an adjacent 70-acre property.

In 2005, the first laboratory building to temporarily house Scripps Florida researchers opened on the FAU campus, with a second building added in 2006. Construction of the new Scripps Florida campus, adjacent to the temporary quarters, got under way in 2006. The two laboratory buildings vacated by Scripps Florida will now be used to house Max Planck Society scientists while their facilities are constructed. Ultimately, these buildings will revert to FAU for science education.

A three-month move-in process to the bright new Scripps Florida buildings—which were completed on time and on budget—was completed in early 2009. The buildings currently house about 300 employees.

In his remarks at the opening ceremonies, Governor Crist predicted that thousands of jobs would eventually be created because of the state’s investment in Scripps Florida.

“As we face growing economic challenges, we must support



the growing biomedical and life sciences industries,” Crist said. “Florida is one of the top biotech centers in the world. The opening of Scripps Florida marks an important milestone in the Sunshine State’s development as a biotech hub and as a global leader in medical research and development. Florida’s economy will benefit from the collaboration among Scripps Florida and the state’s other biotech companies, and the result will be important advances that improve the health and quality of life for everyone.”

The economic impact of Scripps Florida has already been significant. To date, Scripps Florida has been awarded more than \$50 million in outside grants and filed more than 79 patent applications. According to the governor’s office, over the next 15 years, Scripps Florida will create 6,500 new jobs and generate about \$1.6 billion in additional income, while boosting the state’s gross domestic product by \$3.2 billion.

To drive home his point, Crist declared 2009 the “Year of Science” in Florida. →

*Top and second from top:*  
The audience listens as Frank Brogan, president of Florida Atlantic University, expresses his delight at the establishment of Scripps Florida on the university’s Jupiter campus.

*Third from top:*  
Palm Beach County Commissioner Addie Green joins the festivities.

*Bottom:*  
Governor Charlie Crist cuts the ribbon.



*Left and center:*  
Nobel laureate Susumu Tonegawa (*left*) of the Massachusetts Institute of Technology, Nobel laureate Günter Blobel of The Rockefeller University (*center left*), and Gerald Joyce (*center right*) of Scripps Research are among those enjoying the scientific lectures.

*Right:*  
Professor Raymond A. Dwek (*left*) of the University of Oxford and U.S. Congressman Ron Klein take the opportunity to chat.

## Symposium : 2-27-09

*“Scientists like to feel crowded. It means there are a lot of ideas floating around.”*

GERALD JOYCE, M.D., Ph.D.

*The Quantum Foundation of Palm Beach County, National City Corporation, and Florida Trend magazine served as premier sponsors of Scripps Florida's three-day campus opening ceremonies. Other sponsors included Weitz-DPR, Florida Power & Light, Gunster Yoakley, Fisher Scientific, Fluor, James Landscaping Design, and Publix. “We are extremely pleased to have the support of all our sponsors for our three-day opening,” said Scripps Research President Richard A. Lerner, M.D., “Their support is important to our work, and an example of how Scripps Florida has been building strong community relationships in Palm Beach County and throughout South Florida.”*





### SCIENTISTS REJOICE WITH SCIENCE

The opening celebrations for Scripps Florida didn't end with the ceremonial ribbon cutting.

On Friday, February 27, scientists from both Scripps Research campuses and from across the state of Florida attended a scientific symposium, offering seminars on cellular biology, metabolism and aging, and molecular therapeutics. Six Nobel laureates—Günter Blobel, Sydney Brenner, Michael Brown, Paul Greengard, Philip Sharp, and Susumu Tonegawa, all members of the Scripps Research Board of Governors—presented talks or chaired sessions.

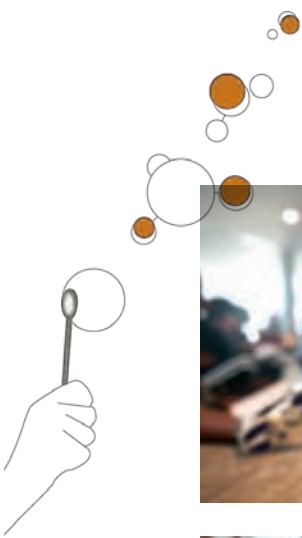
The event's organizer, Gerald Joyce, M.D., Ph.D., Scripps Research dean of the faculty and member of the Skaggs Institute for Chemical Biology, likened the symposium to a calling of the scientific faithful, making it clear that coming together in gatherings like this one was how scientists celebrated. He added that the symposium was likely “the largest gathering of the science illuminati in the history of the state.”

