Issue No. 291 February 2017

Parkinson's Resource Organization

Working so no one is isolated because of Parkinson's

MESSAGE

Love is in the air! February is the month to celebrate those we hold most dear; our sweetheart, our soulmate, our spouse, best friend and, of course, family members. As an organization, our heart beats with gratitude and LOVE for our incredible community of followers, friends, supporters, volunteers and of course, our donors. When our site visitors and newsletter readers take the time to thank us for the information we share and the support we offer the Parkinson's community, our heart steals with appreciation.

Thank you for all the wonderful comments about last month's newsletter. We received lots of questions via email, comments on our website and phone calls about finding TMJ/TMD dentists across the country. We also noticed much more interest in the **#YearOfTheCure** as covered in our Update on the Road to the Cure.

To our entire community we wish you a blessed Happy Valentine's Day and welcome you to join us for a very special Valentine's Champagne Brunch, February 11th at Venus De Fido. Visit our website for details and to purchase your ticket.

On a sad note, we lost our bookkeeper of 23 years... Leonard Rudolph passed away December 31, 2016. All of us knew him as "Uncle Leonard." He was one of our rocks. He was only 89 when he passed. We express our deepest sympathies to his family and miss him terribly.

January brought more donations from our year-end campaign, and again we say thank you for your tax deductible contribution giving us the opportunity to help MORE people, MORE often, MORE timely, with MORE information in a MORE compassionate way.

The **ROAD TO THE CURE** on this page continues with a very interesting review of Stem Cell Therapy, along with bringing the ICBI science to the people.

February brings articles from some of our extraordinary Wellness Villagers; Informative news such as: *WHAT IS A CLINICAL RESEARCH STUDY*? from Parexel Clinical Trials on page 2, *IS YOUR FINANCIAL HOUSE IN ORDER*? by David Thatcher, CFP® at The Cypress Group on page 3. We also bring to you articles of interest such *THE DIFFERENT CATEGORIES OF TREMOR* on page 4.

UPDATE ON PARKINSON'S "ROAD TO THE CURE" PROJECT

Ram S. Bhatt, PhD, CEO & CSO

PROS AND CONS OF STEM CELL THERAPY

Back in 2007 (10 *years ago*) Jim Fossett, of AMBI/Rockefeller Institute, Federalism and Bioethics Initiative, compiled data on the amount of money being spent on Stem Cell research:

- Allocations, via NIH, have been roughly flat at \$640 million annually for the last couple of years;
- California, on its own, has already obligated more than \$200 million;
- The California Institute of Regenerative Medicine (CIRM), the state agency which manages the stem cell program, is spending more than five times what NIH is spending (or roughly \$3.2 Billion);
- States could be spending over \$500 million annually on stem cell research over the next 8 to10 years; and,
- Foundations and private philanthropists are spending a ton of money on HESC (Human Embryonic Stem Cell). While we don't have it all by a long shot, we have counted some \$1.7 billion in private donations.

The question might be: What is there to show after spending billions on stem cell research? Stem cells have not been shown to halt the progression of Parkinson's or Alzheimer's disease. There have been some reports of symptomatic relief in a handful of patients.

What Are Stem Cells? Stem cells are mother cells with the potential to become any type of cell in the body. One of the main properties of stem cells is their ability to self-renew or multiply while maintaining the potential to develop into other types of cells. Stem cells can become cells of the heart, muscles, bones, skin, brain, blood, etc. There are different sources of stem cells but all types of stem cells have the same capacity to self-renew (*make copies of themselves*).

Types of Stem Cells. There are several types of stem cells:

- i. Embryonic Stem Cells (ESCs)
- ii. Tissue-Specific Stem Cells
- iii. Mesenchymal Stem Cells
- iv. Induced Pluripotent Stem Cells (IPSCs)

In this article we will mainly focus on ESCs and IPSCs.

i. Embryonic Stem Cells

Embryonic stem cells (ESCs) are *pluripotent*, meaning they can give rise to every cell type in the fully formed body, except the placenta and umbilical cord. Our bodies have an estimated 37 trillion cells, all of which originate from ESCs. These cells are incredibly valuable because they provide a renewable resource for studying normal development and disease, and for testing drugs and other therapies. Human embryonic stem cells have been derived primarily from blastocysts created by in vitro fertilization (IVF) for assisted reproduction that were no longer needed.



