Lighting the Way for Huntington’s

When Dr. Juan Sanchez-Ramos sits down to talk about Huntington’s Disease, he becomes emotional. He remembers when he first met HD patients in Venezuela. He was just 13 years old at the time, but the images from that trip have stayed with him all these years, transforming the boy scout into neurologist.

With Dr. Sanchez-Ramos at the helm, USF’s Huntington’s Disease Clinic is in the national spotlight. The only clinic of its kind in Florida, it has been designated a “Center of Excellence” by the Huntington’s Disease Society of America (HDSA). On March 14, the HDSA national executive director, Babara Boyle, travelled from New York to USF in Tampa to participate in a special candle lighting ceremony.

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A sweet fundraiser

Dr. Stanley Nazian was a good sport March 7 when he took a pie in the face in an effort to raise money for Project World Health, a student-run community support program that includes travel to developing countries to tour medical facilities, help local physicians provide basic care and donate much needed supplies and medications. Participating faculty members are “sponsored” by a student traveling with Project World Health and whoever raises the most money gets to throw a pie at his or her professor. The race was close, so more than two were chosen. In addition to Dr. Nazian, Dr. Paul Wallach, vice dean at COM, and Dr. Marion Ridley, associate professor of otolaryngology, participated in the event and individual pies were bought by fellow faculty members to throw at Dr. Wallach.

LEADERSHIP

New HSC leadership shared the spotlight last week when they were introduced to faculty and staff at a reception at USF’s Lifsey House. Stephen Klasko, MD, MBA, dean of the College of Medicine and vice president for Health Sciences, introduced the nine honorees, which included new stars recruited to the HSC, as well as stars who have been promoted from within:

- **Bryan Bognar, MD**, promoted to associate dean for Undergraduate Medical Education
- **Enrico Camporesi, MD**, the new chair of anesthesiology and associate dean for Clinical Practice
- **Anne Curtis, MD**, new director of cardiology and CEO of the new cardiovascular strategic program
- **Karen Liller, PhD**, promoted to associate dean for academic affairs at COPH
- **Steve Morris, MD, RN**, director of new Disaster and Bioterrorism Training Program at College of Nursing
- **Donna Petersen, ScD, MHS**, new dean of the College of Public Health
- **Sandy Quillen, PhD, PT**, promoted to associate dean and as director of School of Physical Therapy
- **Paul Wallach, MD**, promoted to vice dean of education for COM
- **Ted Williams, PhD**, promoted to associate vice president for diversity for USF and continues as associate dean for diversity in the COM

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Collaboration by USF’s Richard Heller, PhD, left, and Adil Daud, MD, led to the clinical trial of a promising new therapy for advanced melanoma at Moffitt Cancer Center.

By Anne Delotto Baier

Melanoma is a particularly deadly form of skin cancer very resistant to treatment. Researchers at Moffitt Cancer Center and the University of South Florida are testing a promising new therapy that prompts the immune system to aid in the fight against melanoma tumors.

“This is a milestone clinical trial because it is the first time that electroporation is being used to deliver plasmid DNA in a gene therapy study in humans,” said Richard Heller, PhD, professor of medical microbiology and immunology who helped develop the technology used in the study.

Electroporation is a technique in which a hand-held device applied to the skin delivers pulses of electricity to open up pores in the tumor cell membrane. This opening allows a small therapeutic molecule — in this case a molecule known as a DNA plasmid that contains the gene for Interleukin-12 — to slip inside the melanoma tumor before the membrane reseals.

“Melanoma does not respond well to standard chemotherapy,” said Adil Daud, MD, assistant professor of oncology in the Cutaneous Oncology Program at Moffitt.

“Gene therapy gives us the flexibility to introduce a huge variety of potential targets for treatment, but its major limitation has been getting the gene into the cancer. If electroporation can deliver the gene to these tumors reliably and without serious side effects, melanoma and other cancers would be open to many new treatment possibilities.”

Six years of laboratory studies by Dr. Heller and his colleagues preceded the initial human trial begun in January at Moffitt. The collaboration of USF and Moffitt in this trial is a good example of translational research — moving the new application of a gene transfer technology from an animal model to the patient. Dr. Heller’s team worked extensively with Dr. Daud to adapt the electroporation technique used on mice to humans.

The researchers injected the DNA plasmid, which encodes a gene that stimulates the immune system, directly into the tumor site in mice. Then, they applied electroporation to the site to help the plasmid move into the tumor cells. The tumor cells used the plasmid’s genetic instructions to make proteins. These proteins signaled the immune system to recognize the melanoma tumors as abnormal and attack.

Eighty percent of the mice were cured.

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Motion analysis lab

By Sarah A. Worth

What started as a way to make use of some extra equipment has grown into an operation that researchers throughout USF can use to analyze body motion, from the smallest movements needed to breathe to the broadest motions needed to pitch a baseball more than 90 miles an hour.

Murray Maitland, PT, PhD, assistant professor in the School of Physical Therapy in the College of Medicine, has set up the USF Motion Analysis Laboratory in the physical education building, just north of the campus recreation center.

Using eight high-frequency digital cameras (the same used to make the film Polar Express) and reflective markers attached to the person being analyzed, information is collected by specialized computer software to track every movement, including vertical impact.

The three-dimensional information allows Dr. Maitland’s team and other researchers using the lab to help people move farther, smarter or faster.