In an added flourish, Joyce also chose that moment to announce that Ronald L. Davis, Ph.D., of Baylor College of Medicine had accepted the position of chair of the new neuroscience department at Scripps Florida. He will be among what Joyce predicted would be some 30 new faculty to join Scripps Florida over the next few years.

In addition to neuroscience, Scripps Florida includes the Departments of Cancer Biology, Molecular Therapeutics, Infectology, Chemistry (also based on the La Jolla, California, campus), and Metabolism and Aging, as well as the Translational Research Institute, which combines basic research with advanced technology platforms to develop potential lead compounds that can prevent, treat, or cure disease.

Joyce predicted that Scripps Florida's new laboratories would soon be filled to capacity.

“Scientists like to feel crowded,” he said. “It means there are a lot of ideas floating around.” →



## *Family Day :* *2-28-09*

### SCIENCE FOR EVERYBODY

The third day of the Scripps Florida celebrations reached a different crowd—the families and children of Palm Beach County, some 5,000 of whom flooded the campus on Saturday, February 28 to get a look at the labs and meet some of the scientists working there.

The day feted and cemented the connections between Scripps Florida and its Palm Beach County community. Ongoing programs include the widely admired Scripps Florida summer internships and science training sessions for teachers and students; the remarkable art hanging on the walls of Scripps Florida hallways and lobbies, an exhibition co-sponsored with the Palm Beach County Cultural Council; and a lecture series so popular that people have been turned away for lack of seats. In addition, Scripps Florida trains graduate students earning their Ph.D.s in the biochemical sciences.

That Saturday morning found Nobel laureate and Knight

of the Realm Harry Kroto crouched on the floor of the new Scripps Florida cafeteria among a sea of children, trying to make sure that all 200 of them were building their buckyball models the right way. Buckyballs, which are made up of 60 carbon atoms, are round symmetrical molecules that Kroto and his colleagues originally named “buckminsterfullerene” after R. Buckminster Fuller, the man who invented the geodesic dome, which buckyballs tend to resemble. For the discovery of that new molecule, Kroto and two other colleagues were awarded the 1996 Nobel Prize in Chemistry. He was knighted earlier that same year.

While Kroto’s seminar was educational, he also told the kids he wanted them “to be creative.” Judging from the children’s response, that was exactly what was happening. Sir Harry’s exuberant performance was complete with some exhilarating whooshing sound effects to give the movement of



*Above:* Scripps Florida Education Day drew some 5,000 parents and children to the campus, where they enjoyed activities such as participating in a buckyball demonstration with Nobel laureate Sir Harry Kroto, watching glowing zebrafish, and manipulating robot technology for a prize of chocolates.

atoms some much needed oomph as they careened around on the pair of screens mounted on either side of him.

He had another message for the children, too. After recounting a series of mini-tales of scientists in their youth, Kroto told his wide-eyed audience, “They were young people just like you, some of them not much older than you are now when they started thinking about this, so you can do these things, too.”

The last time Sir Harry was glimpsed, he was on the floor and challenging the kids to see who could balance a buckyball on their head for the longest time—half an hour was the world record and it seemed like more than a few on the Scripps Florida cafeteria floor were on track to break that time.

The rest of the day was filled with other scientific demonstrations, dotted around Scripps Florida’s artfully landscaped green space, attracting crowds of parents and their children.

The demonstrations ranged from the delicious to the noisy

and seemingly everything in between. At the ScrippsBot booth, a kind of mini-version of the institute’s much larger Kalypsis robot technology, participants could manipulate the robot themselves—with the prize of a plastic test tube filled with chocolates delivered into their waiting hands. There were glowing zebrafish and zebrafish of various hues, due to transplanted genetic material. At another booth, chemists turned Gummy Bears into flaming goo with a torch and turned common aspirin into oil of wintergreen.

One Scripps Florida scientist came down from his laboratory to get lunch and marveled at the enthusiastic crowds.

“This is great,” he said, a little wistfully. “I wish I could stay longer but I have to get back and work on a new grant proposal.”

A house of science, it seems, has found a home.

