Looking Ahead: An Interview with Michael A. Marletta

> On January 1, Michael A. Marletta took office as president and CEO of The Scripps Research Institute. Here, he speaks about topics including his background, priorities, and vision for the future.

**What led you to The Scripps Research Institute?**

Twenty years ago, Scripps offered me a position. I was at the University of Michigan at the time. I thought long and hard about it, and decided I still enjoyed the full spectrum of a complicated university with many thousands of undergraduates. Just over 10 years ago, I moved to UC Berkeley. At Berkeley, I served as chair of the chemistry department for five years and found I enjoyed leading a complex and driven diverse group of people. A few times over the years, Richard Lerner [former president] would say, “Look, if you are ready to make a move…” I visited Scripps a number of times, and I’ve always admired the place. So when this opportunity came along, I thought it was a long shot but I applied.

**What excites you about the job as president?**

I’m excited about the potential of learning how biology works and applying that knowledge to medical problems—and that’s really being excited about the mission of The Scripps Research Institute. Others at Scripps are excited about that, too, and that’s great.

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**Research Update**

Scripps Research Scientist Awarded $500,000 Grant from Michael J. Fox Foundation to Study Parkinson’s Disease

> Funding Could Help Uncover Novel Therapeutic Target for Neurodegenerative Disorder

The Scripps Research Institute has been awarded a $500,000 grant by the Michael J. Fox Foundation to study a pair of genetic mutations that could lead to a new and potentially vital therapeutic target for Parkinson’s disease, a progressive and fatal neurodegenerative disorder.

Philip LoGrasso, PhD, a professor in molecular therapeutics and senior director for drug discovery at Scripps Florida, is the principal investigator for the project.

The study will focus on two genes, the leucine-rich repeat kinase 2 (LRRK2) and the serum glucocorticoid-regulated kinase 1 (SGK1). Genetic testing of several thousand Parkinson’s patients has shown that the risk of Parkinson’s disease associated with mutations in the LRRK2 gene are substantially reduced by mutations in the SGK1 genes, bringing the risk back in line with that of the general population.
You’ve been here since July. What are some of your first impressions of the institute?

The most encouraging thing I learned is that, in general, the faculty and staff have an intense devotion to this place. I walked into the Beckman Center the other day and the security guard at the desk, Marcus Bilbee, and I struck up a conversation, and it was clear he cares a lot. When the faculty start to talk about what they have been able to discover here, it’s clear they have an attachment. That has been deeper and more intense than I expected. That is going to help us in the long run.

What are the biggest challenges you see?

There are financial pressures. Scripps is a soft-money institution. One question I could ask in return is, “Why do faculty come to Scripps?” They could stay in a university and, even with no research support, collect nine months of salary for teaching. But for that, their days would be broken up with all kinds of university responsibilities. I did those for many years. Some of those are enjoyable, but sometimes they take you away from research when you would rather sit in a lab talking to students about a particular result.

At Scripps, you can come in at the beginning of the day and if somebody finds something unexpected or a big experiment works, you could spend all day thinking about it, talking about it, writing about it… That never happens in a university environment. Faculty come here because they can do unencumbered research. For that, there’s the risk of raising money to fund the research you want to do. Faculty also come and stay because of the infrastructure here—the very best in equipment.

So we need to generate resources to keep that infrastructure at the highest level. We need to generate resources to recruit the next generation of new faculty. We need to have resources to keep our faculty who will get offers from other places. We have had long-time relationships with “big pharma” that are not going to be repeated in the current environment. All of this boils down to the fact that the biggest issue facing us is how to move forward in a situation where the federal government will not be the partner it has been in the past. That will put even more pressure on us to raise internal funds. We’re looking at a combination of philanthropy and a return on our investment in intellectual property [IP].

Could you talk a little more about philanthropy? Why should people give here versus elsewhere?

