

# THE PROJECT

Fall 2013

A Publication of The Miami Project To Cure Paralysis & The Buoniconti Fund To Cure Paralysis



*Schwann cell clinical trial Co-Principal Investigators  
Dr. James Guest and Dr. Allan Levi*



UNIVERSITY OF MIAMI  
MILLER SCHOOL  
of MEDICINE

On behalf of the Board of Directors of The Buoniconti Fund, I am extremely proud of our progress throughout 2013. Specifically, in the Schwann Cell Safety Trial, I am delighted to announce that Miami Project scientists have injected autologous Schwann Cells in two subjects with acute (recent) spinal cord injuries. Those subjects are reacting well to the transplant and have not demonstrated any adverse reactions. As we increase the number of subjects, we will be increasing the dose of Schwann cells in order to discover the optimal therapeutic dose level. Additionally, we are confident that that we will begin our chronic (those paralyzed a year or more) trial in 2014.

In the area of hypothermia, The Miami Project scientists continue to cool patients during the initial traumatic phase of the injury. The results have been dramatic with over 40% of the subjects converting to incomplete injuries. It is our hope that we can obtain the necessary funding to expand our trial nationwide so that everyone can take advantage of this remarkable breakthrough and life changing initiative.

In order to enhance the success of our Clinical Trials, offer the best after surgery patient care, and deliver on the promise my father made to me that we will never quit until a cure is found, it gives me the greatest pleasure to announce the building of our new rehabilitation center named The Christine E. Lynn Rehabilitation Center for The Miami Project to Cure Paralysis at Jackson Health System and the University of Miami Miller School of Medicine.

The addition of the Christine E. Lynn Rehab Center will better position The Miami Project, Jackson Health System and the University of Miami Miller School of Medicine to be the leader in spinal cord injury, as well as other neurological diseases and disorders. The combination of the world's most comprehensive spinal cord injury research center, incredible physicians and surgical teams, and the new rehabilitation center, will allow The Miami Project to provide the highest level of patient care and expertise in neurotrauma.

Sustaining an injury to the spinal cord is devastating. Seeing your loved one in pain, anguish and literally fighting for their life is one of the most difficult and dramatic situations that life can offer. The next question that comes to your mind is just as hard -- what do we do now? Thanks to The Miami Project we have the answer.

With the opening of the Christine E. Lynn Rehabilitation Center, The Miami Project will be the only facility in the world that will provide basic, clinical and rehabilitation research, in-patient / out-patient rehabilitation services, physician and surgical expertise, training, education and quality of life programs.

As President of The Miami Project and The Buoniconti Fund, I make the same promise that my father made to me to our staff, donors and especially to the spinal cord injured community and their families that we will never quit until we achieve our ultimate goal of curing paralysis.

I have never been more confident and optimistic about my future and the future of every spinal cord injured person. It's only because of all of you, our friends, that The Miami Project is where it is today.

Together we have come so far! Together we will succeed!  
Respectfully,



Marc A. Buoniconti, President  
The Buoniconti Fund and The Miami Project



Marc Buoniconti, President  
The Buoniconti Fund  
The Miami Project

## *One Moment In Time*

WE HAVE BEGUN! Our Human Clinical Trials are taking place right now!! This year is definitely The Miami Project's **One Moment In Time** – we are changing medical history. With the Food and Drug Administration (FDA) approval The Miami Project to Cure Paralysis has begun a **Phase 1 Clinical Trial transplanting human Schwann Cells to treat patients with recent spinal cord injuries**. The first two participants received the transplantation of their Schwann Cells about five weeks post-injury. The first participant is home after rehabilitation therapy. The second participant's treatment is continuing just as well. This groundbreaking Clinical Trial will enroll a total of eight participants, testing three different amounts of Schwann Cell injected, and then we will proceed to the much anticipated Human Trial in **chronic injuries**. Exciting findings in the pre-clinical studies with Schwann Cells in chronic injuries have shown extremely promising repairs in the nervous system.



Nick Buoniconti, Founder  
The Buoniconti Fund  
The Miami Project

Since 1985, when Marc suffered a paralyzing spinal cord injury after making a tackle on the football field, I have met so many wonderful families that have been devastated by the effects of spinal cord injuries. The Ryan and Danielle Meade family is just one of the families who are in my prayers every day. Two of their four young daughters were paralyzed in a terrible car accident. Now everyday is a series of doctor visits, therapy, and struggles. I can't stand the thought of these young girls and the millions like them to live their lives with so much difficulty!

The Miami Project has not let hard work and adversity stand in its way to find a cure! We are driven to achieve freedom from paralysis and now, this is our incredible **Moment In Time**, and science has proven that we are a heartbeat away from our goal. For 28 years I have been amazed that supporters of the Great Sports Legends Dinner have raised incredible funds and awareness for The Miami Project's groundbreaking research. I want to sincerely thank The Buoniconti Fund's dedicated Board of Directors, the Great Sports Legends, Honorees, Dinner attendees and all those who have helped to find a cure for paralysis. Millions of the paralyzed around the world look to The Miami Project for their **One Moment In Time** – their destiny to move again, to be free, to take that first step for a brighter future. The Miami Project and all of you here will fulfill their dreams and their destiny. I will meet any challenge to cure paralysis and continue to live for the moment when I can say my life's mission is at last a reality.

A handwritten signature in dark ink, appearing to read 'Nick'.

Nicholas A. Buoniconti, Founder  
The Buoniconti Fund and The Miami Project





A message from the  
Chairman and the  
Scientific Director

Barth Green, M.D.,F.A.C.S.  
W. Dalton Dietrich, Ph.D.

Dear Friends and Colleagues,

This year has been the most productive to date in the history of The Miami Project to Cure Paralysis. Following approval from the FDA to initiate a Phase I Safety Trial in people with recent spinal cord injury (SCI), Miami Project researchers received ethics permission from the University of Miami Miller School of Medicine to begin enrollment for this important trial. We have transplanted two subjects with millions of their own Schwann cells. These are indeed very exciting times for The Miami Project's scientific community as we translate our discoveries into people to make a difference in their lives.

Based on encouraging preclinical studies, it appears that Schwann cell transplantation also represents a logical cellular approach to repairing the nervous system years after the primary insult. To maximize our chances of seeing improvements in chronically injured SCI subjects, we have initiated a Boot Camp program in The Miami Project to condition and train selected individuals to maximize their chances of benefiting from the cell therapies. We feel that Schwann cell transplantation and subsequent combination approaches, together with neurorehabilitation strategies, may be an exciting approach to making a difference in the lives of people living with SCI.

The Miami Project is also beginning to work more closely with biotech companies to help translate some of their new products and discoveries to the paralysis population. Our work with Medtronic is moving forward to test a state-of-the-art brain-machine interface to enhance upper extremity function in people with chronic cervical SCI. Brain signal processing and electrical monitoring equipment along with muscle stimulators will allow commands from the brain to be transmitted to upper extremity muscles to enhance motor function in selected subjects. New applications for deep brain stimulation are also proving advantageous in promoting sensory and motor function in models of SCI and a clinical trial is beginning to target unresponsive pain in chronically injured individuals.

Our innovative drug discovery program has identified novel molecules and therapeutic targets that promote axonal regeneration better than currently available agents. Miami Project scientists also continue to investigate the beneficial effects of therapeutic hypothermia in patients with acute SCI and traumatic brain injury (TBI). We are now positioned to initiate multi-center trials to rigorously test the benefits of therapeutic hypothermia in these two patient populations. The detrimental effects of repetitive brain concussion that can occur during sporting events are also being evaluated in human studies. Again, these are excellent examples of how discoveries within The Miami Project are being successfully translated to our patient populations.

We continue to concentrate on secondary SCI complications such as neuropathic pain, male infertility, muscle spasticity and cardiovascular disorders that are important to the quality of life of people living with paralysis. The Project represents a unique scientific environment by which discovery, translational, and clinical research comes together with the ultimate goal of advancing new therapies to protect and promote recovery in our SCI population. These are indeed exciting times within The Miami Project, and we thank our friends, colleagues, and research participants for their long-term support and commitment to our research programs.



Barth A. Green, M.D., F.A.C.S  
Founder and Chairman  
The Miami Project to Cure Paralysis  
Professor and Chairman, Department of Neurological Surgery  
Professor, Departments of Orthopaedics and Rehabilitation Medicine  
University of Miami Miller School of Medicine



W. Dalton Dietrich, III, Ph.D.  
Scientific Director  
The Miami Project to Cure Paralysis  
Kinetic Concepts Distinguished Chair in Neurosurgery  
Senior Associate Dean of Discovery Science  
Professor of Neurosurgery, Neurology, and Cell Biology & Anatomy  
Vice-Chair for Research, Neurological Surgery  
University of Miami Miller School of Medicine

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Dr. James Guest and  
Dr. Allan Levi in the  
operating room

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# Pumping Up

## Mesenchymal Stem Cells

Last year in *The Project* we wrote about the potential of mesenchymal stem cells (MSCs) in repairing damaged spinal cord tissue. MSCs come from the bone marrow and their normal “job” is to be a continuous source of bone cells, fat cells, and cartilage cells throughout life. One advantage they have from a cellular therapy point of view is that you can easily get them from your own body, i.e. autologous, which reduces the risk of rejection. However, last year we demonstrated in a preclinical model of spinal cord injury (SCI) that unmodified MSCs primarily act in an anti-inflammatory manner, which may be beneficial as a neuroprotective intervention when administered early after injury, but they did not have any effect on repairing injured tissue.

Drs. W. Dalron Dietrich, Helen Bramlett, and Pantelis Tsoulfas have continued their collaboration with Dr. Ian McNiece (MD Anderson Cancer Center, Texas) and Drs. Gentaro Kumagai and Satoshi Toh (Hiroshima University, Japan) to determine whether MSCs can be modified to have an effect on repairing damaged spinal cord tissue. Their latest results were recently accepted for publication in *Experimental Neurology*. They took advantage of technology that allowed them to genetically modify the MSCs.


**1<sup>st</sup>** – For several years Dr. Tsoulfas has been working with a “pumped up” neurotrophin. Neurotrophins are a family of proteins that stimulate the growth, development, and survival of

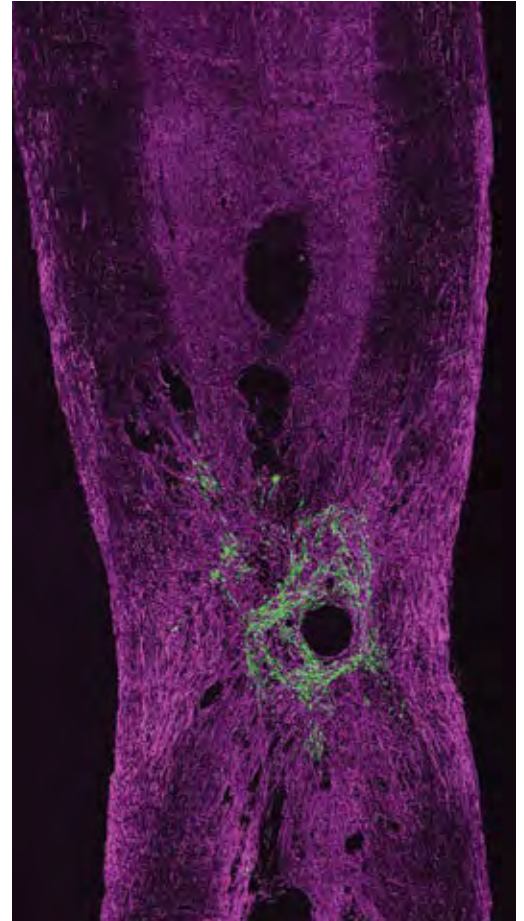
nerve cells (neurons). There are a few main neurotrophins and each will typically interact with only one kind of receptor. The “pumped up” neurotrophin has been modified to resemble 4 different neurotrophins and it interacts with their 4 corresponding receptors. Hence, it is called *multi-neurotrophin* (MNTS1).

**2<sup>nd</sup>** – They took advantage of the Viral Vector Core at the University of Miami and genetically modified some MSCs to start producing and secreting MNTS1. These modified cells can be referred to as MSC-MNTS1 and you can think of them as miniature pumps.

One week after experimental SCI, either the MSC-MNTS1 cells or the unmodified MSCs were transplanted into the injury site and allowed to survive for five more weeks. After that time period they analyzed the SCI site and found some interesting results.

- Transplantation of either the modified or the unmodified MSCs resulted in neuroprotective effects, as was expected.
- Transplantation of the MSC-MNTS1 cells:
  - stimulated axon regeneration,
  - reduced the development of skin hypersensitivity (pain),
  - stimulated blood vessel growth into the injury site, and
  - modified the formation of scar tissue around the injury site.