ERIC SAUTER AND MIKA ONO



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## SCRIPPS FLORIDA SPEAKS OUT

### *A Roundtable Discussion*

*Endeavor magazine hosted a roundtable discussion among some of the leading players at Scripps Florida on January 29, 2009, to discuss the new campus, the advantages of collaboration, and the larger issues facing science in the United States. Led by Vice President of Scientific Operations Harry Orf and writer Eric Sauter, the roundtable discussion included: John Cleveland, Ph.D., Chair of the Department of Cancer Biology; Patrick Griffin, Ph.D., Chair of the Department of Molecular Therapeutics and Head of the Translational Research Institute (TRI); Roy Smith, Ph.D., Chair of the Department of Metabolism and Aging; and William Roush, Ph.D., Professor in the Department of Chemistry, Executive Director of TRI Medicinal Chemistry, and Associate Dean of the Graduate School at Scripps Research. Charles Weissmann, Ph.D., Chair of the Department of Infectology, was unable to attend.*

*Q: When you talk to people you want to hire and bring into your departments, how do you describe Scripps Florida? Or is it so well known that you don't have to describe it?*

CLEVELAND: We still need to educate not only our peers, but the community as well. When we're recruiting new hires, the components of the institute and how they work together are a huge selling point. We have a unique environment for doing state-of-the-art, forward-thinking, technology-driven science. That's very appealing for junior faculty and also for senior recruits, who generally have some potential [drug development] targets in hand that they want to exploit.

GRIFFIN: But at the same time, Scripps Florida is not only about technology. It's about basic research. This is one misconception that's out there. We integrate throughput screening and other technologies into our research programs. The technologies at Scripps Florida are powerful tools, and we excel in the

application of technology to basic research programs in important therapeutic areas.

ROUSH: There's an awareness in the community of what Scripps Florida is, but people really have to come on site and take a look and meet our scientists before they walk away with a deep appreciation of it. Sometimes the only thing people remember from press accounts is that there were political issues at one point concerning where we would be located. Once people come on site and take a look, they leave impressed.

GRIFFIN: Within our department, three of the bigger programs—the JNK3 program for Parkinson's, the Rho kinase program for glaucoma, and the addiction/obesity program—are moving along fast. Although high throughput screening has been or will be used in these programs, the progress and successes to date are due to our expertise in the biology and pharmacology related to these molecular targets. There's a time and



*Left:*  
Participating in a wide-ranging discussion are Scripps Florida's John Cleveland, William Roush, Harry Orf, Roy Smith, and Pat Griffin (left to right).

*Above:*  
Harry Orf (top) and John Cleveland discuss common misperceptions about Scripps Florida.

*“The drug discovery component of campus comes as a huge bonus, but it’s the science that matters. It’s always the science that matters at Scripps.”*

JOHN CLEVELAND, Ph.D.

a place for all the technologies we have, and we have the expertise to know when to use them and when not to.

SMITH: Yes, we need to explain that there’s a lot of very good basic science going on here, and we’re in a unique position to identify potential drug targets.

CLEVELAND: The recruits that we’re going after, hands down across the board, are the very best athletes in terms of their science, so the drug discovery component of campus comes as a huge bonus, but it’s the science that matters. It’s always the science that matters at Scripps.

ORF: When the scientists from the Max Planck Institute were looking into expanding, they were considering many sites in the United States when they came and spent a day here. They saw the site, they saw the potential of what was being built, and they heard from each of the department chairs. Now Max Planck is going to be located 50 feet away from us, right

across the street. That is a tangible testament to the substance of Scripps Florida.

CLEVELAND: We view the Max Planck campus, which will focus on bioimaging, as a huge plus for our research. It will be a recruiting tool for getting other investigators here as well.

SMITH: Max Planck’s focus on bioimaging compliments the expertise of our faculty, an unbeatable combination.

*Q: What are some of the other misperceptions about Scripps Florida? Some people describe Scripps Florida as a startup biotech. Is that a legitimate name for it?*

CLEVELAND: No, we are not a startup biotech company. We’re an academic research institution that is a marriage of investigators from an academic background and from a “pharma” background, and we’re applying that to basic research. Coming out of our studies will be drug discovery, but that →

*“Scripps Florida is like a large family because there’s overlap in research interests across departments.”*

ROY SMITH, Ph.D.

*Left:*

Roy Smith looks forward to interacting with chemists in his work on aging.

*Right:*

John Cleveland (*left*) and William Roush discuss the strong culture of collaboration at Scripps Research.



by no means indicates we are a biotech company.