People give because there is something about what we are doing that strikes a chord in them. Each of us can rattle off parents, siblings, aunts, uncles, cousins who suffered from some disease. It’s just inevitable. When disease strikes, we often like to do something about it. It’s one of the common aspects of private giving here. Donors hear about what we’re doing and want to support it. Of course, we have to tell them what we’re doing, and I’m spending some of my time doing that.

Sometimes what strikes a chord is an individual they meet, say a faculty member working on a particular disease. When they make a contribution, they have the opportunity to see that person be successful, working on something they believe in or a disease they want to see wiped out. So it’s often deeply personal. That’s why philanthropy is all about relationships—listening to what potential donors find interesting and then showing them we have the potential to make a major discovery that they can be a part of.

Isn’t basic research somewhat of a double-edged sword—you’re years away from medically applied research, although the fundamental discovery may ultimately have a larger impact?

I actually don’t agree with that. Let’s use the recent example of Jeff Kelly’s tafamidis [now approved in Europe to treat familial amyloid polyneuropathy]. At the heart of it, I’d say Jeff probably has two passions. One is to come up with a drug that helps treat disease. He’s just done that. But the other passion is for the science itself. So Jeff’s driving force was understanding how proteins fold, and when they misfold what happens—very basic, fundamental work, but also necessary to make a drug. Benlysta® is the only treatment for lupus, a very complicated disease. Richard Lerner’s antibodies are the technology that drug was based on. There was Humira® before that. Humira® will soon be the largest selling drug in the world.

To me, Scripps represents the very best in fundamental research coupled with looking outward for the translational piece, which takes fundamental discovery and turns it into drugs. When I was at Michigan, in the medical school’s biological chemistry department, the clinicians would say, “You’re so far away from [the clinic].” It appeared more like that then, because you made a fundamental discovery, you published it, and that was more or less the end of it. But at Scripps, it’s not just about basic discovery, but also what can you do with it. That’s different. I tell donors what our fundamental discoveries can do. I tell them we are about discovery—that’s what we do—but we don’t let it rest there, and we’ve got examples to show it. Here, basic research and potential applications go hand-in-hand.

How did you get interested in science in the first place?

I have a 16-year old. I watched him when he was a baby. Every kid is a scientist. They are all trying to figure out the world—whether they are lying on the floor and hacking at something or trying to figure out where the ball is going to go when it rolls across the floor. I found it interesting to watch him. I thought about myself and from my earliest memories, I always wanted to know how things work. But the catalyzing moment was October 4, 1957, when I was six years old and the Soviets launched Sputnik. I was six, so I was too young to be afraid. This was in upstate New York. It was pretty cold as I remember it, an October night, and I put on a heavy jacket and went out and stood on the front lawn of the little house we lived in and watched Sputnik fly over.

Even though I didn’t understand there was engineering and science at the time, I became convinced that whatever that was I wanted to be a part of it. Christmas was right around the corner, so I asked for a telescope. Since I was six, I guess it would have been Santa who brought it to me. Then the next year, I asked for a microscope and I got that. And the next year I asked for a chemistry set, a Gilbert chemistry set, and I didn’t get that. My father was worried I was going to blow up the house, although there was nothing you can blow up with a Gilbert chemistry set. But by this time, it was maybe 1960 and you could still buy a lot of chemicals, which I did because I had a paper route. I built my own lab and I almost did blow up the house.

Is it too early to ask you your vision of Scripps?

It’s a little early, but people have asked. As I mentioned, you have to have the best infrastructure possible. You’ve got really smart...
Scientists from The Scripps Research Institute, Scripps Health, and collaborating cancer physicians have successfully demonstrated the effectiveness of an advanced blood test for detecting and analyzing circulating tumor cells (CTCs)—breakaway cells from patients’ solid tumors—from cancer patients. The findings, reported in five new papers, show that the highly sensitive blood analysis provides information that may soon be comparable to that from some types of surgical biopsies.

“It’s a next-generation technology,” said Scripps Research Associate Professor Peter Kuhn, PhD, senior investigator of the new studies and primary inventor of the high-definition blood test. “It significantly boosts our ability to monitor, predict, and understand cancer progression, including metastasis, which is the major cause of death for cancer patients.”