These preclinical results certainly change our view on the potential usefulness of MSCs to repair SCI. When they are “pumped up” they hold much more promise than when unmodified, but they are still not the only answer. MSCs have still not been demonstrated to turn into neurons and, in the current experiment, did not improve motor function. So, as we have described in many articles over the years, combination therapies are very important. These new effects of modified MSCs are a step forward and quite exciting. 



Mesenchymal stem cells (green) transplanted into a spinal cord injury cavity



# OBT T Operation Brain Trauma Treatment



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An important, long-standing area of research at The Miami Project is traumatic brain injury (TBI), for many reasons: 1) the brain and spinal cord both make up the central nervous system, 2) TBI and trauma-induced spinal cord injury (SCI) share many of the same underlying pathological mechanisms and potential repair processes, 3) it is not uncommon for humans to sustain TBI and SCI at the same, 4) the TBI and SCI clinical populations both suffer from the very difficult issue of heterogeneity (every injury is different), and 5) there are no successful reparative treatments yet available for either TBI or SCI. Additionally, TBI is the leading cause of injury and death to our military personnel who fought in Operation Iraqi Freedom as well as the ongoing war in Afghanistan, largely due to blast injuries from improvised explosive devices. In late 2009, the United States Army Medical Research Acquisition Activity funded Operation Brain Trauma Treatment (OBT T) to create a faster, yet more robust system for identifying promising TBI treatments and fast-tracking them through translation.

OBT T is a consortium of 5 highly specialized, internationally recognized centers focusing on TBI research: 1) the Safar Center for Resuscitation Research, Univ. of Pittsburgh School of Medicine (Patrick Kochanek, MD, overall PI), 2) the Miami Project to Cure Paralysis, Univ. of Miami School of Medicine (W. Dalton Dietrich, PhD, and Helen M. Bramlett, PhD, site co-PIs), 3) the neuroprotection program at Walter Reed Army Institute of Research (Frank Tortella, PhD, site PI), 4) Virginia Commonwealth Univ. (John Povlishock, PhD, site PI), and 5) Banyan Biomarkers, Inc. (Ronald Hayes, PhD, site PI). Their objective is to rapidly screen potential neuroprotective therapies and identify diagnostic/prognostic biomarkers for TBI in multiple similar yet slightly different preclinical animal models to identify candidate treatments with strong enough effects that overcome the variability across injuries. These will ultimately be translated into treatments for combat warriors subjected to complex, multi-trauma brain injuries as well as civilians that suffer TBI.

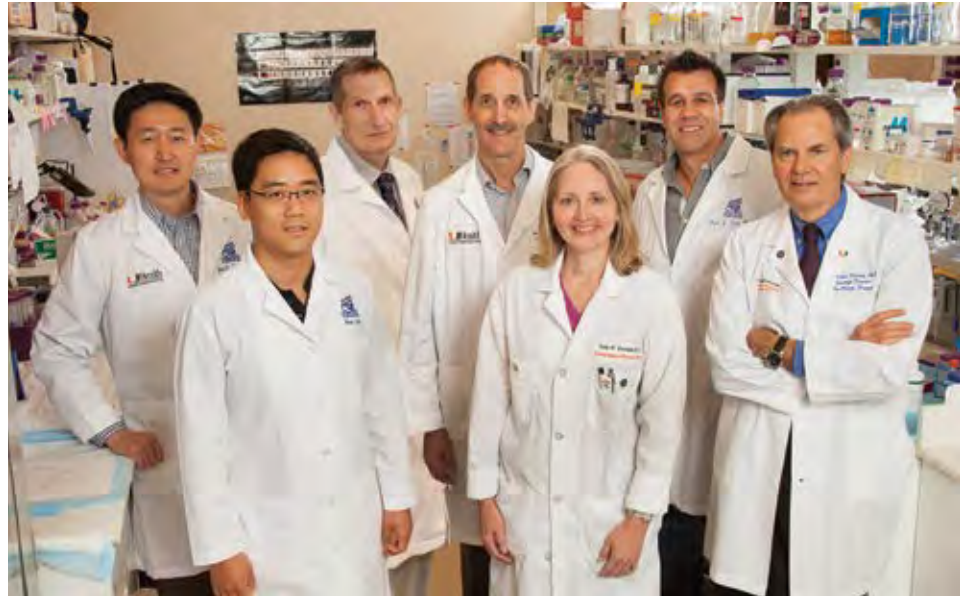
OBT T will screen therapies using a three tiered approach.

- Tier A, approximately 15 agents/therapies will undergo primary screening in three of the most well characterized and accepted basic experimental models of TBI.
- Tier B, those therapies identified in Tier A as the most promising will be tested in more complex models which mimic the more complex multi traumas warriors experience during combat.
- Tier C, the most promising agents will also undergo more advanced testing in a large animal model of TBI, in pigs.

The first five therapies they are testing are drugs already approved by the FDA for other indications: 1) Nicotinamide (Vitamin B3), 2) Erythropoietin, 3) Cyclosporin-A, 4) Simvastatin, and 5) Levetiracetam (Keppra). The first 3 drugs have completed the testing in Tier A and the results will be presented in a special upcoming issue of the *Journal of Neurotrauma*. The results from the 4<sup>th</sup> drug are being analyzed and testing of the 5<sup>th</sup> drug is underway. Operation Brain Trauma Treatment has the potential to identify promising therapies in a relatively short period of time that can then move into clinical trials for TBI. 

## Miami Project Researchers Receive DoD Funding for Axon Regeneration and Spinal Cord Injury Research

“this new DoD funding is extremely important. It comes at a critical time in our research mission, when innovative hypotheses are being tested and new discoveries are being translated to our patients”



Left to right, Drs. Jae Lee, Kevin Park, John Bixby, Vance Lemmon, Helen Bramlett, Dan Liebl, and Dalton Dietrich.

A consortium of discovery science researchers within The Miami Project to Cure Paralysis have received a \$2.5M, 18 month grant award from the US Army Medical Research and Materiel Command entitled “U.S. Army Battlefield Exercise & Combat Related SCI” to investigate new treatments for experimental spinal cord injury (SCI). A multidisciplinary team of researchers including Drs. Jae Lee, Kevin Park, John Bixby, Vance Lemmon, Helen Bramlett, Dan Liebl, Pantelis Tsoulfas (not pictured), and Dalton Dietrich will participate in this program. Research projects include determining the role of dependence receptors in regulating cell survival, testing a combination of protein kinase inhibitors to promote axonal regeneration, and enhancing neuron-intrinsic growth capacity to support axon re-growth. Other projects

include the use of antifibrinolytic agents and cytokine-mediated mobilization of mesenchymal stem cells to promote protection and repair after SCI. The program will support several critical scientific cores providing personnel and resources for animal surgical procedures, behavioral testing, morphology/neuroimaging, and high content screening. A newly acquired light sheet fluorescence microscope, which allows for imaging of whole intact tissues, will be an important component of this new program. Dr. W. Dalton Dietrich, Scientific Director of The Miami Project and the overall PI of the program, states that “this new DoD funding is extremely important. It comes at a critical time in our research mission, when innovative hypotheses are being tested and new discoveries are being translated to our patients”.

## FACULTY UPDATE

Edelle Field-Fote, PhD, PT, FAPTA

**D**r. Edelle Field-Fote is a long-standing member of The Miami Project. She is a full professor in the department of physical therapy and she uses her physical therapy background to study neuromotor rehabilitation strategies aimed at improving function in individuals living with spinal cord injury (SCI).

One of her focus areas is locomotion, about which she recently published 3 scientific manuscripts. Many people with SCI experience involuntary muscle contractions, which can be in the form of clonus, spasticity, and/or fasciculations. In those individuals that still have some movement in their legs (motor incomplete), these involuntary muscle contractions may interfere with their ability to functionally use that movement. One way to alter that is to capitalize on the ability of the nervous system to adapt in response to training. Dr. Field-Fote demonstrated that twelve weeks of body-weight supported locomotor training can significantly reduce spasticity in the quadriceps muscle (in the legs) and clonus (in the ankle). This was associated with an increase in walking speed and walking distance. Another type of training focuses on enhancing activation of weak voluntary muscles and/or suppressing involuntary reflex pathways. Dr. Field-Fote's research group led by PhD student Kathleen Manella, used a learning model called operant conditioning, which involves behavioral modification by positive reinforcement each time the behavior is performed. After 5 weeks of training focused on either enhancing voluntary control of the tibialis anterior leg muscle or focused on suppressing ankle clonus, the results indicated that both types of training were associated with improvements in measures of walking, voluntary control, and reflex control. So we know we can use training to modify walking patterns, but how much training is best? This is a question that Dr. Field-Fote will be addressing in a new grant from the National Institutes of Health.

In 2012, while she was on sabbatical in Barcelona, Spain, at the Instituto Guttmann de Neurorehabilitación, she was struck by the disconnect between what is done in the research setting and what is done in clinical practice. At the Guttmann Institute they have both ongoing research as well as excellent clinical care for persons with SCI. In research we use a very systematic and standardized approach to studying effects of physical therapy rehabilitation interventions; however, that is not true in the clinical application of these interventions. There are few published guidelines related to optimal doses of physical therapy rehabilitation interventions. While millions of dollars are spent on finding the most effective doses of interventions involving drugs, in many clinical situations the most effective interventions are not drugs but are rehabilitation interventions. Her new grant will be directed at identifying the dose-response relationship of another training intervention that her lab has been studying – Whole Body Vibration (WBV). Preliminary studies from her lab suggest that input into the spinal cord in the form of WBV may reduce spasticity and improve walking in persons with SCI. Her recent studies have shown that local vibration elicits involuntary step-like behavior, even in persons with motor-complete SCI. This suggests that vibration may influence walking function by activating circuits in the spinal cord called “central pattern generators”. However, it is not clear what dose is optimal for obtaining the maximal effect. Her new study will provide much needed answers related to dose effects of WBV on spasticity, walking function, pain, and muscle strength. This study will be a first step in addressing questions related to the most effective dose of rehabilitation for optimal outcomes.



Dr. Edelle Field-Fote (center) with members of her laboratory



Dr. Edelle Field-Fote monitoring ambulation



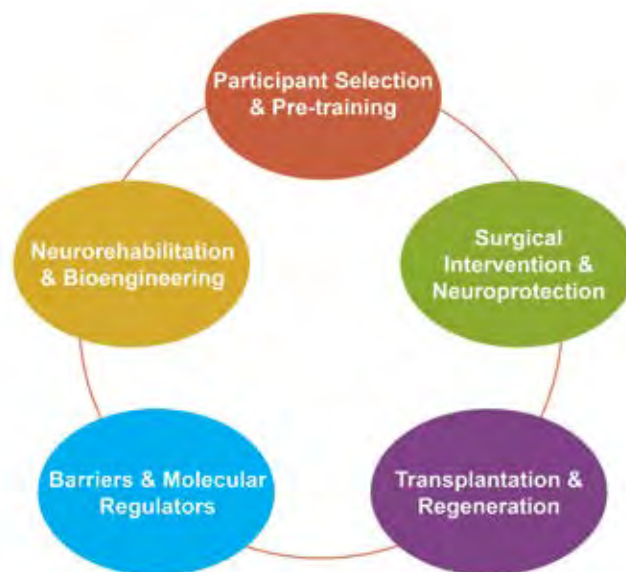
# Five Steps to a Cure

## Reassessing Miami Project Progress Since 1999

W. Dalton Dietrich, PhD,  
Scientific Director

In 1999, I generated a position statement that was published in the Winter issue of *THE PROJECT* emphasizing the complexity of developing treatments to target paralysis following spinal cord injury (SCI). Even after only two years as Scientific Director of The Miami Project, it became clear to me that a simple or single discovery was most likely not going to produce the cures that our scientific programs were targeting. Indeed, the concept of a single “silver bullet” leading to successful regenerative and reparative processes that would produce clinically meaningful improvements in function and quality of life for people living with paralysis was not likely correct. Based on an emerging scientific literature, our scientists and clinicians emphasized that most likely, multiple steps or approaches each bringing us closer to the cure would be the means by which our goals could be met. Even in those early years of paralysis research, several investigators were attempting to translate new approaches into the clinical area or conducting clinical studies that would serve as a foundation for future clinical trials.

To capitalize on our chances of making real progress on the complicated problem of SCI paralysis, appropriate steps or therapeutic targets needed to be identified to enhance the translation of our discoveries into people. Because of this overreaching research goal and my own attempt to clarify why an institute such as The Miami Project was unique and important to the field, the concept of Five Steps to a Cure was advanced. As I begin my 17th year as Scientific Director of this remarkable institute, it might be informative and timely to reconsider those proposed steps and determine how much progress we have made over these years using our multidisciplinary team science approach. Today, because of the hard work of our Miami Project scientific community in the areas of discovery



science, translational programs, and clinical studies, many success stories can be highlighted with many more to come in the future.