ROUSH: Scripps Florida has a culture that brings strengths from both of these typically separate environments. We help keep each other focused. Investigators from academics can talk to those from industry to help them identify good targets to pursue for a potential therapeutic and why. So, in terms of streamlining research and keeping a train of thought moving in a positive direction, people interact in a way that’s atypical for academics. By the same token, we’re not a pharmaceutical or biotech company, nor should we be.

GRIFFIN: Scripps has focused on excellence in chemistry and biology, so the marriage of the two gives it that sense of biotech. Because we have the best in chemistry with experts in specific areas in biology, spinoffs will happen, as they have in La Jolla. However, this does take time.

CLEVELAND: Entrepreneurial things will come, but they are not something I’m focused on. I’m more focused on the experiments of the day.

ROUSH: We’re all focused on getting our next grant.

CLEVELAND: Experiments, papers, grants. Very simple.

*Q: Do you think the community’s perceptions of Scripps Florida have changed over the last four years?*

GRIFFIN: Unfortunately not enough. There are still misconceptions as to what this place is all about.

CLEVELAND: We are “.edu.” We are an academic institution.

ORF: That’s the first line of my public talk: it’s not “Scripps.com.”

GRIFFIN: People need to understand that we are about basic research with the opportunity for translational research [trans-



lating basic science discoveries into medicines], so they can see Scripps Florida as benefiting their children and providing potential opportunities over the long-term. Everyone has to look beyond the short-term.

ORF: From my public talks, I have observed that while it's true many people still don't know who we are or what we do, there is another segment of the community, the people who tend to be engaged in community activities, whose perception and understanding of what we are is vastly different than one or two years ago. That will continue to improve. Eventually, we'll even get the general public to have a better understanding of Scripps Florida.

*Q: Roy, you're just starting to build your department. How are people you're trying to hire reacting to Scripps Florida?*

SMITH: I stress the strong interactions we have here. Scripps Florida is like a large family because there's overlap in research interests across departments. When I came here to interview, what struck me most, and what made me most enthusiastic, was this camaraderie I felt. The scientists I talked to were all very open to collaboration. Generally, every candidate who comes through meets scientists in each of the different departments and the candidate experiences this atmosphere for himself or herself. This place has terrific science. We have close ties with La Jolla. And it's a close-knit community among the scientists. These are our strengths.

CLEVELAND: Investigators can come here and cross disciplines in a tangible and meaningful way. Academic researchers who are working in biological arenas can come here and

actually collaborate with chemists. You just don't see that anywhere else. This is historically a huge strength for Scripps, and it's a huge strength here. Chemists can change the way you do science. Speaking personally, it's a change in a major way.

*Q: How has having access to chemists changed your research?*

CLEVELAND: Interacting with chemists gives me opportunities for creating chemical probes to ask novel biological questions and a chance to move forward into developing medicines, such as to prevent or cure cancer.

SMITH: I agree, although I haven't had the opportunity to do that yet. As a next step in my research, I'd like to identify small molecules that protect cells against oxidative damage. That's a field that's really ripe for discovery.

ROUSH: It's a two-way street because biology changes the way the chemists do science as well. For me, in the four years I've been here, it has been an unbelievable learning curve. I didn't know a fraction of what I now know on the biological side. It has been tremendous.

ORF: Stepping into the biological realm for chemists also provides expanded funding opportunities.

*Q: Without getting into politics per se, as scientists dependent on National Institutes of Health [NIH] funding, how do you see the possibilities over the next several years?*

CLEVELAND: I think in the short-term it's going to be a tough go.

GRIFFIN: It's going to be tough, but people are dropping out of the research pool. This is unfortunate, but it does create →



*“I firmly believe that the Scripps Florida model is the future. I don’t see how we can be anything other than wildly successful.”*

WILLIAM ROUSH, Ph.D.

opportunities for the folks who survive the current tough time.

ROUSH: Yes, that’s true, but I still take the view that the NIH budget is enormous. The system in the U.S. has historically been a meritocracy and ultimately quality rises to the top. We have not yet developed any program project grants here in Florida, but we’re working on the early stages of getting one going. The strengths that we bring across departments and across disciplines will make us extraordinarily competitive.

ORF: If there is a trend in NIH funding, it has been to move toward more interdisciplinary programs, and, as Bill said, Scripps Florida is well situated to compete.