“From the physically disabled to those who can run a four-minute mile, this technology can provide the information to improve movement,” he said.

Among the many applications for this lab is biomechanics research and clinical practice, such as orthopaedics, sports medicine, ergonomics and neurology. Examples of clinical uses include defining how patients are progressing in therapy, how surgery is helping for range of motion, problem areas of movement, and tracking movement pre and post surgery to determine the efficacy of surgery.

But the technology offers a broader application than just medicine, Dr. Maitland said.

“This technology is a great way to analyze physical performance in a lot of areas,” he said. “From surgeons, to engineers, to sports physiologists, the Motion Analysis Lab offers research opportunities for a variety of specialties.”

In addition to research in physical therapy, the lab has been tapped for sports performance analysis, including baseball pitching and running. Specialized plates in the floor in the lab provide information about impact, crucial to a variety of movement analyses, he said.

Huntington’s Disease Clinic (Continued from page 1)

“We know that the dedicated team of professionals that you have assembled here will be at the forefront of creating new and innovative programs for care,” said Boyle, the society’s national CEO. Pictured on the left, retired airforce officer Dean Hufford lighting a candle and being interviewed by television news crews. Hufford, diagnosed with Huntington’s three years ago, said he lost his airforce career and his marriage because of the disease. Lighting a candle with his trembling hands, he got help from Stephen Klasko, MD, MBA, vice president for Health Sciences and dean of College of Medicine.

“Moments like these bring a great sense of pride in what our young college and our exceptional researchers have accomplished,” Dr. Klasko said.

Pictured at right, leading Huntington’s researcher, Dr. Juan Sanchez-Ramos.

PT faculty publish texts

Three faculty members in the USF School of Physical Therapy recently published books. Two USF faculty members in the School of Physical Therapy co-authored the textbook “Professionalism in Physical Therapy” (Elsevier Saunders).

Catherine Page, PT, PhD, professor of physical therapy, and Laura (Dolly) Swisher, PT, PhD, assistant professor of physical therapy, wrote the text that explores the history, practice and development of professionalism in the profession to date.

And Keiba Shaw, PT, EdD, assistant professor of physical therapy, contributed the chapter on adulthood in the “Human Development and Performance Throughout the Lifespan” by Cronin and Mandich (Thomson).
Don’t forget to give your input into the status of diversity at the USF College of Medicine by filling out the online survey.

When using the campus telephones to call for emergencies, dial 911. Although on-campus phones require certain numbers for calling on or off campus, callers need only press 9, 1, 1 to be connected for all police, fire and medical emergencies.

The deadline for providing your ideas through this anonymous survey is March 31. The information gathered will be used to gauge the climate of diversity at COM and used to shape future action plans. The survey can be found at www.hsc.usf.edu.

REMINDER:

Call 911 for emergencies

REMINDER:

Diversity climate survey online until March 31

Dr. Karen Liller appointed to Florida Injury Prevention Advisory Council

Karen Liller, PhD, associate dean for academic affairs at the College of Public Health, has been appointed by Florida Health Secretary Dr. John Agwunobi to the state’s new Injury Prevention Advisory Council. She was named the team leader for goal 7 of the Injury Prevention Strategic Plan. This goal focuses on building capacity and resources statewide for the evaluation of injury prevention initiatives and interventions.

Dr. Liller, professor of community and family health, is known across the country for her work on safety and is writing a book on keeping children safe.

Advanced melanoma

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with this therapy — their tumors disappeared and the treated animals remained disease free for the full length of the study (100 days), Dr. Heller said.

Furthermore, he said, even when melanoma cells were reinjected into the cured mice the tumors were rejected. This indicates the immune system formed a memory response that recognized the melanoma cells as foreign and prevented tumor regrowth.

“We were very encouraged by the results of the preclinical studies.” Dr. Heller said. “We’re hoping this translates into a beneficial treatment for patients.”

The Phase 1 clinical trial by Moffitt and Genetronics Biomedical Corp is evaluating the safety of the electroporation technology in treating patients with advanced melanoma. The trial expects to enroll 18 to 25 patients.

For more information, please call (813) 745-8581.

News anchor, broadcast designer join HSC

Lissette Campos and Klaus Herdocia made the jump from TV land to promoting higher education and joined the team in the Health Sciences Public Affairs Office.

A familiar face to many of us, Campos is a 17-year veteran of television news and anchored and reported for ABC Action News Channel 28 in Tampa for three and half years. Before that she was a reporter for the CBS affiliate in Miami. Campos earned a degree in broadcast journalism from Florida International University. She also studied international economics at Cambridge University in England.

Her duties at HSC will be to help share the stories of our researchers, teachers and doctors with media outlets locally, nationally and internationally, helping to propel the Health Sciences Center to national prominence. In addition, she will use her broadcast reporting expertise to provide media training to faculty throughout the university.

Also joining HSC Public Affairs is Klaus Herdocia. He, too, comes to us from Channel 28, where his graphic design talent was showcased extensively on the air for news and special programming. He will use that strong talent for combining technology and graphics on several strategic projects for HSC, including the new integrated web site and other interactive media.

Herdocia earned a bachelor’s degree in digital arts and technology with an emphasis on interactive media and computer graphics from the International Academy of Design and Technology in Tampa.

Lissette Campos, is retiring her “lucky” hurricane boots after nine years of wear and tear!

Art director Klaus Herdocia’s work space at HSC is part office, part art gallery! Herdocia is always looking for inspiration.