Newsworthy Notes

<u>our wellness villagers:</u>

ACUPUNCTURE

Dr. David Shirazi

ADAPTIVE CLOTHING

AROMA THERAPY

• Renee Gauthier

ASSISTIVE TECHNOLOGY

- California Phones
- CARE FACILITIES
- Atria Hacienda

CHIROPRACTIC

- Dr. Curtis Buddingh
- CLINICAL TRIALS

CRANIOSACRAL THERAPISTS

Center for Physical Health

DEEP BRAIN STIMULATION

• Dr. Michel Lévesque

DENTAL HYGIENISTS-MOBILE

Betty Anna Gidlof

DENTISTS

CMD/TMJ DENTISTS

- (CA) Dr. George Altuzarra
- (CA) Dr. Maryam Bakhtiyari
- (CA) Dr. Dwight Jennings
- (CA) Dr. Steven Olmos
- (CA) Dr. David Shirazi
- (CT) Dr. Patricia A. Richard
- (IL) Drs. Ed and Lynn Lipskis
- (KÝ) Dr. William H. Funk
- (PA) Dr. Stephen D. Smith
- (TX) Dr. Risto Hurme
- (VA) Dr. Brendan C. Stack
- (VA) Jeffrey L. Brown

SLEEP MEDICINE DENTISTS

• (CA) Dr. Maryam Bakhtiyari

WHAT IS A CLINICAL RESEARCH STUDY?

the product and make sure it is effective and safe.

safeguarding safety and rights of study participants.

- (CA) Dr. Steven Olmos
- (CA) Dr. David Shirazi

is practically impossible.

- SLEEP MEDICINE DENTISTS (CONT.)
- (IL) Drs. Ed and Lynn Lipskis
- (PA) Dr. Stephen D. Smith
- (TX) Dr. Risto Hurme
- (VA) Dr. Brendan C. Stack
- (VA) Jeffrey L. Brown

ELDER LAW ATTORNEYS

- (CA) Zoran K. Basich
- (CA) William R. Remery
- (NY) Ronald A. Fatoullah

ESTATE PLANNING- ACCOUNTING

- (CA) William R. Remery
- (NY) Ronald A. Fatoullah

FELDENKRAIS METHOD® PRACTITIONERS

- Center for Physical Health
- LeAnn Brightwell, CM

FINANCIAL ASSISTANCE

• The Assistance Fund, INC

HEALTHY PRODUCTS

- Healthy Chocolate
- Wild Blue-Green Algae
- Nerium Age Defying Formula

HOSPICE CARE

- Family Hospice (local)
- Gentiva Hospice (regional)
- Vitas Healthcare (Nationwide)

INCONTINENCE SUPPLIES

• Geewhiz

IN HOME CARE PROFESSIONALS

- Eldercaring
- Cambrian Homecare
- · Senior Helpers of the Desert

LEGAL-ATTORNEY-LAWYERS

- (CA) Zoran K. Basich
- (CA) William R. Remery, Esq.
- (NY) Ronald A. Fatoullah

LSVT LOUD PROGRAM

Easy Speech Communication Center

Before a medication or new device for treatment of medical issues is available to the public, the United States Food and Drug Administration (FDA) must review and approve the medication or device for public use. The FDA does this to learn more about

To get FDA approval, the company that makes the medication or device is required to conduct clinical research studies. The company will ask people to volunteer for clinical research studies. In these studies, volunteers are given the investigational medication or device and are evaluated by study doctors and staff members. After clinical research studies are completed, the company submits the study information to the FDA. The FDA reviews this information and decides if the investigational medication or device can become available to the public. Clinical research studies are carried out under the strict supervision of fully qualified doctors, nurses and other healthcare and scientific professionals. Additionally, the Institutional Review Board (IRB), an independent ethics committee comprised of doctors, scientists and members of the community, must also approve the conduct of clinical trials. The main concern is

WHY PARTICIPATE? By being a part of a clinical trial, volunteers can help move research forward. As a participant in a clinical trial, volunteers are making a substantial contribution to finding new and better treatments that may help other patients in the future. Scientists work constantly to find better ways to treat diseases, but improved treatments can never become a reality without testing in clinical trials with human volunteers. Without the help of volunteers, finding better medicines for devastating disorders