GRIFFIN: Now you’ll have new leadership at NIH as well. Time will tell.

ROUSH: The good news is I don’t think the NIH system will be any worse under the Obama administration than under the previous one. If anything, I am personally optimistic that there will be some upward movement.

*Q: We’ve talked about interactions here at Scripps Florida. Can you expand on that to talk about ties to La Jolla?*

GRIFFIN: Within my department and also within my own research group, we have a collaboration on lipid signaling pathways with Ben Cravatt and Dale Boger in La Jolla. We have the National Screening Center collaboration with Hugh Rosen and his team, which also includes chemists Ed Roberts and Ben Cravatt in La Jolla, and Peter Hodder and Bill Roush at Scripps Florida. Along with Patsy McDonald of Scripps Florida, I have a collaboration with La Jolla’s M.G. Finn. My lab has a collaboration with Richard Lerner looking at compounds that disrupt TNF $\alpha$  trimerization. We also have a collaboration with Ray Stevens and Hugh Rosen looking at the dynamics of GPCRs. We’re in the process of working with Roy [Smith] on a program project idea targeting his receptor and its role in aging and metabolism, together with Ray, bringing in the structural and mechanistic aspects.

SMITH: It’s a big advantage to have access to investigators on the La Jolla campus. I visited Ray Stevens to talk about structural studies involving ghrelin receptor heterodimers and he was so enthusiastic about us working together.

GRIFFIN: They’re all top notch – structural biology, chemistry, any field of biology...

ROUSH: Scripps’s structural biology group is world-class. It’s the best, just off the scale.

CLEVELAND: We’re collaborating with Richard Lerner and his colleagues using their immunochemistry expertise for a very exciting program that involves new therapeutic targets. We’re also just starting a collaboration with Peter Kuhn and his group, a terrific project that deals with circulating tumor cells. I think



with time there will be lots of interaction between the two campuses for every investigator.

*Q: Let me ask a general question about the public and science. As scientists, do you think the American public as a general rule understands science?*

ROUSH: No.

CLEVELAND: Science education is a huge deficit in the United States. We lose these kids. We lose them in middle school.

GRIFFIN: There is not enough encouragement for women to pursue science as a career. There's a bias early on in education that women are not focused on math and science; they should be focused on other things. I have two daughters, so I see it firsthand.

ROUSH: This is exactly why I sent my daughter to a women's college—for exactly this reason.

ORF: All the innovations of the 20th century were based in the physical sciences and America led all of this—the airplane, the automobile, space travel, the Internet. Bioscience is going to have that same impact in this century, and the question is, “Who is going to lead the innovation?” If we don't get more of our students interested in science, it's not going to be the United States. For the last 10 years we've been filling the educational gap by importing students to major in science. They used to stay here and become productive members of our institutions. Now the trend is they come here to be educated, then go back home.

SMITH: It's hard to recruit top graduate students and postdocs from the United States because the numbers are dwindling. In the U.S., often the really good people go to medical school, business school, or law school. You must have a passion for what you do in science, but even with that passion, many kids are influenced by their parents, who say, “Do you want to struggle the rest of your life as a scientist trying to write grants? Go get a law degree.” Many schools have difficulty filling positions with students and postdocs who are U.S. citizens.

ROUSH: In a global sense, what Roy is saying is true and correct. The top tier programs are not having these difficulties, though, and I put Scripps among them. Looking at the graduate program at Scripps, many students are not of Anglo-Saxon derivative, but many are from the United States. Overall, Scripps has done extremely well and the caliber of the students is extremely high. Unfortunately Scripps isn't going to be one to solve the “pipeline” problem. It is a big problem and one that's going to affect the future of this nation, and our economy.

CLEVELAND: The return on the dollar invested in science education is huge, so it makes economic sense.

ROUSH: Earlier we were discussing the change in administration in Washington. In addition to a change in the funding of the NIH, I keep hoping there will be a change in policies on the visa

situation, on immigration. Part of the problem is that policies have made it difficult for bright, strong graduate student talent to come into this country to get training. As a nation, instead of having an open door policy that says “come and thrive,” we've put up barriers.

GRIFFIN: But now the problem is compounded by the question of what people do when they finish their postdoctoral fellowship. In this current economic crisis, where are those jobs going to come from? The states are hurting, so state jobs are not going to be there. Private institutions are hurting. Endowments are hurting.

ROUSH: It's cyclical, inevitably that'll come back.