The new test, called HD-CTC, labels cells in a patient’s blood sample in a way that distinguishes possible CTCs from ordinary red and white blood cells. It then uses a digital microscope and an image-processing algorithm to isolate the suspect cells with sizes and shapes (“morphologies”) unlike those of healthy cells. Just as in a surgical biopsy, a pathologist can examine the images of the suspected CTCs to eliminate false positives and note their morphologies. Kuhn emphasizes that this basic setup can be easily modified with different cell-labeling and image-processing techniques.

To test the new technology, members of the Kuhn lab at Scripps Research teamed up with pathologists and oncologists at Scripps Health in La Jolla, California; UC San Diego Moores Cancer Center at the University of California, San Diego; the Billings Clinic in Billings, Montana; the Division of Medical Oncology at the University of California, San Francisco; the Center for Applied Molecular Medicine at the University of Southern California, in Los Angeles; and the Netherlands Cancer Institute-Antoni van Leeuwenhoek Hospital in Amsterdam, the Netherlands.

The five new studies that resulted from the collaboration not only demonstrate the accuracy and effectiveness of the new test for a number of different cancer types, but also begin to explore the utility of the technology for diagnosing and monitoring patients and improving cancer research in the lab. While other tests for CTCs typically use “enrichment” steps in which suspected CTCs are concentrated—and these methods inadvertently exclude some types of CTCs—the new studies show HD-CTC works well as a no-cell-left-behind process and enables a more complete analysis.

Also striking is the quality of the images. “The high definition method gives a detailed portrait of these elusive cells that are caught in the act of spreading around the body,” said diagnostic pathologist Kelly Bethel, MD, of Scripps Health, Scripps Research, and UC San Diego School of Medicine, who is the senior clinical investigator on Kuhn’s team. “It’s unprecedented—we’ve never been able to see them routinely and in high definition like this before.”

In the first study, the research team examined 83 advanced cancer patients using HD-CTC to document the test’s sensitivity and accuracy for different cancer types. The scientists found that the test detected five or more CTCs per milliliter of blood in 80 percent of patients with metastatic prostate cancer, 70 percent of those with metastatic breast cancer, 50 percent of those with metastatic pancreatic cancer, and no healthy subjects. The current gold-standard CTC test, known as CellSearch, was notably less sensitive in detecting tumor cells in these samples.

Most patients whose CTC counts surpassed the detection threshold also showed small aggregates of CTCs, which cancer biologists term “micrometastasis emboli.” These are widely suspected to be incipient metastatic tumors, as well as triggers for the blood clots that often kill advanced cancer patients. In the second study, the scientists showed that HD-CTC could detect these aggregates in 43 percent of 71 patients with advanced prostate, lung, pancreas, and breast cancers, and in none of a group of 15 healthy subjects. “This tells us that HD-CTC could be helpful in studying the origins of cancer metastases and related blood clots, and for predicting them, too,” Kuhn said.

In the third study, the team used HD-CTC to compare circulating tumor cells from prostate cancer patients with cells from prostate cancer cell lines that researchers often use as convenient models for prostate cancer biology in the lab. The team found significant differences between the two classes of cells, in their cell morphology and in the way they were labeled by HD-CTC’s fluorescent tags. “This underscores the need for studying cancer cells from patients, not just model cancer cells that in some ways may be utterly different from the real thing,” Kuhn said.

In the fourth study, the researchers performed HD-CTC tests on 28 patients with advanced non-small-cell lung cancer over periods of up to a year. The team was able to detect CTCs in 68 percent of samples, and found that the numbers of detected CTCs tended to go up as other measures showed cancer progression.

In the fifth and final paper of the series, the team used HD-CTC in 78 patients who had just been diagnosed with various stages of non-small-cell lung cancer. “We demonstrated that we could sensitively detect CTCs even in patients with early-stage cancer,” Kuhn said.