LSVT BIG PROGRAM

• New Beginning Physical Therapy

MASSAGE & BODYWORK

Mot'us Floatation & Wellness Center

MEDICAL SUPPLIES

• Access Medical, Inc, dba In & Out Mobility

NEUROSCIENCE

- Desert Psychology & Neuroscience Center
- Brain Optimizers

NURSING HOME ATTORNEYS

• (CA) Zoran K. Basich

NUTRITION- WELLNESS CONSULTANTS • Wayne Myers

PHYSICAL THERAPISTS- TRAINING SPECIALISTS

- Center for Physical Health
- New Beginning Physical Therapy
- Innergy Therapy Systems
- Desert Zen Wellness
- PHYSICIANS AND SURGEONS
- Dr. Michel Lévesque

SENIOR HOUSING

Atria Hacienda

SPEECH THERAPY

TRANSPORTATION

Drs. Kohtz & Spurling

Kim L. Hartz, LMT, WABA

• LA Car Service

VISION

WATSU

ROCK STEADY BOXING-DESERT CITIES • Gloria Landau, Head Coach

Easy Speech Communication Center

• Riverside Institute of Vision Rehabilitation

cont. on page 7

IS YOUR FINANCIAL HOUSE IN ORDER?

David Thatcher, CFP®, Vice President & Senior Financial Advisor

Chances are your morning routine involved checking the news for the weather and traffic report to plan your morning commute. You probably looked at your inbox and calendar to think through the workflow of meetings and tasks that are on your plate for the day. It's likely that you will coordinate plans for this weekend, getting dinner with some friends or catching a game of your favorite sports team.

Technology and routine have helped us become experts at planning for the daily events in our lives. But how about the bigger picture things? Do you have an updated, strategic, and well-thought-out plan for your finances? A 2013 US Trust survey revealed that over 70% of investors don't.

Far too many people get blindsided by the urgent details of their daily lives and neglect to put their financial house in order, should something happen. As an advisor, I see the tragic effects of this negligence often.

This predicament was brought to light with the recent untimely death of Prince. This pop star left his family and loved ones at the age of 57 without a will or plan for how to handle his fortune. It is likely they will be dealing with this in courts for years to come. He wasn't the only one without his financial house in order. When famous businessman Howard Hughes died on an airplane in 1976, it was unclear whether or not he had a will. Scandal broke out as several versions of wills emerged, many of them ultimately deemed as forgeries. Even Abraham Lincoln, one of the most famous lawyers of his time, did not have a will. This left his widow, Mary Todd Lincoln, to sort out his assets with a judge after he was assassinated.

Not having your finances in order can leave family members with a tangle of legal battles and uncertainties. In the wake of their grief, spouses may have to deal with unspeakable stress as they wade into the legal red tape. Unfortunately, there have been cases where widows were swindled out of large percentages of their husband's wealth with advisors suggesting unsuitable investments and unnecessary taxes. These issues can and should be avoided with some foresight and intentional organization.

While taking the time out of a chaotic schedule to plan for a seemingly unlikely event may feel like a low priority, the benefits of creating a comprehensive plan for your finances are undeniable. Thinking through a big-picture blueprint for all of your assets is a way of protecting you if you should need long-term care, your investments, your legacy, and most importantly, your loved ones. This can also provide continuity for your current financial situation, aligning all aspects of your estate to work efficiently and effectively together.

I am passionate about helping individuals and families create an effective strategy to help establish stability and growth, regardless of any life circumstances. Here are some ways to start thinking about how to get your house in order today.

Access a Team of Experts

Navigating all of the components that go into estate planning can be complex, to say the least. It's likely that you have a variety of experts weighing in on how to manage your wealth. Your CPA brings extensive knowledge about how to navigate taxes while your financial advisor is savvy in investment strategies and retirement planning. An estate attorney, on the other hand, is able to guide you through the legal aspects of creating a will and establishing a plan for your comprehensive wealth management.

Each of these experts is working to help you achieve your financial goals. With their specific niches in the process, they can provide necessary checks and balances to your approach. It is crucial to select advisors and accountants that are willing to collaborate and take all the aspects of your financial planning into consideration.