*Q: Let me ask a blue sky question. If you had a magic wand to have all the funding and whatever else you needed, what would you do?*

CLEVELAND: What I'd do is to create endowed chairs for faculty we want to retain or recruit. That would make for a stronger institution. We need institutional support in that regard. We need philanthropic funds to create an endowment.

SMITH: It's difficult to raise funding for endowed chairs, but the fear is a scenario like this. You take a chance when you recruit a young faculty member. Besides obvious talent, you select based on whether you believe this person can become independently funded within two to three years. Success! The faculty member meets all your expectations. Then other institutions try to recruit him or her away because the person is no longer a risky investment. The way to encourage the best scientists to stay is to provide an endowed chair at the time they are promoted to a tenured faculty position.

CLEVELAND: So it's a retention issue; it's a recruiting issue.

*Q: Is this the utterly practical side of science?*

GRIFFIN: Yes, it has to be run like a business. We run our lab like a small company.

CLEVELAND: Every investigator is his or her own independent business. We're advocates for all these.

ROUSH: We're all “mom and pop” entrepreneurs.

GRIFFIN: We have to solve multiple problems simultaneously—our own research funding, our faculty members' research funding, and the institute's survival over the long term.

*Q: Is Scripps Florida a new paradigm of what the future of biomedical research looks like?*

ROUSH: In part, yes. Will all the institutions in the nation gravitate to do what we're doing? No, they won't. They can't. There's just too much institutional inertia. I firmly believe that the Scripps Florida model is the future. I don't see how we can be anything other than wildly successful.

## The Discoveries of Tomorrow ✨

*The researchers at Scripps Florida need your help. Funding is needed to support early-stage research—the kind of pioneering work too experimental to attract traditional funding sources—to endow fellowships for graduate students and postdoctoral fellows, and expand science education opportunities for young people.*

### FACILITY NAMING OPPORTUNITIES

Scripps Florida's campus—second to none in its technological and strategic design—provides a unique selection of facility naming options for the thoughtful philanthropist. Such opportunities to underwrite the long-term costs of operating labs are rare at existing world-class institutions.

The award-winning Zeidler Partnership Architects in association with Bohlin Cywinski Jackson rendered the new structures in a 21st century palate of colors perfect for its tropical setting—silver, cool green, grey-blue, and terra cotta. The three buildings of the complex encompass more than 350,000 square feet in an arc around a lake designed to attract wildlife and to reflect the new structures. The project icon, evocative of the double-helix structure of DNA, is an 8.4-ton galvanized steel tower rising 134 feet above the central building.

The *Drug Discovery Building* is home to most of the key components of the Scripps Research discovery pipeline. A pair of Kalypsys robotic arms anchor the Scripps Florida screening center with the capability to test over a million chemical compounds against biological targets of interest to scientists. The structures of promising compounds are modified and improved to increase efficacy and to reduce unwanted side effects of potential drugs. The Drug Discovery Building can be named with a gift of \$7,500,000.

The headquarters and nerve center of the campus complex is the *Advanced Technologies Building*. At its core is the Rodney B. Fink Education Pavilion with two classrooms and a large auditorium for scientific symposia. A large cafeteria opening onto a lakeside terrace creates a bustle of daily activity and information exchange. A library and informatics center are adjacent to the Founders' Suite for meetings of the Board of Trustees and other important functions. Core laboratories for genomics, proteomics, and cell based screening, as well as the Department of Metabolism and Aging occupy labs in the building along with an important microscopy center for the campus. The Advanced Technologies Building can be named with a gift of \$10,000,000.

Scientists in the laboratories of Cancer Biology, Cell Biology, Neurobiology, and Infectology in the *Biomedical Research Building* help to unravel some of the most vexing questions of human →





### SCRIPPS FLORIDA

In addition to the three buildings, more than 150 other naming opportunities are available.