This result points to the possibility of using the HD-CTC blood test not only to evaluate already-diagnosed cancer, but also to help detect cancer in people who are unaware they have it. “If HD-CTC works on the day after cancer diagnosis, as we’ve shown, then one can easily imagine that it would work the day before diagnosis, too,” Kuhn said.

Kuhn and his colleagues now intend to study the use of HD-CTC as a potential screening test and to develop it further for use in clinical monitoring and cancer research. Kuhn has founded a San Diego-based biotechnology company, Epic Sciences, Inc., to develop HD-CTC commercially for companion diagnostic products in personalized cancer care.
**Jeff Kelly: Homing in on New Drugs to Fight Neurodegenerative Diseases**

Top-notch researcher Jeff Kelly, chair of Scripps Research’s Department of Molecular and Experimental Medicine and the Lita Annenberg Hazen Professor of Chemistry, is working toward a cure for Alzheimer’s, Parkinson’s, and other neurodegenerative diseases. And he is determined to get there.

Jeff’s work employs a multidisciplinary approach to understand the biology and chemistry of the misfolding and misassembly of proteins, which appears to be the underlying cause of many chronic and late-onset neurodegenerative diseases, including well-known conditions such as Alzheimer’s and Parkinson’s, as well as rarer diseases, such as Huntington’s, familial amyloid neuropathy, familial amyloid cardiomyopathy, and inclusion body mitosis. Jeff is one of the world’s leading experts in protein misfolding diseases and his goal is to develop novel therapeutic strategies to fight them.

In 1997, Jeff and his colleague Evan Powers designed and synthesized several compounds that stabilized transthyretin, a protein found in blood. Transthyretin is the second most prominent blood protein and can be found in all of us. Unfortunately, in some people this protein misfolds and misassembles into a structured aggregate referred to as amyloid fibrils and this process, known as amyloidogenesis, can cause a variety of diseases. The molecules discovered in Jeff’s lab prevented this process of amyloidogenesis.

These discoveries resulted in Vyndaqel® (tafamidis), which was recently approved by the European Medicines Agency for the treatment of familial amyloid polyneuropathy associated with transthyretin aggregation (TTR-FAP).

The initial symptoms of this inherited and ultimately fatal disease include loss of sensation, muscle weakness, and autonomic nerve dysfunction (including sexual dysfunction, gastrointestinal disorders and urinary problems) progressing to cardiac failure and loss of the ability to walk. The only previously known treatment available has been liver transplantation.

The European Commission approved Vyndaqel® to treat TTR-FAP in adult patients with stage 1 symptomatic polyneuropathy. The drug’s clinical studies demonstrated it significantly halted disease progression and reduced the burden of disease after 18 months, compared to placebo. Since transthyretin tetramer dissociation and monomer misfolding and aggregation (prevented by tafamidis) also causes cardiomyopathies, affecting hundreds of thousands of patients, there is reason to be optimistic that tafamidis will be useful for ameliorating senile systemic amyloidosis associated with wild type transthyretin aggregation (leads to congestive heart failure) and familial amyloid cardiomyopathy associated with mutant transthyretin amyloid fibril formation.

Tafamidis was developed by the company FoldRx Pharmaceuticals, cofounded by Jeff, and acquired by Pfizer in 2010.

Jeff beams about the role private philanthropy has played in his work.

“We’re so appreciative of our philanthropic funding that empowers us to do the painstaking, cutting-edge research required for development of first-in-class drugs,” said Jeff. “Because of philanthropy, we have been able to help and hope to continue to help people with disabling medical conditions that currently have no treatments.”

“I’m very excited tafamidis helps patients suffering from TTR amyloid diseases,” Jeff continued. “Its development was built on years of basic scientific research, and we were fortunate to be funded by the Skaggs family, as well as the Lita Annenberg Hazen Foundation.”

The Skaggs family gave an extraordinarily generous gift of $100 million in 1996 which has helped transform Scripps Research into one of the leading biomedical research centers in the world.