It can be overwhelming to coordinate the efforts of so many professionals. We at the Cypress Group believe that someone should take the lead on your behalf; a financial advisor can help ensure that your CPA, attorney and you are all communicating effectively and on the same page.



BOARD OF

DIRECTORS

3

CHUCK KOCH Alan Rosen, FAIA (deceased) Wayne Friedlander Paul Rosen Elaine Vacca

3......

cont. on page 7

Issue No. 291

GARY LOPEZ ~ G~ARIES VISIONS

THE DESERT COMPUTER DOCTOR,

ROBIN BROWN

SUE DUBRIN

FRANK & MARY BUYTKUS

IRENE MOTTA

WALT & PAT BENSON

JON & MARTHA HANSON

RON BUCKLES

JOHN & JUDITH GUNDERSEN

SHEILA HEFFERNAN

EVA MYERS

JON PEARL

RICHARD CORDES, CPA, JD, LLM

MASSI ABADI, MFT

IRENE SOMERS

CAROLE ROBERTS-WILSON, MS-SLP

KATHY SCHREIFER

SEAN PIERCY

"LIKE" US ON FACEBOOK AND FOLLOW US ON TWITTER.



Facebook.com/ ParkinsonsResourceOrganization



twitter.com/ParkinsonsPro

THE DIFFERENT CATEGORIES OF TREMOR

Tremor is most commonly classified by its appearance and cause or origin. Some of the better-known forms of tremor, with their symptoms, include the following:

Essential tremor (sometimes called benign essential tremor) is the most common of the forms of abnormal tremor. Although the tremor may be mild and non-progressive in some people over a long period of time, in others, the tremor is slowly progressive, starting on one side of the body but affecting both sides within a few years. The hands are most often affected but the head, voice, tongue, legs, and trunk may also be involved, typically to a lesser extent than the hands. Tremor of the hands is typically present as an action tremor. Head tremor may be seen as a "yes-yes" or "no-no" motion. Essential tremor may be accompanied by mild gait disturbance. Tremor frequency may decrease as the person ages, but the severity may increase, affecting the person's ability to perform certain tasks or activities of daily living. Heightened emotion, stress, fever, physical exhaustion, or low blood sugar may trigger tremors and/or increase their severity. Onset is most common after age 40, although symptoms can appear at any age. It may occur in more than one family member. Children of a parent who has essential tremor have a 50 percent chance of inheriting the condition. A variant in the gene LINGO1 has been identified as a risk gene, although not all individuals with essential tremor carry this variant--which also can be present in people without essential tremor. While essential tremor was thought not to be associated with any known pathology over many years, recent studies suggest that there is a mild degeneration of certain parts of the cerebellum in individuals with essential tremor.

Parkinsonian tremor is caused by damage to structures within the brain that control movement. This tremor, which appears characteristically as a resting tremor, can occur as an isolated symptom or be seen in other disorders and is often the first symptom of Parkinson's disease (more than 25 percent of patients with Parkinson's disease have an associated action tremor). The tremor, which is classically seen as a "pill-rolling" action of the hands that may also affect the chin, lips, legs, and trunk, can be markedly increased by stress or emotions. Onset of parkinsonian tremor is generally after age 60. Movement starts in one limb or on one side of the body and usually progresses to include the other side.

Dustonic tremor occurs in individuals of all ages who are affected by dustonia, a movement disorder in which sustained involuntary muscle contractions cause twisting and repetitive motions and/or painful and abnormal postures or positions, such as twisting of the neck (torticollis) or writer's cramp. Dystonic tremor may affect any muscle in the body and is seen most often when the patient is in a certain position or moves a certain way. The pattern of dystonic tremor may differ from essential tremor. Dystonic tremors occur irregularly and often can be relieved by complete rest. Touching the affected body part or muscle may reduce tremor severity. The tremor may be the initial sign of dystonia localized to a particular part of the body. Cerebellar tremor is a slow tremor of the extremities that occurs at the end of a purposeful movement (intention tremor), such as trying to press a button or touching a finger to the tip of one's nose. Cerebellar tremor is caused by lesions in or damage to the cerebellum resulting from stroke, tumor, or disease such as multiple sclerosis or some inherited degenerative disorder. It can also result from chronic alcoholism or overuse of some medicines. In classic cerebellar tremor, a lesion on one side of the brain produces a tremor in that same side of the body that worsens with directed movement. Cerebellar damage can also produce a "wing-beating" type of tremor called *rubral* or Holmes' tremor — a combination of rest, action, and postural tremors. The tremor is often most prominent when the affected person is active or is maintaining a particular posture. Cerebellar tremor may be accompanied by dysarthria (speech problems), nystagmus (rapid involuntary movements of the eyes), gait problems, and postural tremor of the trunk and neck.