*Common to all three buildings are:*

<i>Research Suites</i>	\$1,000,000 - \$3,500,000
<i>Symposium Rooms</i>	\$350,000
<i>Conference Rooms</i>	\$250,000
<i>Department Chairs' Offices</i>	\$250,000
<i>Laboratories</i>	\$250,000 - \$350,000
<i>Professors' Offices</i>	\$150,000
<i>Assistant/Associate Professors' Offices</i>	\$100,000
<i>Postdoctoral Fellows' Offices</i>	\$75,000 - \$100,000
<i>Research Scientists' Offices</i>	\$75,000
<i>Student Fellows' Offices</i>	\$50,000 - \$75,000

*In addition, naming opportunities unique to each building include:*

#### ADVANCED TECHNOLOGIES BUILDING

<i>Lakeside Plaza</i>	\$500,000
<i>Microscopy Suite</i>	\$500,000
<i>Library and Conference Center</i>	\$5,000,000
<i>Founders' Suite</i>	\$2,000,000
<i>Library</i>	\$1,000,000
<i>IT/Informatics Suite</i>	\$1,000,000
<i>Executive Suite</i>	\$500,000
<i>Partners' Suite</i>	\$250,000
<i>Philanthropy Suite</i>	\$250,000

#### BIOMEDICAL RESEARCH BUILDING

<i>Atrium</i>	\$750,000
<i>Vivarium</i>	\$500,000
<i>Discovery Lounge</i>	\$350,000



biology and disease. Through interactions with other scientists around the world, these teams take advantage of Scripps Florida's constellation of talent and tools for drug discovery. These efforts hold great promise to streamline the agonizingly slow process of therapeutics development. The Biomedical Research Building can be named with a gift of \$7,500,000.

#### ENDOWED PROFESSORIAL CHAIRS

An endowment gift to establish a faculty chair is one of the most meaningful and lasting gifts available to a donor. Such a gift perpetuates the donor's philanthropy by creating a permanently funded position, named by or for the donor, which may be occupied in succession by major figures in the world of biomedical science. The benefits far outlast the life of the donor and will be enjoyed and acknowledged by generations to come.

A growing pool of endowed chairs helps the institute

compete in a challenging market to recruit and retain high-caliber faculty, a fact of life in research and academia today. Private support is crucial for keeping faculty salaries competitive. An endowed chair confers its holder with extra money for research and some flexibility in using those funds.

An outstanding faculty improves the institute by producing groundbreaking research that opens new frontiers and attracts the best students. It builds on the institute's strengths and prominence. The availability of such chairs to professors in all disciplines sends a clear message that the institute provides opportunities for excellence in every department. That helps make the institute attractive to outstanding young scientists as well as established leaders.

Some chairs are funded at levels that enable the institute to create an entirely new faculty position. Other gifts provide supplementary salary support, as well as discretionary funds for research.



*Above:* Opportunities are available for direct giving to support faculty chairs, postdoctoral and student fellowships, educational programs, and research related to specific diseases.

## OTHER OPPORTUNITIES

**Frontiers Fund** Gifts to the Frontiers Fund leverage private grants to open new avenues of biomedical research. By underwriting costs that research foundations and other private funding agencies are unable to provide, Scripps Research can significantly expand its funding for valuable research.

The Frontiers Fund will help launch research at the threshold of new biomedical knowledge, inquiry that is routinely passed over in favor of more conventional research approaches. Awards from the Frontiers Fund will be used as matching funds to attract other private resources.

**Centers of Excellence** Scripps Research provides an opportunity for donors to support disease-related projects selected by the institute on the basis of concentrated talent among the faculty. Such gifts accelerate discoveries in battling many of the most prevalent and devastating diseases and challenges

facing the world today, including:

*Alcoholism/Drug Abuse \* Alzheimer's Disease \* Arthritis \* Asthma \* Autism \* Cancer \* Depression \* Diabetes \* Ebola Virus/Lassa Fever \* Energy \* Heart Disease \* Hepatitis \* HIV/AIDS \* Malaria \* Parkinson's Disease \* Prion Diseases \* SARS \* Schizophrenia \* Stroke \* Viruses*

**Postdoctoral Fellowships** Postdoctoral associates make a vital contribution to Scripps Research's success by generating new ideas and publishing research results. In postdoctoral training programs, freshly minted Ph.D.s carry out research under the tutelage of an experienced faculty mentor over a number of years. These individuals go on to take top jobs in academia and industry.

The contribution of postdoctoral fellows is critically important for the institute and for the future of biomedical science. Philanthropic opportunities are available to ensure →



Scripps Research has earned a four-star rating, the highest possible ranking, from Charity Navigator for eight years in a row.

that Scripps Research is able to attract the very best applicants and that they are able to work at the institute regardless of economic circumstances. Named yearly and named endowed (in perpetuity) fellowships for postdoctoral fellows are available.