The Arlene & Arnold Goldstein Family Foundation also provided a major gift to Jeff and his colleagues to develop the next generation of drugs to treat transthyretin amyloidosis.

“This category of human maladies represents a large unmet medical need and we appreciate the Goldsteins’ commitment to provide us with the resources to develop new therapeutic strategies for these degenerative disorders.”

A patient affected by amyloidosis, Goldstein was a participant in an ongoing FoldRx clinical trial. The support of the Bruce and Anne Bundy Foundation has also been integral to Jeff’s work.

Jeff’s laboratory also worked on the drug, Diflunisal, which is currently being evaluated for the treatment of transthyretin associated neuropathy by an academic group of clinical investigators. Results are due in early 2013.

“Philanthropy to our lab has been transformative,” Jeff said. “The National Institutes of Health is becoming less of a partner and the future will require more and more philanthropy for us to operate.”

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Peter and Linda Levine are an active La Jolla couple involved in a myriad of community activities. They recently made a major gift to support the work of Scripps Research’s Dr. Jeff Kelly, who is developing novel therapeutic strategies for neurodegenerative diseases, such as Alzheimer’s and Parkinson’s. The gift will be used to support the establishment of biomarkers and early detection methods.

Peter and Linda met in Los Angeles in 1978 and married a year later. Peter spent 32 years in the commercial insurance industry and retired ten years ago. He is currently a broker and consultant in the same industry, but is now semi-retired. Peter has several degrees in business and finance, including a Doctorate in Business Administration. He has taught college level courses in those areas. Linda, a native of Pittsburgh with a Master’s degree in gifted education, is a former elementary school teacher and GATE coordinator.

Peter and Linda have jumped into the charitable area in a big way with their recent gifts to Scripps Research, the Salk Institute of Biological Studies and Technion-Israel Institute of Technology, utilizing both funds from Peter’s retirement account as well as outright gifts.

“I’ve become very interested in the growing concerns associated with neurodegenerative diseases like Alzheimer’s, Parkinson’s and ALS,” said Peter. “I’ve researched the medical field quite a bit and have found that there is not a lot of funding for early detection and for finding biomarkers. The big money from both pharma and government tends to drive the development of new drugs and it’s a long, tough process—typically taking seven to ten years from the beginning of the process to new drug approval.”

“When we decided to make gifts in this area, I talked to several medical research groups and found that Scripps Research is one of the top medical research organizations in many areas, including neurodegenerative diseases,” said Peter. “We also wanted to make sure our gift went totally to research and some research centers required that a management fee be deducted from the gift monies.”

“Currently it is too late to stop the onslaught of these diseases, after initial diagnosis. What is needed is a simple test, such as a blood test, to mark the beginning of these diseases.”

“Once the marker is found early, it is our hope that a drug can be discovered to stop the disease in its tracks. We are all living longer and it is said that after 65 years of age, the chances of developing a neurodegenerative disease by age 80 is 50 percent. Our goal in making these gifts is to avoid both the crippling costs and the psychological effects on families caring for family members who contract the disease.”

In addition to their interest in these devastating neurodegenerative diseases, Peter and Linda are very active in the community. They are involved in the OSHER Lifelong Learning Institute at UCSD, which is an educational and cultural organization for retirees, with approximately 600 members. OSHER provides a variety of classes in such areas as art, history, science, and medicine. Peter is currently serving on the OSHER Council.

Peter and Linda are both also very active in the San Diego Jewish Film Festival, one of the largest film festivals highlighting features, documentaries and shorts that have Jewish content. Both are Underwriters and serve as Committee Chairs. Linda heads Outreach and gives presentations to various groups highlighting films to be shown. Peter is a member of the Film Selection Committee and also is Chair of the Audience Choice Awards. Linda is also active in the San Diego Jewish Book Fair.

Both Peter and Linda volunteer for Jewish Family Service of San Diego. Peter serves as a substitute driver for the foodmobile program and Linda participates in Project SARAH (Stop Abusive Relationships at Home), which offers a safe, confidential setting for individuals and teens who experience abuse and for children growing up in abusive homes.