Issue No. 291

Newsworthy Notes

Psychogenic tremor (also called functional tremor) can appear as any form of tremor movement. The characteristics of this kind of tremor may vary but generally include sudden onset and remission, increased incidence with stress, change in tremor direction and/or body part affected, and greatly decreased or disappearing tremor activity when the individual is being distracted. Many individuals with psychogenic tremor have a conversion disorder (defined as a psychological disorder that produces physical symptoms) or another psychiatric disease.

Orthostatic tremor is characterized by rhythmic muscle contractions that occur in the legs and trunk immediately after standing. The person typically perceives orthostatic tremor as unsteadiness rather than actual tremor. Because of its high tremor frequency, often the tremor cannot be seen, but sometimes be heard when putting a stethoscope to the thigh muscles. No other clinical signs or symptoms are present and the unsteadiness ceases when the individual sits, is lifted off the ground, or starts walking.

Physiologic tremor occurs in every normal individual. It is rarely visible to the eve and may be heightened by strong emotion (such as anxiety or fear), physical exhaustion, hypoglycemia, hyperthyroidism, heavy metal poisoning, stimulants, alcohol withdrawal, caffeine, or fever. It can occur in all voluntary muscle groups and can be detected by extending the arms and placing a piece of paper on top of the hands. Enhanced physiologic tremor is a strengthening of physiologic tremor to more visible levels. It is generally not caused by a neurological disease but by reaction to certain drugs, alcohol withdrawal, or medical conditions including an overactive thyroid and hypoglycemia. It is usually reversible once the cause is corrected.

Tremor can result from other conditions as well. Alcoholism, excessive alcohol consumption, or alcohol withdrawal can kill certain nerve cells, resulting in tremor, especially in the hand. (Conversely, small amounts of alcohol may even help to decrease essential tremor, but the mechanism behind this is unknown. Doctors may use small amounts of alcohol to aid in the diagnosis of certain forms of tremor but not as a regular treatment for the condition.) Tremor in *peripheral* neuropathy may occur when the nerves that supply the body's muscles are traumatized by injury, disease, abnormality in the central nervous system, or as the result of systemic illnesses. Peripheral neuropathy can affect the whole body or certain areas, such as the hands, and may be progressive. Resulting sensory loss may be seen as a tremor or ataxia (inability to coordinate voluntary muscle movement) of the affected limbs and problems with gait and balance. Clinical characteristics may be similar to those seen in individuals with essential tremor.

How is tremor diagnosed?

During a physical exam a doctor can determine whether the tremor occurs primarily during action or at rest. The doctor will also check for tremor symmetry, any sensory loss, weakness or muscle atrophy, or decreased reflexes. A detailed family history may indicate if the tremor is inherited. Blood or urine tests can detect thyroid malfunction, other metabolic causes, and abnormal levels of certain chemicals that can cause tremor. These tests may also help to identify contributing causes, such as drug interaction, chronic alcoholism, or another condition or disease. Diagnostic imaging using computerized tomography or magnetic resonance imaging may help determine if the tremor is the result of a structural defect or degeneration of the brain.

The doctor will perform a neurological exam to assess nerve function and motor and sensory skills. The tests are designed to determine any functional limitations, such as difficulty with handwriting or the ability to hold a utensil or cup. The individual may be asked to place a finger on the tip of her or his nose, draw a spiral, or perform other tasks or exercises.

The doctor may order an electromyogram to diagnose muscle or nerve problems. This test measures involuntary muscle activity and muscle response to nerve stimulation.

For more information refer to the NIH/National Institutes of Neurological Disorders and stroke.