### Participant Selection and Pre-training:

Today, over 5 million people are living with some form of paralysis due to injury to the nervous system. The importance of selecting a particular SCI subject population for specific treatment strategies was highlighted early as an important step in targeting paralysis. This strategy emphasized the need to determine which subpopulation of people living with SCI might benefit the most from personalized regenerative therapies including cellular transplantation trials. Even at that time, it was clear that the SCI subject population was heterogeneous and the use of specific interventions targeting selective therapeutic targets might be critical when considering treatment strategies. Also, the need for various training and rehabilitation strategies specifically for those with chronic injuries was



A research participant having blood drawn as part of a trial.

emphasized to ensure significant cardiovascular or skeletal integrities supporting increased function. Today, our educational and clinical trial programs have accumulated a listing of over 1400 persons living with paralysis due to SCI who are interested in clinical trials. This secured registry contains information about injury characteristics that is useful for selecting specific subgroups of SCI for different studies. The ability to identify specific SCI groups to participate in clinical studies allows The Miami Project to conduct hypothesis driven research that provides a platform for future multicenter clinical trials with colleagues throughout the world. We acknowledge and thank all of our volunteers for participating in our research studies.

With these goals in mind, The Miami Project initiated a conditioning rehabilitation program on the first floor of the Lois Pope LIFE Center which prepares subjects for potential cell therapies including Schwann cell transplantation. The important topic of aging with paralysis has also been recently emphasized and stresses the need for good dietary and exercise programs to inhibit or reduce established co-morbidities associated with SCI including cardiovascular disease, obesity, and diabetes. On any given day of the week, individuals are working out in our 1st floor facility using specialized equipment under the supervision of our expert staff and scientists. Conditioning strategies have already been reported to improve several indicators of cardiovascular function, strength, endurance, and metabolic function.

Neurorehabilitation strategies to promote locomotor and arm and hand function have been implemented using cutting edge approaches as well as state-of-the-art robotic systems. Thus, individuals can undergo a variety of multimodal tasks to enhance function that will help prepare them for the intensive rehabilitation strategies that will be required to promote healthy aging or enhance cellular and molecular processes including circuit plasticity with cellular transplantation approaches.

In this regard, a special program called

pre- and post-surgery training strategy is now a reality as we continue to move our FDA approved cell therapy programs forward.

### **Surgical interventions and Neuroprotection:**

Each year approximately 12,000 new cases of traumatic SCI occur in the United States. Through the development of better critical care procedures in the initial minutes and hours after an injury, more patients are surviving these severe injuries and living long productive lives.

Another STEP that was also emphasized in 1997 was surgical interventions and neuroprotection. These topics are relevant as we consider therapeutic strategies to target the acute and more chronic injury states. For example, refined surgical measures including early decompression procedures are improving outcomes by reducing cord swelling and improving blood flow to the damaged cord. In subjects

where cellular transplantation into the injured spinal cord is proposed, a reproducible and safe approach needs to be established and tested to administer millions of cells to protect and enhance circuit reorganization and repair. Miami Project researchers have spent the last several years developing and testing transplantation strategies that we can utilize in individuals with acute or chronic spinal cord injury.

Using both small and large animal models of spinal cord injury, evidence for the successful application of cells into the injured spinal cord has been developed. During this testing period, our scientists worked with biotech

Each year approximately 12,000 new cases of traumatic SCI occur in the United States. Through the development of better critical care procedures in the initial minutes and hours after an injury, more patients are surviving these severe injuries and living long productive lives.

“The Miami Boot Camp” has been initiated that is assessing multimodal training paradigms for future candidates for cellular transplantation treatments. Over several weeks, individuals that meet specific inclusion criteria are put through a concentrated program to monitor and improve specific outcomes such as motor function, sensory dysfunction, and endurance. It is also envisioned that similar training and neuro rehabilitation approaches will be used after the transplantation procedures to enhance regenerative processes and ultimately increase treatment potential. The combining of multimodal rehabilitation approaches including a

## The Miami Project continues to grow by recruiting the next generation of outstanding scientists. New approaches are allowing our programs to branch out into different areas of human health.

companies and surgical colleagues to help promote the successful translation of these cell transplantation procedures to people. We know from previous clinical trials conducted by others in the field that injecting cells into the spinal cords of people can have adverse effects. Thus, this was an important step that had to be mastered prior to initiating our clinical studies. An FDA approved approach for administering cells safely into the injured spinal cord is currently being used in our clinical trial.

The use of therapeutic hypothermia as a powerful means to protect the brain and spinal cord from irreversible damage has also been introduced into the clinical area. In patients with out-of-hospital cardiac arrest as well as in infants that undergo a hypoxic insult during delivery, multicenter trials have shown that early cooling is protective

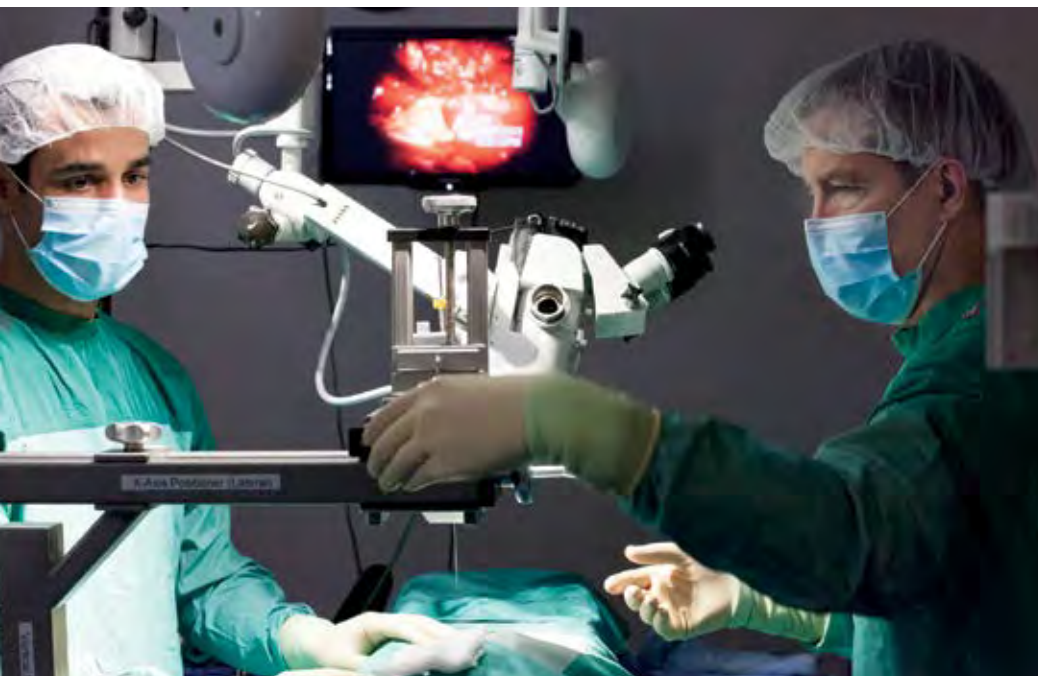
and improves long term survival and function. In the areas of stroke, spinal cord injury, and traumatic brain injury, therapeutic hypothermia is also being tested in patients with encouraging results. Indeed, multicenter trials led by The Miami Project have been planned and should provide the safety and efficacy data necessary to conclude whether hypothermic therapy in thousands of neurotrauma patients is beneficial. These seminal studies may help change the way we treat people with these severe injuries. It is very gratifying to know that our research and clinical programs have already helped change medical practice in a way that has helped patients with severe injuries.

In addition to hypothermia research, the discovery and testing of a number of neuroprotective molecules and drugs have also resulted in

exciting findings. Secondary injury mechanisms that promote neuronal cell death and inflammation are being investigated as relevant targets for new drug discovery. Compounds that have been used in other disease conditions or recently discovered novel agents are being tested in clinically relevant models and showing promise for future translation into the clinic. The potential use of pharmacological treatments in combination with temperature management and therapeutic hypothermia strategies represents a fruitful area for continued investigations.

### Transplantation and regeneration strategies:

Various cell types or bridging strategies have been evaluated by The Miami Project as well as by other centers throughout the world targeting SCI. Both adult and embryonic stem cells have been shown to enhance recovery in some preclinical models of SCI and continue to be a research focus. Various bridging strategies including the use of biological and acellular grafts show promise in terms of helping axons grow across injury-induced gaps in the spinal cord. The addition of growth promoting factors either through infusions of proteins or gene therapy is a powerful and exciting method in which to target both the intrinsic as well as extrinsic mechanisms of axonal regeneration. Indeed, high content screening strategies as well as other molecular approaches are identifying novel genes and proteins that can enhance neurite growth, promote new vessel formation and successful regeneration in models of SCI and TBI. Thus, it is clear that major strides have been made



Surgical technology to enable cell transplantation interventions in humans



standing scientists dedicated to paralysis research. New technologies and human medicine that may help provide answers to this complex problem.

regarding what regenerative strategies including cellular transplantation should be considered as we test and attempt to translate our findings.

The Miami Project made an informed decision several years ago to concentrate on the human Schwann cell as a means to promote repair in the acute and chronically injured spinal cord. Based on studies from both small and large animals, Schwann cell transplantation was reported to be safe and effective in improving functional outcome in these clinically relevant animal models. The ability to use an individual's own Schwann cells and inject them autologously is believed to be a major advantage as we try to move these new therapies to people. In addition, to enhance cell survival after transplantation and obtain FDA approval for clinical studies, good manufacturing procedures and cell processing strategies have been established to ensure that cells that are injected are healthy and will function in a hostile environment of the injured spinal cord. Schwann cells release a variety of growth-promoting factors as well as have the capacity to remyelinate (insulate) injured fibers that we believe will help lead to increased axonal function in lesions where axons are intact but demyelinated. The use of cutting-edge viral vector technology has also now permitted the continuous visualization of the transplanted cells for weeks to months to evaluate migration tendencies and assess long term survival.

Based on years of research and published studies, an Investigational New Drug Application (IND) was approved by the FDA in 2012 for the use of autologous Schwann cell transplantation to target injured individuals with subacute severe spinal cord injury; several subjects have already been successfully transplanted. The long term monitoring of these individuals will continue over the next few years as we continue to recruit additional subjects for this initial dose escalation safety study. Because of the overall goal of The Miami Project to develop new therapies for people today living with spinal cord injury, addendums and new clinical protocols are being proposed and submitted where Schwann cell transplantation will be initiated in chronically injured subjects to target the larger population of people living today with SCI. In these studies additional programs such as the Boot Camp will be combined with the transplantations procedures. Also, subsequent programs

will combine Schwann cell transplantation with other treatments that may enhance the ability of this cellular therapy to promote significant recovery in the chronic situation. It's a truly special feeling for medical researchers to see their research discoveries translated to the SCI community. This important FDA approved trial represents an important step in our goal to develop new therapies to improve function and quality of life for the SCI community.

### **Barriers and Molecular Regulators for Regeneration:**

The fourth STEP concentrated on overcoming barriers for regeneration and repair. As our scientific knowledge has progressed, it is clear that various molecules originating from inflammatory cells or the breakdown of myelin may inhibit axonal growth and lead to unsuccessful regeneration. Thus, Miami Project scientists have focused on identifying molecules that may help to overcome or target these inhibitory factors in both cell culture as well as animal models. In 2006, we organized a High Content Screening core to help identify novel molecules that promote successful axonal growth under conditions where inhibitory factors normally retard that growth. Indeed, lead compounds have now been translated to more complex models of SCI and are providing exciting information regarding what molecules are responsible for successful and unsuccessful axonal growth and which may be targets for treatment strategies. Junior, established, and senior scientists are working together to help understand the basic science of axon repair with the long term goal of using this knowledge to define the future of repairing the nervous system after injury.

The Miami Project continues to grow by recruiting the next generation of outstanding scientists dedicated to paralysis research. New technologies and approaches are allowing our programs to branch out into different areas of human medicine that may help provide answers to this complex problem. For example, in addition to the importance of studying extrinsic mechanisms underlying the control of successful regeneration, new research is targeting endogenous or intrinsic mechanisms that may limit reparative processes in the mature nervous system. Novel molecules and molecular targets are being identified that appear to be critical regulators of axonal growth that have never been investigated. In addition, new information is being obtained on the molecular control mechanisms

for promoting neurogenesis and neovascularization in the injured brain and spinal cord. Ultimately, the use of cell therapies combined with clinically relevant strategies to alter these molecular regulators of regeneration, synaptic function and repair may be an important therapeutic strategy to consider in future FDA applications.