Peter and Linda’s daughter Melissa lives locally. Their grandchildren Jacob and Sophie keep Peter and Linda very busy and are giving them much joy. Their son Eric is single and is an attorney in the Philadelphia area.

After all their community and family activities, Peter and Linda still find time to travel. Peter found his love of travel while in the U.S. Navy overseas. He has now visited over 100 counties. Linda has also caught the travel bug, with over 60 countries visited. Peter has been active in sports all his life and still dreams of being a professional golfer!

Peter and Linda are an unassuming couple, quietly giving of themselves and making a significant difference in the lives of others.
“As a kinase, LRRK2 is the kind of molecule that drugmakers have a great deal of experience targeting. And as a significant genetic contributor to Parkinson’s disease, it provides important therapeutic avenues for understanding the biological mechanisms and clinical aspects of PD,” said Todd Sherer, PhD, CEO of The Michael J. Fox Foundation. “Dr. LoGrasso’s expertise in kinases and his well known work in developing novel treatments for Parkinson’s disease will be a particularly valuable addition to the promising research already being carried out with funding from the Foundation.”

SGK1 was discovered by 23andMe, Inc., a leading personal genetics company. The company currently has 125,000 genotyped customers, and nearly 90 percent have opted-in to participate in the company’s Institutional Review Board-approved research. 23andMe has amassed the single largest Parkinson’s research cohort in the world, which now comprises approximately 6,000 participants and includes one of the largest cohorts of individuals carrying the pathogenic mutations in the LRRK2 gene.

With this award, Dr. LoGrasso joins the LKRR2 Consortium, established last year by the Michael J. Fox Foundation. The consortium is an international group of academic and industry partners dedicated to accelerating LRRK2 therapeutic development.

“I want to thank the Fox Foundation for their generous grant,” LoGrasso said, “and for giving me the opportunity to study the links between these intriguing genetic mutations. The question our laboratory will explore is how SGK1 works and how it impacts the LRRK2 mutation. We’re all hoping that ultimately this produces a new target for treatment intervention – because there are no viable long-term treatments available today.”

Since the 1960s the mainstay for the treatment of Parkinson’s disease has been levodopa (L-DOPA), a drug that provides only symptomatic relief. Unfortunately, L-DOPA loses efficacy over time and has numerous side effects that limit its effectiveness.

Patients with Parkinson’s disease suffer from a loss of dopaminergic neurons in a specific area of the brain. An estimated one million Americans are believed to suffer from the disease, according to the Parkinson’s Disease Foundation; approximately 40,000 new cases are reported annually.

The LRRK2 gene was first linked to Parkinson’s disease in 2004, and many believe it to be the most common genetic contributing factor to the disease. While hereditary forms of the disease are relatively rare—an estimated five to 10 percent—unlocking the mechanisms involved in both LRRK2 and SGK1 could eventually benefit all patients.

Mutations in the LRRK2 gene have been linked with an increased risk not only of Parkinson’s disease, but also of Crohn’s disease. SGK1 is involved in a number of biomolecular processes including inflammation, cell proliferation, and apoptosis or programmed cell death. It is believed that the gene also plays a role in brain disorders other than Parkinson’s disease, such as schizophrenia, depression, and Alzheimer’s disease.

Kelly, CONTINUED

While Jeff and his colleagues have developed drugs for specific diseases, his next goal is to develop a drug that would treat multiple diseases at once.

And he plans to do this as part of a team. “I’m excited by the discoveries that the graduate students and postdoctoral fellows in our laboratory have made and will continue to make,” said Jeff.

A graduate of State University of New York at Fredonia, where he first got excited about science, Jeff received his Ph.D. from the University of North Carolina. He was a professor of chemistry at Texas A & M University before coming to Scripps Research, and, before that, a researcher at The Rockefeller University.