**Graduate Student (Ph.D.) Fellowships** The Ph.D. program at the Scripps Research Kellogg School of Science and Technology offers a dual service to society. The laboratory scientists of tomorrow are trained in one of the world’s most advanced research settings, and the students’ contributions in the laboratory fuel the momentum of critical biomedical experiments. Financial aid opens doors and makes dreams possible. Both named yearly and named endowed (in perpetuity) fellowships for graduate students are available.

**Undergraduate Research Programs** Opportunities exist for undergraduate students from academic institutions in Florida or elsewhere to perform research in the laboratories of Scripps Florida, conditional on the availability of laboratory space and funding. The cost of the program is \$3,000 per student per summer.

**K-12 Student and Teacher Programs** Scripps Florida promotes bioscience education and awareness throughout the state by reaching out to middle and high school students, assisting middle and high school teachers with bioscience education initiatives, and educating the general public about the basic ties that exist between biomedical research and human health. Our program is supported by a generous gift from the William R. Kenan, Jr. Charitable Trust. Special support opportunities to help provide supplies and equipment for K-12 educational outreach programs are available.

*“We are proud and excited to support The Scripps Research Institute, particularly as it gets off the ground here in Palm Beach County. The scientists and their research can make a significant difference, both in health care and in the quality of our lives.”*

ALEXANDER W. DREYFOOS, TRUSTEE AND DONOR

*“The Scripps Research Institute deserves our full support. By minimizing the bureaucratic aspects of advanced medical research, Dr. Richard Lerner has attracted an unequalled group of scientists who will continue to be responsible for many of the advances in this century.”*

PHILLIP FROST, TRUSTEE AND DONOR

*“Disease interrupts life. With its cutting edge combination of biology and chemistry, The Scripps Research Institute will develop cures for many of life’s diseases—cancer, diabetes, and Alzheimer’s among them. That is why I give to Scripps.”*

MARJORIE FINK, TRUSTEE AND DONOR

*“I’m a big Scripps Florida fan. I’ve been very pleased with the results of the research, as well as the people we work with at Scripps Florida and our relationship.”*

HARRIS HOLLIN, FOUNDER OF DONATING ORGANIZATION CONQUER FRAGILE X FOUNDATION



## ❖ *Scripps Florida : Donors*

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**IN GRATEFUL APPRECIATION OF DONORS** *We are grateful to the following Florida donors, and others who have made gifts to advance the work of Scripps Research in Florida. This list includes gifts of \$10,000 and above made from January 2004 to February 2009, including in-kind gifts.*

### **\$2 MILLION+**

Rodney B. † and Marjorie S. Fink\*

### **\$1,000,000 to \$1,999,999**

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### **\$500,000 to \$999,999**

Anonymous Non-Profit Foundation / Arthritis Foundation Mid-East Region / The William R. Kenan, Jr. Charitable Trust / Pfizer

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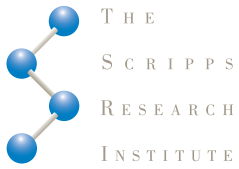
\* *Member of the Board of Trustees*

† *Deceased*

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### **SCRIPPS RESEARCH ACCOUNTABILITY**

We want you to support The Scripps Research Institute with confidence. As one of the country's largest, private, non-profit research organizations, we are proud of the way we manage our resources, private funding and assets. Accountability to our donors has earned us the highest possible four-star rating from Charity Navigator—the nation's most-utilized evaluator of charities—eight years in a row. Less than one percent of charities nationwide have received the four-star rating for eight straight years. This prestigious ranking is given to only those organizations that exceed industry standards and outperform most charities.



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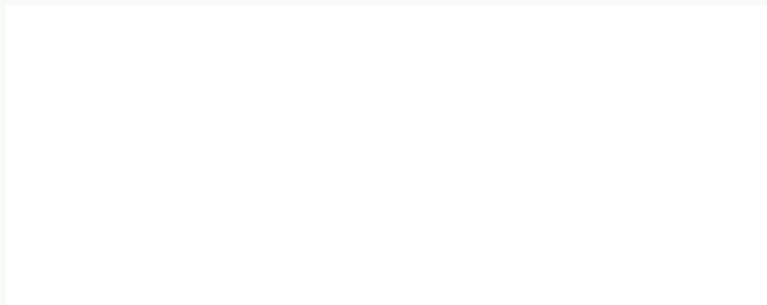
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