### **NeuroRehabilitation and Bioengineering approaches to improve motor and sensory function:**


The Miami Project has a long history of utilizing novel rehabilitation strategies to enhance motor and sensory function in people living with SCI. Robotic walking machines such as the Locomat and other rehabilitation strategies have been used for years to help promote endogenous reparative strategies that might be important in SCI subjects. Combining locomotor training protocols, electrical stimulation, and vibration approaches are providing encouraging clinical findings that can be applied to the general SCI population. An exciting new direction includes the use of brain-computer interface technology that allows functional connections between the brain and spinal cord to be introduced

by novel engineering technologies. In the near future, Miami Project scientists will be utilizing these neurorehabilitation approaches and neuroengineering systems that will allow paralyzed individuals to voluntarily move their hands or legs. These neurorehabilitation strategies combined with the biological approaches, including Schwann Cell transplantation that have already been described, represent a path to promoting significant clinical recovery in persons living with SCI and overall improvement of their quality of life. With the successful implantation of cells or growth-promoting factors, enhanced axonal regeneration coupled with these innovative rehabilitation tools could help modify and enhance axonal growth to appropriate targets that could lead to enhanced function.

Many people with SCI are living with the terrible situation of pain resulting from spinal damage. Miami Project researchers were some of the first to uncover the high frequency of neuropathic pain in the subject population and begin to investigate mechanisms underlying this important consequence of SCI. Today we know that more than 50% of people living with SCI have some form of neuropathic pain that in many cases is not successfully treated. In response to this need, researchers have uncovered cellular and molecular mechanism that may participate in this pathogenesis and also tested various treatment strategies including cell and drug treatments. Our faculty are involved in clinical trials to test new pain reducing agents that provide significant relief in many subjects. Established surgical approaches including deep brain stimulation are showing promise in treating both sensory and motor deficits after injury. Regarding

another quality of life issue, important studies are clarifying the mechanisms underlying fertility problems in men with SCI. Based on recent findings, a clinical study is now moving forward to test a new treatment strategy that could provide hope for hundreds of couples trying to have children.

### **Concluding Remarks:**

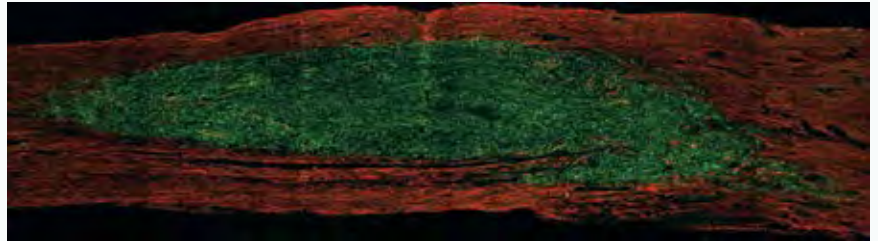
The Miami Project is an internationally established research institute that has remained focused on its discovery, translational, and clinical research programs targeting paralysis following SCI. Hundreds of peer reviewed papers and chapters have been written and findings presented at national and international meetings. Our list of discoveries and advancements continue to grow. The successful translation of many of our programs into the clinic emphasizes the significant progress that our scientific family has made over these years. We continue to work on novel strategies that target the complex field of SCI research to determine how best to advance our scientific programs. Importantly, our program is positioned and scientifically equipped to make major steps forward in terms of our neuroprotective, cellular transplantation, regenerative, and rehabilitation strategies that will make a real difference in people lives today. We sincerely acknowledge our scientific colleagues and supporters for their everlasting support for our research mission. Over the last two decades, our research programs have undergone significant change and redirection without ever losing site of our ultimate goal. In the years to come, we will continue to conduct the best science we can and pursue scientific questions that will help find the cures for people living with paralysis. 



Recording brain signals in the bioengineering laboratory

# UPDATE

## Schwann Cell Clinical Trial Program



In July 2012, we received approval from the Food and Drug Administration (FDA) to move forward with our first Phase I clinical trial to evaluate the safety and feasibility of autologous Schwann cell treatment in subacute spinal cord injury (SCI). We just passed the one year mark and have quite a few accomplishments to report.

**October 2012 – obtained approval from the University of Miami (UM) Institutional Review Board (IRB)**

**November 2012 – finalized agreement with Jackson Health System; conducted study initiation activities**

**December 2012 – performed 1<sup>st</sup> transplantation**

**April 2013 – performed 2<sup>nd</sup> transplantation**

**June 2013 – conducted 6-month and 2-month post-transplant follow-up visits for participant 1 and 2, respectively**


**July 2013 – submitted annual report to the FDA**

Those are major accomplishments in a short period of time! The amount of coordination required to enroll and move each participant through all of the trial activities is astounding. There is not enough room in this magazine to describe the enormity of communication, education, and coordination required to make this successful, but the players involved are physicians (within our team and outside our team), hospitals (within UM and JHS as well as outside), researchers (multiple laboratories), administrators, regulators, and families seeking the best treatment options for their loved one.

Thus far, there have been no treatment-related adverse effects, which is excellent news. Remember, safety is the determinate of success for this Phase I trial. We are not releasing any other information about the participants or results because the trial is ongoing and we cannot compromise the data. We are actively recruiting and screening for the remaining 6 participants. As described previously, we do not expect enrollment to progress quickly in this sub-acute trial because one cannot predict when someone will sustain an SCI that meets all the criteria of the trial. We are recruiting nationwide, however.

*“It is imperative to continue preclinical research while clinical trials are being conducted so that questions that arise during the trials can be answered in the laboratory in parallel – this is crucial to success.”*

In parallel, we are preparing data to submit to the FDA regarding a second Phase I trial targeting chronic SCI. This involves animal data as well as human data. Over the past year we have been conducting preclinical experiments in which we are transplanting Schwann cells into rodents and pigs with chronic SCI. We are collecting functional data as well as safety data (biodistribution, toxicity), which we expect to be completed by the end of 2013/beginning of 2014. Similarly, we have been conducting a human study to evaluate the multi-system effects of an exercise conditioning and rehabilitation combination we plan on adding to the phase I trial for chronic transplantation. We affectionately call this “Boot Camp” because it involves an onslaught of interventions and assessments from all of the clinical laboratories. We have all 8 participants enrolled and will complete data collection by the end of 2013/beginning of 2014.

So, in 2014 we will be able to pull together all of the rodent, pig, and human data and prepare a 2<sup>nd</sup> Phase I trial to submit to the FDA targeting transplantation of autologous human Schwann cells in individuals living with chronic SCI. That trial will also be primarily focused on safety, but in addition it will involve a preliminary evaluation of the efficacy of combining Schwann cells with exercise and rehabilitation. These are exciting times indeed. We appreciate all of the funding agencies and philanthropists that have supported us and continue to support us in our translation of this promising repair strategy for SCI. 



# Clinical Studies

## Spotlight

We're taking this opportunity to update you on two areas of research at The Miami Project that are very important to people living with spinal cord injury (SCI) – fertility and pain.

**Dr. Nancy Brackett** has been heading up the male fertility research program for over 20 years and has led the field in discoveries regarding the mechanisms underlying SCI-induced male infertility. Many years of research have revealed that SCI impairs the motility of sperm. There are altered levels of inflammatory chemicals in the seminal fluid after SCI. These chemicals are present at high enough levels that they become toxic to sperm; they do not kill the sperm, but they reduce the motility to significantly impair the likelihood of fertilization. There is growing knowledge that these inflammatory chemicals get turned on by the inflammasome, which is a multi-protein complex that activates inflammatory processes. A couple of years ago, Dr. Brackett and her research team demonstrated that a technique can be used to neutralize these inflammatory chemicals when the sperm sample is in a Petri dish. This resulted in increased motility of the sperm in the dish. However, it still required the use of assistive reproductive techniques for successful fertilization. It also did not get at the trigger of whatever is activating the inflammasome.

Last year Dr. Brackett was awarded a grant from the Craig H. Nielsen Foundation to further our understanding of the biology behind these elevated inflammatory chemicals and test a medication that can be taken by mouth to try to neutralize them. The medication is a known inhibitor of a key protein (pannexin-1) involved in the activation of inflammasomes. The main objective of the grant is to determine if pannexin-1 contributes to impaired sperm motility associated with SCI. This will be tested in 3 ways by her research team.

1. They will determine the protein levels and the cellular distribution of pannexin-1 in the semen of men with SCI versus age-matched non-injured control subjects. This will let them know if SCI causes an increase in pannexin-1 expression or changes its distribution pattern within cells so that it can become more active. If pannexin-1 is more active, it can activate inflammasomes.
2. They will determine if inhibition of inflammasome activation by blocking pannexin-1 with the medication in a Petri dish results in improved sperm motility in men with SCI.
3. They will determine if taking the medication orally will result in ejaculated semen with improved sperm motility in men with SCI.

The team is about halfway through with the experiments and Dr. Brackett has presented preliminary results at two meetings of the American Urological Association. If oral administration of the medication is safe and results in improved semen quality, this will decrease the need for invasive and expensive assisted reproductive technologies currently required to overcome low sperm motility and achieve pregnancy. The results are expected to lead to improved reproductive function in men with SCI and, therefore, a higher quality of life.



Dr. Emad Ibrahim, Dr. Charles Lynne, Dr. Nancy Brackett, Sonny Aballa

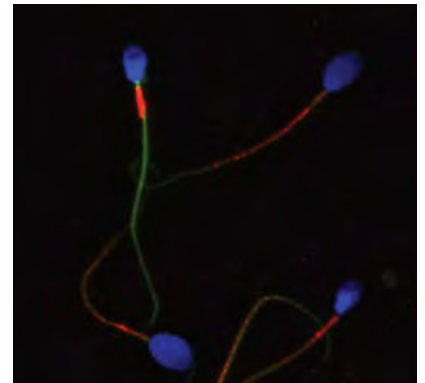


Image of sperm cells from a man with spinal cord injury. The red color indicates the presence of ASC, a component of the inflammasome


**Dr. Eva Widerström-Noga** has been studying chronic pain for over 20 years as well, with an emphasis on SCI since 1996. More than two-thirds of individuals living with SCI experience chronic, persistent pain. Dr. Widerström-Noga is an international leader in SCI pain research and classification. The field knows most about pain assessment and classification. There are 2 main types of pain: 1) nociceptive and 2) neuropathic. Nociceptive pain is typically experienced in muscles/joints/bones or internal body organs and can often be effectively treated with various pain medications. Neuropathic pain is currently defined as “pain initiated or caused by a primary lesion or dysfunction in the nervous system”, ex. pain that develops as a direct result of damage to the spinal cord. This pain can be at the level of injury or below the level of injury and it is very resistant to current pain medications. Dr. Widerström-Noga’s research group has demonstrated that SCI neuropathic pain tends to manifest in 3 distinct symptom profiles: 1) aching, throbbing

pain, exacerbated by cold weather and constipation; 2) stabbing, penetrating, and constant pain of high intensity; and 3) burning, electric, and stinging pain aggravated by mechanical stimuli such as touch and muscle spasms. These different symptom profiles are each associated with a significant degree of biological and psychological stress. No treatments are currently available that completely relieve neuropathic pain after SCI. So how do people cope with this?

That is the exact topic of a grant Dr. Widerström-Noga was awarded last year from the Department of Defense. It is titled “*Experiences of Living with Persistent Pain After a Spinal Cord Injury*”. It is a qualitative study being conducted in two parts. The first part is interview-based and involves 35 individuals living with SCI and neuropathic pain. These interviews will provide her team with comprehensive, in-depth, first-hand insight on what it’s like to live with chronic pain after SCI and what people do to cope with this pain. The second part will be a larger scale survey based on the findings of the first part, with the goal of making sure the results apply to the larger SCI population and determining how pain and coping with pain may change with time since injury or be dependent on injury severity, gender, etc.

The main objective of the whole study is to explore the perceptions of individuals with SCI and chronic pain regarding barriers and facilitators:

- for living and coping with pain and SCI;
- to activities and participation;
- to pain relief from treatments and self-administered remedies, and the role of social support

The team is about halfway through with the first part of the study and Dr. Widerström-Noga presented preliminary results in May, 2013 at the annual meeting of the American Spinal Injury Association in Chicago, Illinois. The long term goal of this research is to facilitate the management of SCI related chronic pain by increasing the knowledge regarding the barriers and facilitators of living with SCI and chronic pain, from the individuals with SCI point of view. We expect that this information will be useful for other individuals who live with SCI and chronic pain and their families, as well as for health care providers, and clinical researchers. 



Top: Members of the Widerström-Noga laboratory (Maydelis Escalona, Dr. Eva Widerström-Noga, James Adcock)  
Left: Collecting emotional information about an individual’s experience with pain requires the ability to establish a rapport between researcher and participant.

# FACULTY *notes*



**Mary Bartlett Bunge, Ph.D.**, was the keynote speaker at the 19<sup>th</sup> Annual Kentucky Spinal Cord and Head Injury Research Trust Symposium in Louisville. The title of the talk was “*The journey with Schwann cells: From bench to bedside*”.