Jeff was recruited by former Scripps Research President Richard Lerner to come to the La Jolla campus in 1997. “It was a very easy decision,” said Jeff. “Scripps Research was emerging as the place to do chemical biology...plus La Jolla is a pretty nice place to live.”

Jeff also served as dean of graduate and postgraduate studies and dean and vice-president of academic affairs for many years, where he was responsible for Scripps Research’s Kellogg School of Science and Technology. The school has been consistently recognized by U.S. News and World Report as among the top graduate programs in chemistry and biology in the nation.

Jeff is himself a philanthropist and has made Scripps Research the beneficiary designation of his retirement plan. “Scripps Research has been very good to me,” said Jeff. “I have no dependents and this is my way of giving something back in a way that will benefit society. Scripps Research needs philanthropic support for innovations in science and is one of the best charities around. I can’t think of a better gift than improving the quality of life for humankind and pushing forward the frontiers of science.”

Outside work, Jeff enjoys driving vintage race cars. Yet he says he takes far greater chances in the lab than he ever does on the track. The Scripps Research environment has allowed him to think big and tackle groundbreaking experiments.

“We have a unique environment here, because we don’t have departmental boundaries like many other universities,” said Jeff. “I have exceptional faculty, graduate student, and postdoctoral fellow colleagues and the freedom to spend a good fraction of the day thinking about and performing research—that’s becoming more and more difficult at universities.”
Scripps Research Ranked Number One Worldwide in Chemistry

The Scripps Research Institute tops a recent decade-long international ranking of institutions for impact in the field of chemistry. The ranking, published in Thomson Reuter's ScienceWatch newsletter, which tracks trends and performance in basic research, is based on citations per paper from 2001 to 2011. The report, “Chemistry, at the Highest Level,” listed the citation rate per 1,000 or more papers for Scripps Research at 41.70, followed by Harvard University at 36.76, Rice University at 34.44, and Caltech at 34.02.

Building Blocks for the Future Quiz

The building blocks for a secure future are an essential step in planning for yourself and your family. This short quiz can help you quickly determine if you have or are in the process of putting the building blocks in place. Answer "yes" or "no" to each question.

- Yes  No  Have you appointed a health care proxy and designated a power of attorney to handle your medical or financial affairs if you are unable to do so?
- Yes  No  Have you appointed a guardian for any minor children?
- Yes  No  Have you reviewed your retirement account(s) and determined the best payout options for you?
- Yes  No  Have you evaluated your health insurance options and estimated your potential long-term health care costs?
- Yes  No  Have you reviewed your Social Security records for accuracy?
- Yes  No  Have you talked with your tax advisor about required minimum distributions from your retirement accounts?
- Yes  No  Have you confirmed and/or updated beneficiary designations for your retirement accounts, insurance policies and even your checking and brokerage accounts?
- Yes  No  Does your plan reflect your charitable interests? A gift to The Scripps Research Institute through your will, trust or by beneficiary designation can help fund life-saving research for future generations.

“No” answers represent planning steps you should consider. For helpful tips on how to proceed, contact William Burfitt in our California office at (858) 784-2037, or e-mail him at burfitt@scripps.edu, or Alex Bruner in our Florida office at (561) 228-2013, abruner@scripps.edu.

Marletta, CONTINUED

people who already have great ideas. You need to recognize talent, keep the best talent, and then basically get out of the way.

That said, I think that it would be important for Scripps to engage in serious issues in human health. I would like us to work on some big problems, like the combination of obesity and metabolic diseases like diabetes. We already have people working in these areas, but there is some opportunity. As enzymologists—I would describe myself as an enzymologist—we study one enzyme in a test tube, one at a time. We understand a lot, but when you put that one enzyme with a thousand others all working together in us, it doesn't quite work like it works in a test tube. So, in fact, we're talking about metabolism, an old moniker. When you think about the spectrum of metabolic diseases, they include not only diabetes and aspects of obesity, but also cancer, which is now being reinterpreted as something called the Warburg effect—oxygen consumption by cancer cells. I would like us to be as good at metabolomics as we are at proteomics—where we are one of the best in the world due to our investment in talent and infrastructure. With infrastructure in metabolomics, not only can our faculty take advantage of these resources, we'll also be able to tackle diseases that confront the Western world.