February 2017

PARKINSON'S RESOURCE ORGANIZATION

VOLUNTEERS

LEONARD RUDOLPH Bookkeeper

LYNN HAWKS Web Design & Marketing

> GARY LOPEZ Graphic Artist

Ambassadors

SOPHIE BESHOFF CHERYL EPSTEIN **DOLORES LUHRS & KEN LUHRS** CAROLE ROBERTS-WILSON, MA-CCC/SLP CHARLENE & BOB SINGER

GROUP FACILITATORS

PEGGY SEXTON BARBARA ENGLISH SUE DUBRIN BETTY GOODIN KAY GRAY MARTHA HANSON SCOTT HOLLAND CHRISTINA LOPEZ

VOLUNTEERS/OFFICE SUPPORT

SHEILA HEFFERNAN EVA MYERS JOHN PERL IRENE SOMERS GAY BAYLESS MICHELE WALDNER SEAN PEARCY GISELA GREENAMYER KATHY SCHRIEFER THOMAS HOUSEMAN **EDUARDO FORTIS** JOEL MARK

We do not intend THE PRO NEWSLETTER AS LEGAL OR MEDICAL ADVICE NOR TO ENDORSE ANY PRODUCT OR SERVICE WE INTEND IT TO SERVE AS AN INFORMATION GUIDE.

₹.....₹

Newsworthy Notes

ROAD TO THE CURE - cont. from page 1

While ESCs are the most versatile mother cells for every cell in the body, host immune rejection is a complication that often occurs with stem cell transplantation.

iv. Induced Pluripotent Stem Cells (aka Adult Stem Cells)

Induced pluripotent stem cells (IPSCs) are the most widely publicized stem cells in today's media. IPSCs have been engineered in the lab by converting tissue-specific cells, such as skin cells into cells that behave like embryonic stem cells. IPSCs have become critical tools to help scientists learn more about normal development and disease onset and progression, and they are also useful for developing and testing new drugs and therapies. While IPSCs share many of the same characteristics of embryonic stem cells, including the ability to give rise to all the cell types in the body, they aren't exactly the same. Scientists are exploring what these differences are and what they mean. For one thing, the first IPSCs were produced by using viruses to insert extra copies of genes into tissue-specific cells. Researchers are experimenting with many alternative ways to create IPSCs so that they can ultimately be used as a source of cells or tissues for medical treatments.

IPSCs are derived from patient's own skin or muscle cells. Thus, these types of cells avoid immune rejection challenges of embryonic stem cells.

PROS AND CONS OF STEM CELL THERAPY PROS

• Because of their ability to self-renew, stem cells have an enormous potential to treat spinal cord injury, brain disorders, cardiac failure, cancer, diabetes and many other diseases. There is a lot of potential to replace the damaged and diseased tissues in the body.

• The stem cell research can allow the scientists to test a number of potential medicines and drugs without carrying out any test on animals and humans. The drug can be tested on a population of cells directly.

• The stem cell therapy also allows researchers to study the developmental stages that cannot be known directly through the human embryo and can be used in the treatment of a number of birth defects, infertility problems and also pregnancy loss. A higher understanding will allow the treatment of the abnormal development in the human body.

CONS

• Stem cells have not yet been shown to slow the underlying disease nor do they improve motor symptoms of Parkinson's patients. They can replace the need for levodopa drugs (Madolyn Bowman Rogers, Alzforum Networking for a Cure, June 17, 2014).

• Tumorigenicity as a Clinical Hurdle for Pluripotent Stem Cell Therapies

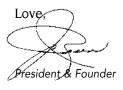
[Nature Medicine, 19 (8), 998 (2013); J. Clin. Med., 4, 159 (2015)]

Pluripotent stem cells (PSCs), including embryonic (ESCs) and induced pluripotent stem cells (iPSCs), offer immense potential as a source for regenerative therapies, as was

PRESIDENT'S MESSAGE - cont. from page 1

We know we are providing valuable information and support in the Parkinson's community, and continue to appreciate your monthly or general donations through our safe PayPal donation page at *ParkinsonsResource.org/contribute-2/* or by mail to our office in Palm Desert, California.