**Vance Lemmon, Ph.D.**, taught a course on High Content Screening at the 2<sup>nd</sup> Annual Society for Lab Automation and Screening Conference and Exposition held in Orlando in January, 2013. He was also a plenary speaker at The 2013 Australian High Content Screening and RNAi meeting in Melbourne, Australia in July, 2013. Informatics and reporting

standards were major topics at the recent National Neurotrauma Symposium. Vance Lemmon organized one of the two sessions devoted to these topics and he gave a talk on using ontologies to uncover new knowledge about compounds that could be used in spinal cord injury experiments.

**Edelle Field-Fote, Ph.D., P.T., FAPTA**, has been designated as a Fellow of the American Physical Therapy Association. The criteria for this prestigious award includes a demonstrated excellence in one primary domain (advocacy, education, practice, or research); a translation of her contributions and achievements across the other three domains, and advancing the practice or research related to physical therapy through sustained efforts for a period of not less than 15 years preceding the nomination. Additionally Dr. Field-Fote was invited





to give the 12<sup>th</sup> Maureen Rodgers Visions for Physical Therapy Lecture at Rancho Los Amigos National Rehabilitation Hospital in Los Angeles, California in November, 2012. The title of her talk was “*Up to Standard: Aligning rehabilitation practice with the ideals of healthcare*”.



**Helen Bramlett, Ph.D.**, has been elected to serve as President of the National Neurotrauma Society for 2015. This one year prestigious position involves many responsibilities including helping to grow the society membership, recruit a scientific program committee, secure funding, and organize a national scientific symposium targeting brain and spinal cord trauma.

She also recently served as the Guest Editor of a special issue of *Translational Stroke Research*. This special issue focuses on the importance of gender in various Neurological Disorders including Stroke, Traumatic Brain and Spinal Cord Injury. In addition, how gender influences anesthetic effects in the Central Nervous System (CNS) is addressed. Current research indicates the role of sex hormones on the vulnerability of the CNS to different insults as well as recovery processes. The eight chapters are written by international experts and summarize the current status of this exciting research field.

**Justin Sanchez, Ph.D.**, recently gave a talk at the TED – Framing the Future Conference in Miami in October, 2012. The theme of the conference was about what we can do to change the course of our future. Dr. Sanchez’ talk focused on understanding how the brain controls perception and behavior such that bio-inspired hardware and software can be used to decode it to control prosthetic devices.




**Brian Noga, Ph.D.**’s work with deep brain stimulation to facilitate walking following SCI was highlighted in a Press Conference at the 2012 Society for Neuroscience Annual Meeting in New Orleans. He also presented a talk at the Will-to-Win International Research Symposium, Winnipeg, Manitoba (2013/05/14), entitled

“*Enhancing Locomotor Recovery and Function Following Spinal Cord Injury Using Deep Brain Stimulation of the Mesencephalic Locomotor Region*”.

**Coleen Atkins, Ph.D.**, Assistant Professor, Department of Neurological Surgery at The Miami Project has a paper titled *Phosphodiesterase Inhibition Rescues Chronic Cognitive Deficits Induced by Traumatic Brain Injury* in the *Journal Neuroscience*.



**Dr. Xueting Luo** from **Dr. Kevin Park**’s lab was one of two video entry winners of the Federation of American Societies for Experimental Biology’s (FASEB) BioArt competition. The winning images will be used as a tool in FASEB’s efforts to engage Members of Congress and the general public in dialogue regarding the immense value of the United States biomedical research enterprise and the need for sustained support of life science and biomedical research-funding federal agencies. The three-dimensional, fluorescence imaging video shows retinal ganglion cell (RGC) axons connecting one eye to other key areas of the brain in a mouse. Glaucoma causes the degeneration of the RGC axons, RGC death, and irreversible vision loss. Intensive research has been focusing on identifying strategies to promote RGC survival, axon regeneration, and reestablishing connections with other brain cells. This work is supported by the National Eye Institute, and U.S Army W81XWH-05-1-0061 and W81XWH-12-1-0319. 



*Shaquille O'Neal, Joe Torre, Bob Costas, Alonzo Mourning, Marshall Faulk, and Emilio Estefan honored with other Sports Legends at Record Breaking Fundraising Event*



2012 Legends and Honorees



Emilio Estefan and Marc Buoniconti

# Twenty-Seventh Annual Great Sports Legends Dinner



Bob Costas



Emilio Estefan, Mark Dalton, Nick and Marc Buoniconti, Shaquille O'Neal, Jack Schneider and Marshall Faulk

## 27<sup>th</sup> ANNUAL GREAT SPORTS LEGENDS DINNER RAISES \$18 MILLION FOR THE BUONICONTI FUND TO CURE PARALYSIS

Celebrities, sports legends, corporate leaders and more, joined NFL Hall of Famer **Nick Buoniconti**, his son **Marc**, and Event Chair **Mark Dalton** on September 24<sup>th</sup>, 2012, as they hosted an inspiring, sold-out crowd of more than 1400 guests, in celebration of the 27<sup>th</sup> Annual Great Sports Legends Dinner. Held annually at New York's famed Waldorf Astoria, the dinner paid tribute to philanthropic heroes and sports legends that inspire and motivate those affected by spinal cord injuries and raised nearly **\$18 million**. Once again hosted by *NBC* sports icon **Bob Costas**, the event assembled notable and influential figures to support the efforts of The Buoniconti Fund and honored this year's Great Sports Legends: **Shaquille O'Neal**, **Joe Torre**, **Marshall Faulk**, **Tony Perez**, **Mark Martin**, **Lisa Leslie**, **Jake LaMotta** and **Lorena Ochoa**.

Famed NBA Player and NBA Championship Winner, **Alonzo Mourning**, was presented with *The Buoniconti Fund Award* and Grammy Winning Musician and Producer, **Emilio Estefan**, was honored with *The Outstanding Business Leader Award*.

Other notables in attendance included: actor Danny Glover, NBA legend Walt 'Clyde' Frazier, boxer Laila Ali, Olympian Jordan Burroughs, talk show host Wendy Williams, Olympians Bonnie Blair and Allyson Felix, Brad Leland from *Friday Night Lights*, Olympic Gold Medalist Gary Hall, Jr., NFL Hall of Famer Harry Carson, Super Bowl MVP Mark Rypien, 1980 Miracle on Ice Team Captain Mike Eruzione, NBA Hall of Famer Rick Barry, and many more.

Sponsors for the evening included HBO Sports, Tiffany & Co., United Airlines, Barton G. and Diageo. 



## GREAT SPORTS LEGENDS DINNER



Marc Buoniconti and  
Shaquille O'Neal



Paul and Swanee DiMare



Mark Dalton and Marc Buoniconti with Jack Schneider



Donna Shalala and Marc Buoniconti



Lisa Leslie, Shaquille O'Neal, Joe Torre, Laila Ali and Marshall Faulk



Danny Glover and Anthony Mason



Joe Torre, Marc Buoniconti and Dr. Barth Green



Tony and Juana Perez with Dick Aldrich



Kandy Kramer



Alonzo Mourning and Walt "Clyde" Frasier



Earth, Wind and Fire



# GOLF LEGEND JACK NICKLAUS HOSTS BUONICONTI FUND CELEBRITY GOLF INVITATIONAL

PRESENTED BY THE TUDOR GROUP



Christine E. Lynn



Matthew Settle and Jeff Conine



Jack and Barbara Nicklaus with Lynn and Nick Buoniconti



Jim Ferraro with Mike Piazza




Mark Dalton, Marc and Nick Buoniconti



Paul DiMare

Golf icon Jack Nicklaus, who was named “Golfer of the Century” or “Golfer of the Millennium” by almost every major golf publication in the world and owns 118 professional tournament victories worldwide and a record 18 professional major-championship titles, along with NFL Hall of Famer Nick Buoniconti and his son Marc, hosted the 11th Annual Buoniconti Fund Celebrity Golf Invitational presented by The Tudor Group at Nicklaus’ home club and course, The Bear’s Club in Jupiter, FL. Since its inception 11 years ago, this event has attracted the world’s top business leaders and celebrities, coming together to find a cure for spinal cord injury. To date, more than \$5 million has been raised by this event to fund research programs at The Miami Project to Cure Paralysis.

Golfers and celebrities including HBO’s *Band of Brothers* and *Gossip Girl* actor Matthew Settle, former MLB catcher Mike Piazza, NFL Hall of Famer Harry Carson, NBA Hall of Famer Rick Barry, former Marlin great Jeff Conine, 1980 Olympic Gold hockey team captain Mike Eruzione, former NBA player Bruce Bowen, and University of Miami Football coach Al Golden enjoyed the Celebrity Dinner affair and an exciting day of golf on the prestigious golf course. 

# DESTINATION FASHION 2012 PRESENTED BY MICKY AND MADELEINE ARISON RAISES \$31 MILLION FOR THE BUONICONTI FUND TO CURE PARALYSIS

*A \$25 million gift from philanthropist **Christine E. Lynn** stunned the crowd as stars **Enrique Iglesias, Tom Brokaw, Tommy Lee Jones, Wayne Newton, Gossip Girls' Matthew Settle** and others joined forces to cure paralysis*

**N**FL Hall of Famer Nick Buoniconti and his son, Marc teamed up with The Buoniconti Fund Board of Directors and dedicated supporters **Academy Award winner Tommy Lee Jones and wife Dawn** and **International Polo Sensation Ignacio "Nacho" Figueras and wife Delfina** to host **Destination Fashion presented by Micky and Madeleine Arison** which raised \$31 million for The Buoniconti Fund to Cure Paralysis.

The staggering amount was the result of some especially magnanimous donors who made announcements that astounded the sold-out crowd. The surprises began when **Christine E. Lynn**, who was being honored with the Humanitarian Award and is a Buoniconti Fund Board Member and longtime supporter, announced a gift of \$25 million that would go to build a state-of-the-art new tower, to be called the **Christine E. Lynn Tower for The Miami Project to Cure Paralysis Rehabilitation Center** that will enhance the Miami Project's research efforts toward finding a cure for paralysis. Buoniconti Fund Board Member **Paul DiMare and his wife Swanee**, who were also honored during the evening with The Buoniconti Fund Award, and **Tim Gannon**, Buoniconti Fund Board Member and one of the founders of Outback Steakhouse, each gave an additional \$1 million to the cause.

More than 2,000 supporters celebrated this inspirational evening at the famed Bal Harbour Shops which opened its doors for this high profile affair emceed by NBC News icon **Tom Brokaw**. **Saks Fifth Avenue Bal Harbour** presented **Emilio Pucci's Spring 2013 Fashion Show Designed by Peter Dundas** on a custom-built runway in the Fashion Arena created specifically for this event. Partygoers enjoyed an interactive destination party experience and dance and cheered at a private concert by **Grammy Award winner Enrique Iglesias**.

The November 10th affair included the presentation of the Inspiration Award to **Micky and Madeleine Arison**, the Champion for a Cure Award went to **Edie Laquer** and the Laquer Foundation, the Humanitarian Award to **Christine E. Lynn**, The Buoniconti Fund Award to **Paul and Swanee DiMare**, and the Philanthropist Award to **Beatrice and Dr. Sanford Ziff**.



Christine Lynn and Tom Brokaw



Micky and Madeleine Arison and Enrique Iglesias



Tom Brokaw, Marc and Nick Buoniconti



Following the Emilio Pucci Fashion show and dinner, tribute was paid to The Buoniconti Fund's notable 2012 Women of Substance and Style, who walked down the runway accompanied by Celebrity Presenters. The evening culminated with guests dancing to the musical stylings of **DJ Irie** and traveled their way through the shops, which were transformed into "The Destinations" of locations from around the world such as Asia, Africa and the Americas. Bal Harbour Shops donated one-of-a-kind silent auction items including a Harry Winston diamond timepiece valued at more than \$34,000, Tiffany & Co. platinum and diamond earrings valued at \$11,000 and Warren Henry Auto donated a year lease for the new Range Rover Evoque, to name a few.

Notable celebrities and presenters included: Steve Alaimo, Moises Alou, Stanley Bahnsen, Rick Barry, Bob Beamon, Woody Bennett, Bruce Bowen, Miguel Cabrera, Helio Castroneves, Jeff Conine, Channing Crowder, Christopher Cuomo, Gil de Ferran, Colin Egglesfield, Todd English, Scott Erickson, Mike Eruzione, Emilio and Gloria Estefan, Rod Gilbert, Tim Hardaway, Randall Hill, Marvin Jones, James Lafferty, Brad Leland, Danell Levy, Rex Linn, Joe Manganiello, Mercury Morris, Alonzo Mourning, Tony Nathan, Wayne Newton, John Offerdahl, Louis Oliver, Tony Perez, Mike Piazza, Errict Rhett, Brett Romberg, Mark Rypien, Matthew Settle, Dwight Stephenson, Tico Torres, Aiden Turner, EJ Viso and Jed Weaver.