If we don't solve those problems, as a society we're going to have an albatross around our neck. We need to understand the processes, and we need to do something about those diseases. So, I see investment in that kind of infrastructure and then doing what I do best, which is 1) taking advantage of it in my own research, and 2) getting out of the way.

Are there any other messages you want to get out there to employees, to donors, to faculty?

I mostly want people to know I'm excited. The more I learn about Scripps, the more excited I am. Also, I'm going to work hard to make sure that Scripps remains the kind of institution that it has been and moves forward with new discoveries, but I need everybody's help—donors, faculty and staff—everybody.
Partners

1
Scripps Research celebrated 50 years of excellence in biomedical research with a gala held in November at the Estancia Hotel in La Jolla. Proceeds from the festive occasion benefited the Scripps Research Kellogg School of Science and Technology. Among the 300 distinguished guests were many members of the faculty, trustees, donors, and community members.

Six Nobel laureates attended the gala: (left to right) Michael S. Brown, professor at the University of Texas (UT) Southwestern Medical Center and member of the Scripps Research Board of Scientific Governors; Kurt Wüthrich, Cecil H. and Ida M. Green Professor of Structural Biology and member of the Skaggs Institute for Chemical Biology at Scripps Research; K. Barry Sharpless, W.M. Keck Professor of Chemistry and member of the Skaggs Institute at Scripps Research; Manfred Eigen, former director of the Max Planck Institute for Biophysical Chemistry and recipient of a 2011 honorary degree from Scripps Research; Gerald Edelman, chair of the Department of Neurobiology and member of the Skaggs Institute at Scripps Research; and Joseph Goldstein, professor and chair of UT Southwestern Medical Center and member of the Scripps Research Board of Scientific Governors.

2
The Florida campus marked Scripps Research’s 50th with a special celebration presenting an inaugural concert featuring the Kronberg Academy Strings, with José Menor on piano. The intimate and acoustically perfect Rodney B. Fink Auditorium proved an ideal venue for the music program containing Halverson, Schubert, and Chopin. The Honorable Richard A. Gephardt, Scripps Research’s lead trustee, welcomed 225 guests and recognized Craig Grant, president of PNC Bank Florida, for its years of support for Scripps Florida’s research, most significant milestones, and the evening’s events.

Charles Weissmann, founding department chairman of Infectology, honored Richard Lerner, former president of Scripps Research, for his leadership and 40-year scientific career, and expressed the institute’s deepest gratitude to Jimmy and Becky Mayer for their generous gift of music to highlight the occasion. The inspiration for the concert originated from the Mayers frequenting scientific lectures at the auditorium and their delight at the acoustics. As supporters of Kronberg and Scripps Research, it served as a perfect match for what might be the first of many such concerts to come. Pictured (left to right) are Scripps Research donors Becky and Jimmy Mayer, with trustee Marjorie Fink.

3
Frenchman’s Creek Women for Cancer Research (WFCR) held their 4th successful year of funding postdoctoral fellowships at Scripps Florida. To date, WFCR has raised over $540,000, making critical advancements in cancer research possible, and has motivated other communities to set up similar fundraising opportunities for Scripps Florida (see item 4). Pictured (left to right) are Marion Wiseman and Joy Hecht, co-chairs of the 2012 WFCR events, with Irma Blauner, raffle committee chair.

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In its first year of fundraising to benefit postdoctoral fellows in cancer research at Scripps Florida, PGA National’s Women’s Cancer Awareness Days held four days of successful events and activities that raised an outstanding $160,000 in contributions, and resulting in a multi-year commitment. Pictured here are co-chairs Barbara Sedransk (left) and Elaine Solomon (right), with chairman John Cleveland of the Scripps Florida Department of Cancer Biology.

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