Swanee DiMare with Ignacio "Nacho" Figueras and Paul DiMare



Nick and Lynn Buoniconti



Dr. Barth Green and Edie Laquer



Tommy Lee and Dawn Jones with Delfina Blaquier and Ignacio "Nacho" Figueras



Emilio and Gloria Etefan



Tom Brokaw with Gigi Whitman and Matthew and Kristin Lazenby



Stanley Whitman with Suzie Sayfie and Dr. Eugene Sayfie



Cynthia Vijitakula with Marc and Terry Buoniconti



Stephanie Sayfie Agaard, Deborah Slack and Steve Sadov



Beatrice and Sanford Ziff



Tim Gannon





Presented by  
Micky and Madeleine Arison

# Women of Substance & Style and Supporters



Norma Jean Abraham  
and Matthew Settle



Raphael Bastian and  
Mark Rypien



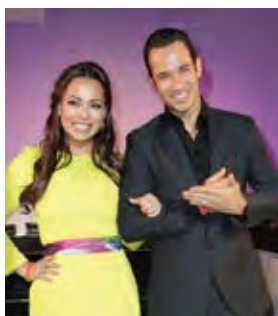
Trish Bell and  
Alonzo Mourning



Yolanda Berkowitz and  
Bruce Bowen



Lauren Book and  
Gil de Ferran



Adrienne Bosh and  
Helio Castroneves



Jennifer Stearns Buttrick  
and Aiden Turner



Chanin Carlin and  
Dr. Barth Green



Roberta O. Chaplin and  
Rick Barry



Wendy Crawford Boardman  
and Brad Leland



Andi Edelstein and  
Christopher Cuomo



Ingrid M. Fatio and  
Scott Erickson



Mary Frank and  
Nick Buoniconti



Dorothy Hamill and  
Emilio Estefan



Sheila Hollo and Jeff Conine



Cathy L. Jones and  
Wayne Newton



Irene Korge and  
Louis Oliver



Judy Lefton and  
Miguel Cabrera



Linda Levy Goldberg and  
Mike Eruzione



Maria-Rosa Lopez-Munoz  
and Dwight Stephenson



Nicole Lozano and John Offerdahl



Lilliam and Gus Machado



Judi Prokop Newman and Mike Piazza



Silvia E. Rios Fortun and Tony Perez



Michelle Simkins Rubell and Tico Torres



Ann Rubino and Rex Linn



Frances Aldrich Sevilla-Sacasa and Tim Hardaway



Millinda and Matt Sinnreich



Dara Torres and James Lafferty



Sheila Slewett and Colin Egglefield



Penny Stamps and Joe Manganiello



Lesley Visser and Bob Kanuth



Pat Wallace and Todd English



Presented by Micky and Madeleine Arison

Destination Fashion 2012 was presented by Micky and Madeleine Arison. Destination Fashion Champion for a Cure: Edie Laquer and The Laquer Foundation. Event, Continent and Ocean Sponsors including Bal Harbour Shops, Bal Harbour Village, Barton G., Carnival Corporation & plc., Roberta and Harvey Chaplin, Coastal Construction Group, Susan and Mark Dalton, Wayne Gaunce, Kim and James Pallotta, Warren Henry Auto Group. Scene Sponsors Anthony R. Abraham Foundation, Bunny Bastian, Trish and Dan Bell, Chanin and Adam Carlin, City National Bank, Swanee and Paul DiMare, The Fairholme Foundation, Mary and Howard Frank, Richard Gray, Gretchen and Jay Jordan, Kandy and Jeffrey Kramer, Krupnick Campbell Malone Buser Slama Hancock et al, Lauren's Kids, Christine E. Lynn, Robert and Judi Prokop Newman, Victoria Ranger Nunez and Mike Nunez, Simkins Rubell Family, Southern Wine and Spirits, Stamps Family Charitable Foundation, Laura and Irwin Tauber and Beatrice and Dr. Sanford Ziff. Sponsors including American Airlines, Atlantico Rum, Aventura Worldwide Transportation Service, Chateau Group – Chateau Beach Residences, Comcast, Departures Magazine, FranklinDodd Communications, Ocean Drive Magazine, One Bal Harbour Resort and Spa, and Quarzo Bal Harbour Boutique Hotel, Saks Fifth Avenue Bal Harbour, Selecta Magazine, The St. Regis Bal Harbour Resort and Tiffany & Co.



# The John M. and Jocelyn H.K. Watkins Distinguished Chair in Cell Therapies Established at The Miami Project to Cure Paralysis



Jocelyn H.K. Watkins

The Miller School's Miami Project to Cure Paralysis announced the establishment of The John M. and Jocelyn H.K. Watkins Distinguished Chair in Cell Therapies at a celebratory dinner at The Miami Project on January 29.

The inspirational evening included touching tributes from Miami Project founders Barth Green, M.D., Nick and Marc Buoniconti, University of Miami President Donna E. Shalala, Miller School Dean Pascal J. Goldschmidt, M.D., and W. Dalton Dietrich, Ph.D., Scientific Director of The Miami Project.



Nick and Marc Buoniconti, Jocelyn Watkins and Ian Cook

"By coincidence or by destiny, this year will mark the 25 years of our association with The Miami Project and it is an honor to bring to fruition something that John and I talked about for quite a long time," Jocelyn Watkins said, "My wish and my hope is with the establishment of this endowed chair, it offers another step forward to the day our scientists will succeed in finding that which we have all been looking and praying for, and to be able to announce to the world in the not too distant future, that they have found a cure for spinal cord injuries."

Green added, "We are so happy to celebrate the contributions of Jo and her extraordinary husband John in helping us move forward in a continued leadership role in cellular therapies," he said.




Donna Shalala, Pascal Goldschmidt, M.D., Helen Bramlett, Ph.D., Jocelyn Watkins, Allan Levi, M.D., Ph.D., Mary Bunge, Ph.D., Marc Buoniconti, Damien Pearse, Ph.D., W. Dalton Dietrich, Ph.D., Barth Green, M.D.

In August 1987, John Watkins suffered a severe spinal cord injury and became a quadriplegic when he was hit by a rogue wave while on vacation in St. Lucia. His body was broken but his brilliant mind and his loving heart were not, which led him and his wife to many generous acts. In 1989, they founded the Fa Bené Foundation to support The Miami Project to Cure Paralysis, and other charities that touched their hearts.

"John was a true gentleman and this gift will allow us to bring in another top-of-the-line investigator," Marc Buoniconti said. "We hope to remember his spirit with this gift that will allow us to get even closer to our goal of a cure for paralysis."

An executive at Colgate Palmolive Company, John enjoyed a rapid ascent as a corporate officer and Senior Executive Vice President. He developed the company's marketing strategy, which according to Ian Cook, the current Colgate Chairman, President and CEO, "casts an enormous shadow at Colgate" even today. Showing great strength after his accident, John lectured at UM's School of Business and enjoyed every moment.

"John and Jocelyn Watkins have been good friends to The University of Miami and The Miami Project," President Shalala said. "They have given generously over the years and have made a difference in countless lives in this community and beyond."

In addition to his sharp mind and warm heart, those close to John recall his keen sense of humor, noting that he often said, "As a quadriplegic, I don't wear out shoes." He also was very spiritual, dedicated to his church and family, and passionate about children, particularly those in harm's way around the world. On January 3, 2010, *The Miami Herald* included John in an article about people who made a difference in the community. John was selected from scores of Miami's movers and shakers. 

## 8<sup>th</sup> Annual Poker4Life Winners to Play on Poker's Biggest Stage at The World Series of Poker

Over the last 8 years more than \$1,250,000 has been raised through NYC poker events with The Buoniconti Fund being the charity of choice.

Ethan Ruby and Jeremy Schwartz, through their brainchild Poker4Life (P4L), had a change of venue this year to the Prince Georges Ballroom in Manhattan but the end result was another resounding success. In what has turned into one of the “must attend” charity poker events in the tri-state area, P4L again had a sold out event with 350 players and 150 spectators rooting them on. This year’s winners enjoyed prizes that included seats in the World Series of Poker (WSOP) Main Event that took place this past summer in Las Vegas, Nevada, NYC sports team packages, weekend stays at Revel in Atlantic City, Diamond Earrings, and seats at the 2013 Great Sports Legends Dinner, to name a few. This year’s field included a mix of professional and amateur players from around the country all vying for the coveted 2013 P4L bracelet. Event winner was Marc Podell who received a seat at the Main Event, and agreed to don the P4L patch to indicate that they intended to donate a percentage of their Main Event winnings to The Buoniconti Fund.




Jeremy and Mor Schwartz with Julie and Ethan Ruby

“Jeremy and I work all year to prepare for this event, and it gives us great pleasure to see such an amazing turnout year after year. Players have a great time, the sponsors have a great time showcasing their company and products, and the charity comes away from the night raising significant funds for important research. This is the true Positive Power of Poker,” said Ethan.

Poker4Life is a charitable organization designed to assist other charities in meeting their fundraising goals by hosting exciting, high profile poker tournaments. Poker enthusiasts Ethan and Jeremy realized the positive impact that the growing popularity of poker could have on the charitable giving world, and founded Poker4Life in 2005. They developed the concept of the “charity of charities” and began hosting poker tournaments with their cutting edge ideas of harnessing the Positive Power of Poker.



Ethan Ruby with winner Marc Podell and Jeremy Schwartz

The mission of Poker4Life is to provide a forum for professional, celebrity and amateur poker players to come together and support causes they believe in while playing a game they enjoy. Poker4Life has attracted thousands of poker players and philanthropists with its exclusive charity poker tournaments. Over the last 8 years more than \$1,250,000 has been raised through NYC poker events with The Buoniconti Fund being the charity of choice. 



*Let us know if your city could benefit from a Volunteer Chapter which develops fundraising events and awareness campaigns to help us reach our goal of finding a cure for paralysis. The Chapters located throughout the country, include Baltimore-Washington DC, Boston, Charleston, Chicago, Claddagh Foundation, Cleveland, Miami, Nashville, New York City, Orlando, Palm Beach-Broward County, Philadelphia, Pittsburgh, Southeast Michigan and Tampa.*

**W**e are proud to welcome new Chapters to our family: Claddagh Foundation and New York City.

There's no better time for you to help! Send an email to [bfchapters@med.miami.edu](mailto:bfchapters@med.miami.edu) or contact Kristin Wherry, Director of National Chapters, at (305) 243-3863.



Chapters Challenge is a campaign that encourages our volunteers and supporters participating in local, regional, national and international races (i.e. marathon, triathlon, community walk, bike race) to utilize our web-based program to raise funds and awareness on behalf of The Buoniconti Fund and The Miami Project to Cure Paralysis. Race participants can establish their own page, fundraising goals, contact friends and family, track their success, and make donations directly to The Buoniconti Fund. Our goal is to have our volunteers and supporters walk, run, swim, bike and wheel their way across the finish line!

<http://chapterschallenge.thebuonicontifund.com>  
Please visit [www.thebuonicontifund.com/chapters](http://www.thebuonicontifund.com/chapters) for the latest events, news and community outreach in your area.

On Thursday May 9, The Woody Foundation held its 2nd Annual Golf Classic at the International Links Miami golf course. Nearly 100 golfers, sponsors and volunteers came out to support this great day of golf, community and spinal cord injury research awareness. The Woody Foundation generously donated \$30,000 to the Miami Chapter of The Buoniconti Fund. This is the second year The Buoniconti Fund to Cure Paralysis was the beneficiary and event partner for this tournament. The Woody Foundation, Inc. is a 501(c)(3) not-for-profit organization formed in 2011 to raise funds for the recovery of spinal cord injured persons. James "Woody" Beckham suffered his spinal cord injury making a rugby tackle in January 2011.

October 19 ~ Miami Chapter's "Zombie Charge"  
October 20 ~ Southeast Michigan's "Run for a Reason in the Detroit Marathon"  
November 2 ~ Charleston Chapter's "7th Annual Tailgate"  
November 8 ~ Philadelphia Chapter's "10th Annual Raise A Glass"  
November 9 ~ Tampa Chapter's "6th Annual Golf Classic hosted by Rick Hart"  
December 5 ~ Chicago Chapter's "15th Annual Indulgence Night"



James "Woody" Beckham and father, Bill Beckham



## Claddagh Foundation Chapter of The Buoniconti Fund

It is with great pride and excitement that we announce the Claddagh Foundation and The Buoniconti Fund have joined forces and, as of June 1, created the Claddagh Foundation Chapter of The Buoniconti Fund. This partnership allows the former non-profit Claddagh Foundation to further expand its success throughout the Chicago area and state of Illinois, and gain the support of the world leader in spinal cord injury research, The Miami Project to Cure Paralysis.



The Claddagh Foundation and the Callahan family began supporting our organization nearly 18 years ago when Gerry Callahan reached out to The Miami Project after his niece Mary Kate Callahan was stricken with Transverse Myelitis in 1995. Transverse Myelitis is a neurological disorder that causes inflammation resulting in injury to the spinal cord. Mary Kate has inspired so many to stand up for those who can't.

### Claddagh Foundation's 17th Annual Golf Outing

The first collaborative effort of the newly formed Claddagh Foundation Chapter of The Buoniconti Fund was the 17th Annual Golf Outing held August 16 at Ridge Country Club in Chicago. Nearly 200 golfers and hundreds of family, friends, colleagues and supporters joined the Callahans in celebrating this successful golf tournament, drawing and reception.



Callahan Family – Nancy, Terry and Jack Sr., Gene Sr., and Kay, Jack Jr. and Mary Kate



Nearly 200 golfers played in AM and PM rounds at Ridge Country Club



Golfers enjoying the day of at Ridge Country Club

## CHRISTINE E. LYNN



**P**hilanthropist extraordinaire Christine E. Lynn has spent her life helping others and giving to those in need. Her name has long been synonymous with outstanding generosity and humanity in the world of philanthropy. She has dedicated her entire life to improving the health, education, and welfare of the people of South Florida and around the world. In addition to her exceptional background in healthcare as a nurse, Christine Lynn has shown outstanding business expertise in her senior administration positions over the years at the Lynn Insurance Group, and she serves as its Chairman of the Board. Her late husband, Eugene M. Lynn, insurance magnate and philanthropist, was chairman of the Board of the Boca Raton

Community Hospital, and she has continued his philanthropy in healthcare and serves as an active chairperson and volunteer for many charitable organizations and events.

Christine Lynn's support and contributions over the years has made her the leading individual donor in the history of The Miami Project to Cure Paralysis and its national fundraising arm, The Buoniconti Fund to Cure Paralysis. She and her husband funded the lobby at the Lois Pope LIFE Center. She also endowed The Christine E. Lynn Distinguished Chair, and donated \$10,000,000 to fund The Christine E. Lynn Human Clinical Trials Initiative. In November 2012, Mrs. Lynn announced that she will donate \$25,000,000 to The Buoniconti Fund to name The Christine E. Lynn Rehabilitation Tower for The Miami Project to Cure Paralysis at the University of Miami Miller School of Medicine and Jackson Memorial Campus. She received the Buoniconti Fund Humanitarian Award at the 2012 Destination Fashion event. The Miami Project's Women's Guild presented Mrs. Lynn with The Ann Bishop Spirit of Excellence Award. She was also honored as a "Woman of Substance and Style" at the 2004 Buoniconti Fund Destination Fashion event. In 2008, Christine was awarded The Buoniconti Fund Award at the 23rd Annual Great Sports Legends Dinner, and in 2010, its Outstanding Philanthropist Award. The University of Miami inducted Christine E. Lynn in the IBIS Society and the Gables Society and elected her to membership in the George E. Merrick Society.

A long-time resident of Boca Raton, in December 2008, the Boca Raton Magazine referred to Christine Lynn as its "Hometown Hero." The Lynn name appears on buildings and institutions throughout South Florida. Lynn University, formerly The College of Boca Raton, was renamed Lynn University in 1991 in recognition of the Lynns' long years of support and Mrs. Lynn served as Chairman of its Board of Trustees. The Christine E. Lynn College of Nursing, the








## Christine E. Lynn Rehabilitation Center for The Miami Project to Cure Paralysis



Christine E. Lynn Center for Caring, and The E.M. Lynn Foundation Congenital Heart Disease Research Program are based at Florida Atlantic University. Mrs. Lynn serves as Chairman of the Board of Trustees of the Boca Raton Regional Hospital where The Eugene M. and Christine E. Lynn Cancer Institute and The Christine E. Lynn Cardiac Institute are based, as well as the Christine E. Lynn Women's Health & Wellness Institute. Mrs. Lynn has also been a major donor to Stetson University, Hospice By The Sea, the Center for Group Counseling, YMCA, the Florence Fuller Child Development Center, The ARC, and The Junior League. She has received Honorary Degrees from Lynn University, Florida Atlantic University, Saint Anselm College in Manchester, New Hampshire, and Stetson University, and has been honored by Rotary International, the Sun-Sentinel, and the American College Dublin, among many others. 




## MICKY AND MADELEINE ARISON

**M**icky Arison's entrepreneurial savvy contributes greatly to South Florida's economic engine. In 1979, his father, Ted Arison, an Israeli immigrant who had acquired wealth in the cargo and shipping business, asked Micky, at the young age of 30, to become President of the company he had founded, the Carnival Cruise Lines. Micky served as Chief Executive Officer of Carnival Corporation, the world's largest cruise line until 2013. He continues to carry out his duties as Chairman, which he has done since 1990. Micky Arison is also the owner of the NBA's Miami Heat professional basketball team, three time NBA World Champions. His dynamic leadership since 1995 has been instrumental in molding the Miami Heat into the NBA's top team and greatly heightened his public visibility and fame. In addition, Micky helped to create the public/private partnership that built the county-owned American Airlines Arena. Madeleine Arison donates her time to a variety of charitable organizations, including serving on the board of directors of the Miami HEAT Charitable Fund. She also supports the organization's efforts by providing college scholarships through the United Negro College Fund.



Micky and Madeleine Arison take great pleasure in giving back to the community and are leading philanthropic contributors. They are passionate supporters of numerous arts and community organizations, including the Miami City Ballet, Miami Art Museum, American Red Cross, Big Brothers/Big Sisters, Community Partnership for the Homeless, the National Foundation for Advancement in the Arts, and the New World Symphony, on whose board Madeleine serves. Both Madeleine and Micky are trustees of the Miami Children's Museum. The Arisons are actively involved with the Carnival Foundation, which coordinates corporate involvement and financial support of various educational and social service organizations, including The Buoniconti Fund to Cure Paralysis, the national fundraising arm of The Miami Project to Cure Paralysis. The Arisons played a key role in the development of the Dr. Eugene J. Sayfie Pavilion for Excellence in Patient Care at the University of Miami Miller School of Medicine. Since 1996, the Arisons have been members of United Way's Million Dollar Roundtable of the Alexis de Tocqueville Society. They are members of the Guardian Angels for the Foundation that supports Jackson Memorial Hospital whose Pediatric Intensive Care Unit is called the Carnival Cares for Kids Center. The Arisons are also members of the Tower Club at Baptist Health Foundation.

Micky Arison attended the University of Miami, and the Arisons are among the long time and most generous supporters of the research at The Miami Project, having provided over \$5.5 million in gifts. In January 2013, the Arisons made a very generous donation to The Buoniconti Fund to support The Miami Project's recently launched Human Clinical Trials Initiative. In November 2012, the Arisons were the official Presenters of the Destination Fashion event at Bal Harbour Shops which included the presentation of The Buoniconti Fund's Inspiration Award to both Micky and Madeleine Arison. At the 2006 Destination Fashion, Madeleine was a "Woman of Substance and Style." She was honored for volunteerism and support of so many deserving charitable entities.

The Arisons have two adult children, daughter Kelly and son Nick both of whom are also very charitable and incredible volunteers in their community. 

# LOIS POPE

A great humanitarian and one of America's outstanding philanthropists, Lois Pope is the Founder and President of the Leaders in Furthering Education (LIFE) Foundation. She is the widow of *National Enquirer* founder Generoso Pope, Jr. After the *Enquirer* was put up for sale, Mrs. Pope used her share of the proceeds through the LIFE Foundation to make a contribution of \$10 million to the University of Miami Miller School of Medicine. Her donation established The Lois Pope LIFE Center – a 7-story neurological research facility that is home to The Miami Project to Cure Paralysis, the most comprehensive spinal cord injury research center in the world. In 2007 she was honored with the “Outstanding Philanthropist Award” at the 22<sup>nd</sup> annual “Great Sports Legends Dinner” to benefit The Buoniconti Fund to Cure Paralysis. In 2008, Lois Pope was honored by the Association of Fundraising Professionals as Philanthropist of the Year. Lois Pope is a Trustee of the University of Miami as well as a member of the Miller School of Medicine's Dean's Leadership Cabinet.


Lois Pope's organizations have sponsored a variety of charitable endeavors, including a clean-water project in Guatemala, summer camp grants for disadvantaged youth, programs to honor disabled veterans, and HealthCorps. The LIFE Foundation's proceeds go towards the LIFE Summer Camp Program, based in Florida, raises funds to send children from disadvantaged backgrounds, as well as those with special needs, to summer day camp. In the past 16 years, the LIFE fundraising events have sent more than 14,500 children to summer camp.

In addition, Mrs. Pope champions the sacrifices made by American disabled veterans. In 1998, she co-founded the Disabled Veterans' LIFE Memorial Foundation, leading a successful campaign to erect the American Veterans Disabled for Life Memorial in Washington, D.C., the first Memorial honoring the more than 3 million disabled veterans who sustained permanent injury or disability in the line of duty, and all of those throughout American history. In a generous



demonstration of gratitude for the enormous sacrifices made by the veterans, including the more than 53,000 who have served in Iraq and Afghanistan, Mrs. Pope has led the effort to build this Memorial in full view of the U.S. Capitol Building.

Mrs. Pope has been very personally associated with the American Humane Association. She is also involved with several international life-saving programs such as donating ambulances to the Magen David Adom, Israel's Red Cross Society; the Sudan Genocide Response Team, a grass-roots program to save women and girls from the Sudan; and funding stem cell research which holds the promise of curing numerous diseases at the Dana Farber Cancer Institute.

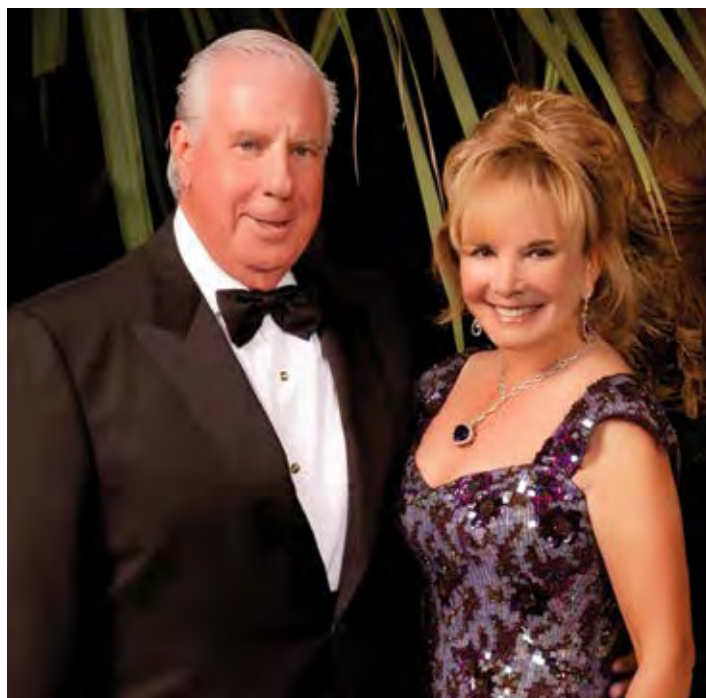
Among her many honors, Mrs. Pope was named a Daily Point of Light recipient by President George H. W. Bush. In addition, in 2006, former Secretary of State Colin Powell appointed Mrs. Pope to the Board of the Colin Powell Center for Policy Studies at the City College of New York. She also received the Ellis Island Medal of Honor for exceptional humanitarian efforts, the Timothy J. Nugent Award presented to outstanding individuals that have significantly influenced the spinal cord injured community of America, and the Health Care Heroes Award from the Greater Miami Chamber of Commerce. She received an Honorary Doctor of Laws Degree in recognition of her philanthropic work from her alma mater, Chestnut Hill College and an honorary doctor of humane letters degree from the Rabbinical College of America. Mrs. Pope was awarded the 2010 Starfish Award and the 2009 WXEL Women with Wings and Wisdom Award. As a patron of the arts, Mrs. Pope, a veteran of the Broadway stage, serves on the Boards of the Palm Beach Opera, and the Armory Arts Center. She is the founder of The Florida Stage in Manalapan, one of the premier regional theaters in the United States. She is also on the Board of the Florida Atlantic University. Born in Philadelphia, Lois Pope resides in Delray Beach, Florida. A mother and grandmother, she has trained for and competed in five New York City Marathons. 

## PAUL AND SWANEE DIMARE

Recognized as major philanthropists in South Florida, Paul and Swanee DiMare are dedicated to a wide range of charitable organizations. In 2007, Paul and Swanee received the Outstanding Philanthropists Award from the Association of Fundraising Professionals. Paul DiMare is the president of seven family corporations, including DiMare Homestead, Inc., and the founder and administrator of the Paul J. DiMare Foundation. He is the top fresh market tomato grower in the U.S. and is affectionately known as “Mr. Tomato.” His civic involvement includes Founder and Chairman of Florida Farmers, Inc., Trustee of the American Red Cross South Florida Region, Director of the 1<sup>st</sup> National Bank of South Florida, President of the Florida Tomato Committee, Chairman of the Florida Tomato Exchange, member of the Board of Trustees and Athletic Board Chairman of the University of Miami, and a Member of The Buoniconti Fund Board of Directors. Paul also sits on the boards of the Dade County Farm Bureau, Farm Share Advisory Board, St. Mary’s Catholic Church in Scituate, Massachusetts, Miami Science Museum, Chapman Partnership of Homeless, and Baptist Hospital South Florida Foundation. Paul was named the 1998 Agriculturist of the Year, and was elected to the Florida Agriculture Hall of Fame in 2005.


Swanee’s community activities began with her work as a ten-year member of the Delta Airlines management team and her leading role in Delta’s community involvement. Governor Jeb Bush appointed Swanee to the State of Florida Nature Based Heritage and Tourism Advisory Committee. Swanee actively supports the American Red Cross and received the prestigious Red Cross Spectrum Award for Philanthropy. She serves on the Board of Trustees of Fairchild Tropical Botanical Garden, and she and Paul generously donated a gift that will be recognized upon the completion of the “Paul and Swanee DiMare Science Building.” Swanee is also a member of the Board of Trustees of Miami City Ballet. She has supported the Women of Tomorrow Mentor & Scholarship Program.

Both Paul and Swanee are Campaign Vice Chairs of the University of Miami’s Momentum 2 Campaign. The DiMares are passionate supporters of the University’s athletics programs. Their son Gino is an alumnus who played on the Hurricanes baseball team and also coached the team for many years at the Hurricanes baseball stadium where the DiMare Family Champions Plaza welcomes



visitors. The DiMares have provided substantial support to the new Schwartz Center for Athletic Excellence. Among the many University programs the DiMares also support the School of Education, the Miller School of Medicine, and the Frost School of Music.

The DiMares are major donors of The Miami Project to Cure Paralysis and have been supporters since its inception. In December 2012, Paul made another very generous gift of \$1,000,000 to The Buoniconti Fund to support The Miami Project’s scientific research. At the November 2012 Destination Fashion Event at Bal Harbour Shops, Paul and Swanee DiMare were presented The Buoniconti Fund Award. At the Destination Fashion Event in February 2004, Swanee was recognized as one of The Buoniconti Fund’s Women of Substance and Style. She and Paul were Event Sponsors at all the Destination Fashion Events. They have Chaired and been presenting sponsors of the Indian Creek Golf Tournament benefitting The Buoniconti Fund for the last several years. All these efforts raise research funds for The Miami Project. In 2007, the DiMares were awarded The Miami Project Women’s Guild Ann Bishop “Spirit of Excellence Award.”

In their spare time, Paul and Swanee enjoy skiing, reading, and their favorite hobby, playing golf. Together they have five adult children, Tony, Paul Jr., Scott, and Gino DiMare, and Jim Husk. 




# TIM GANNON

**T**im Gannon is an extremely successful entrepreneur -- co-founder of Outback Steakhouse and creator of the Tampa-based chain's signature Bloomin' Onion, an avid polo player with five U.S. Open wins, a staunch polo sponsor, and a passionate philanthropist. A man with a mission, Mr. Gannon founded Kettle Comfort, a non-profit which focuses on feeding the hungry and homeless in Palm Beach County and ultimately throughout the country with great food. His other passion is his family; his wife Christy, and five children, Christopher, Kathleen, Blake, Bettina, and JT.

Mr. Gannon graduated from Florida State University with a degree in Art History. Dreaming of being a museum curator, he went to Florence, Italy, where he became a tour guide for an art gallery. He then went to Aspen, Colorado, where he developed his passion for food and cooking. He started his career at the Four Seasons Hotel. Over the next 14 years he worked at Steak & Ale and then Al Copeland, a successful restaurateur, hired Tim to help operate his Copeland's Cajun Café in New Orleans. From 1984 to 1987, he served as Vice President and Director of Development of Al Copeland Enterprises.

In 1988, Tim arrived in Tampa and co-founded Outback Steakhouse. In 2006, Tim created OSI Restaurant Partners, which operates Outback Steakhouse & Wine Bar. In 2013, Tim Gannon and his Outback Steakhouse co-founder Bob Basham opened the first of five PDQ fast-casual restaurants in South Florida with up to 50 more planned for the next five years. Tim sits on the Advisory Board of Thayer Ventures. In 1994, *Inc. Magazine* named Tim Gannon Entrepreneur of the Year. In 1999, The Florida Restaurant Association honored him with its "Lifetime Achievement Award." In 2000, Tim received an honorary Doctorate Degree in Business Administration and Food Service Management from Johnson & Wales University. He was inducted in the Tampa Bay Chamber of Commerce Business Hall of Fame.

Tim Gannon's favorite pastime is playing polo and he sponsors his own team, Outback Polo. Tim Gannon first saw polo at the age of 16 at the Royal Palm Polo Club in Boca Raton, Florida. In 2001, Outback Polo won their third US Open in a row, which no other polo team has ever done. Tim also led his team in being the first team ever to hold five US Championships (1995, 1996, 1999, 2000, and 2001). He has played high goal polo in the U.S., England, Spain, Argentina, Dubai and Uruguay. In 1999, Tim received the USPA Sponsor of the Year award for his contribution to polo. In 2013, Tim was inducted into the Museum of Polo and Hall of Fame in Lake Worth, Florida.

Tim Gannon is a member of the Board of Directors of The Buoniconti Fund to Cure Paralysis, the national fundraising arm of The Miami Project to Cure Paralysis. He recently pledged to make a gift of \$1,000,000 to The Buoniconti Fund to support the Human Clinical Trials Initiative. 



Christy and Tim Gannon

## JAMES L. FERRARO




James L. Ferraro is a leading American litigation attorney best known for representing thousands of blue-collar workers that had been exposed to asbestos. In 1996 Ferraro successfully went to trial against DuPont in what was the first case ever prosecuted against a chemical company for causing a birth defect. *CourtTV* broadcast the trial in its entirety and it garnered worldwide media attention. Mr. Ferraro proved that a pregnant woman's exposure to the fungicide, Benlate, caused her child to be born without eyes and held DuPont accountable in *Castillo vs. E.I. du Pont de Nemours and Company* and *Pine Island Farms*. Because of the case, in 1997 Ferraro was named a national finalist for Trial Lawyer of the Year. Seven years later, the Florida Supreme Court affirmed the verdict. James Ferraro is the founding shareholder of The Ferraro Law Firm in Miami and is a founding partner with Michael V. Kelley of the Kelley & Ferraro LLP in Cleveland, Ohio. The two firms combined have handled over 50,000 asbestos cases, as well as nationwide environmental toxic tort cases.

James Ferraro has fashioned his law practice in the areas of product liability, wrongful death, personal injury, and medical malpractice. He has successfully tried many cases that resulted in multi-million dollar jury verdicts. His negotiated settlements are over a billion dollars.

Mr. Ferraro has a longstanding relationship with the University of Miami and The Buoniconti Fund to Cure Paralysis, and is one of the Fund's most generous donors and supporters. Born in Greenwich, Connecticut, Ferraro moved to Florida to attend college at the University of Miami, where he received his BBA in 1978 and his Master's degree in Accounting in 1979. In 1983, Mr. Ferraro also received his J.D. from the University of Miami School of Law. He became a Certified Public Accountant in 1980 and taught accounting at the University of Miami in 1982. In September of 2007, James Ferraro gave back to the University of Miami School of Law with a very generous gift to establish The Ferraro Scholarship.

Drawing on his experience playing four seasons of high school football in Greenwich, while attending the University of Miami James Ferraro played football for the Miami Hurricanes in 1975 and 1976. He also went on to become a sports agent, and in 2001 he founded the Gladiators arena football team, now settled in Cleveland. He is still majority owner of the franchise. He is a member of the National Leadership Committee of the National Italian American Sports Hall of Fame.

Mr. Ferraro donates to a multitude of charities annually. He is a trustee of The William J. Clinton Presidential Foundation, an organization dedicated to urgent worldwide issues and he counts Bill and Hillary Clinton as his friends. He is on the Board of Directors of The Buoniconti Fund, the Make-A-Wish Foundation of Southern Florida, the Children's Home Society, United Way of Miami-Dade, and the Jackson Memorial Foundation. Mr. Ferraro is also a member of the University of Miami's Bowman Foster Ashe Society. In 2010, he was chosen as one of the Twelve Good Men by the Ronald McDonald House of Charities of South Florida. Ferraro was inducted into the Order of Saint John of Jerusalem Knights of Malta in 1999 and he was awarded the Ellis Island Medal of Honor in 2001. In a nod to his Italian heritage, he is the owner with Marc Randazzo of Randazzo's Little Italy Restaurant in Coral Gables, Florida. 



# MICHAEL MURPHY



**M**ichael Murphy is a 28 year old philanthropist, volunteer, humanitarian, and sports enthusiast. In April 2007, Michael had an accident and suffered a paralyzing injury. He is a T-9 paraplegic. Michael works as an Administrative Officer for the National Institute of Diabetes, Digestive, and Kidney Disease (NIDDK) doing Administrative work for four different labs within the NIDDK. He received his Bachelor of Arts from Randolph-Macon College in 2008, majoring in History, Art History and Classical Studies, and his Master of Arts in American Military History from George Mason University in 2012.

Michael is a competitive handcyclist, racing in road races and time trials as part of the U.S. Handcycling Series, and in 6 marathons -- in New York City, Boston, and in 4 Marine Corps Marathons. He also loves skiing and sled hockey.

Michael has competed in the Tough Mudder events in September 2012 and again in April 2013. Tough Mudder is the premier adventure challenge series in the world -- only 78% of entrants successfully complete each challenge. Tough Mudder is rated as probably "the toughest event on the Planet." Tough Mudder was founded by Will Dean, a former counter-terrorism agent for the British Government, who was inspired to start Tough Mudder out of frustration with unimaginative and repetitive marathons, triathlons, mud runs, and other adventure runs while getting his MBA at Harvard. Tough Mudder events are hardcore 10-12 mile obstacle courses designed to test your all around



strength, stamina, mental grit, and camaraderie. Michael has competed in and successfully finished these extreme endurance events. With the most innovative courses, there have been 1 million total registrations of inspiring participants worldwide to date, and more than \$5 million raised for the Wounded Warrior Project, an nonprofit organization which works to raise awareness and enlist the public's aid for the needs of severely injured service men and women.

Michael and his family have recently made a most generous donation to The Buoniconti Fund for the Human Clinical Trials. Michael's grandmother, Betty Gardner, is a longtime Miami Project supporter and served on The Miami Project Board for years. Michael's parents, Teri and Frank Murphy, have provided a great example for this incredibly philanthropic and volunteer driven young man. Their multifaceted support has helped to bring us to this stage in our cutting edge research programs.

Michael loves to travel. Since his accident he has been to Rome, Paris, Pompeii, Belize, Cozumel, Jamaica, Kenya, Zambia, and Botswana. He returned from Botswana with his family in July 2013. It was a wonderful family vacation. While in Zambia, they visited Victoria Falls and Michael zip-lined across the Zambezi River Gorge! 🇿🇼



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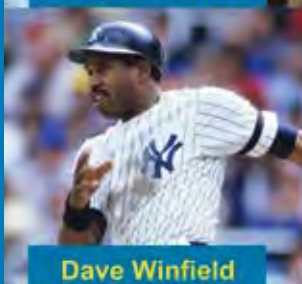


# JERSEY BOYS

will perform at  
The Twenty-Eighth Annual Great Sports Legends Dinner



Terry Bradshaw



Dave Winfield



Shawn Johnson



Anton Brown



## Twenty-Eighth Annual GREAT SPORTS LEGENDS DINNER

### The Buoniconti Fund to Cure Paralysis

The Fundraising Arm of  
The Miami Project to Cure Paralysis

**Monday, September 30, 2013**

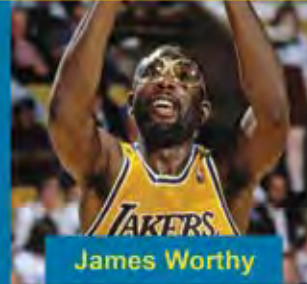
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\*2013 Legends and Honorees featured.



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