Until next month, REMEMBER Groundhog Day on the 2nd, National Wear Red Day on the 3rd, Super Bowl on the 5th, Valentine's Day on the 14th, President's Day on the 20th, and Mardi Gras on the 28th. The flower is the Violet and the Birthstone is the Amethyst. ALWAYS remember to CELEBRATE YOU and PRAY FOR OUR TROOPS.



recently recognized by the 2012 Nobel Committee in Medicine. However, the intrinsic qualities of selfrenewal and pluripotency that make these cells so therapeutically promising are also responsible for an equally fundamental tumorigenic potential. In this regard, PSC tumorigenicity (producing or tending to produce tumors; also, carcinogenic) can ultimately be divided into two separate categories: malignant transformation of differentiated PSCs and benign teratoma (a tumor composed of tissues not normally present at the site) formation from residual undifferentiated PSCs, of which either can produce tumors consisting of one or all three germ layers, respectively.

The risks of Pluripotent stem cells tumorigenicity have been highlighted over the past several years in a number of small and large animal studies, including preclinical dose-escalation tests for the first-in-human PSC clinical trial to be approved by the FDA in 2009. In this case, mice that received the Geron human ESC-derived neural progenitor cell (NPC) product GRNOPC1 developed cysts in regenerating tissue sites of the spine, prompting a one-year moratorium on the trial even before the first patient received treatment. Other animal studies utilizing ESC- and iPSC-based therapies have shown further risk for PSC tumorigenic potential in humans. These include development of neural overgrowths and tumors from human ESC-derived dopaminergic neurons and NPCs transplanted into small animals, as well as ocular tumors in mice receiving ESC-derived retinal progenitors. Moving one step further into primate models, human ESC-derived dopaminergic neurons transplanted into the brains of Parkinsonian monkeys have also resulted in tumors. While PSCderived tumors have yet to be reported in humans,

ROAD TO THE CURE – cont. from previous page

several case studies have documented the formation of tumors in patients receiving fetal and adult stem cell treatments. These developments include the brain of a 12-year old boy who received fetal neural stem cell transplantation for treatment of ataxia telangiectasia, and the kidney of a 46-year old woman who received autologous hematopoietic stem cell transplantation for treatment of lupus nephritis".

• Stem Cell Contamination

Stem cell lines used for research are not always 'pure' because their exposure to other animal cells to maintain viability results in contamination. Many animal cells contain microscopic microbes and diseases that are undetectable and contaminate human embryonic stem cells used for research. Older stem cell lines that are approved for use are also not as 'fresh' and may therefore develop genetic dysfunctions due to their age. As they proliferate, these genetic abnormalities then put the cells at risk for developing into a tumor. Used in a stem cell transplant, the ramifications could potentially be very dangerous.

• Invasive

Stem cell transplantation in the brain is an invasive procedure with risk of infections.

• Intravenously Injected Stem Cells Do not Reach the Central Nervous System (CNS)

Intravenously administered stem cells do not cross the blood-brain barrier to reach the CNS. Patients would be wise not to waste money, as much as \$30,000 per treatment, to have stem cells injected in them intravenously.

ICBII has developed the world's first and only technology to cross the blood-brain-barrier (BBB) for diagnosing and altering debilitating diseases like Parkinson's and Alzheimer's.

If you would like to take part in this "historymaking" science please get in touch with Jo Rosen at Parkinson's Resource Organization with whom we are in constant communication, updating her on our progress, while learning from her why it is so important to continue working to eradicate this horrific disease. IMAGINE a world with no Parkinson's or Alzheimer's disease.

JUST IMAGINE...

FINANCIAL ORDER – cont. from page 3

Organize Your Paperwork

Between wills and deeds, bank account information and online passwords, insurance policies and bills there are a lot of important details in the paperwork we accumulate. Periodically, take the time to sort through the important information and ensure that the right people will know how and where to access these documents. Put secure measures in place to protect this information, with fireproof safes and electronic backups of these documents online.

Communicate Your Plan

Many people avoid conversations about how to handle worst-case scenarios such as an untimely death. However, living in denial of this possibility can be costly, both emotionally and financially. This becomes even more important for individuals who are business owners, with families relying on those companies as a primary source of income. Talking through end-of-life care and strategies for handling a tragedy can be difficult, but it's a conversation that can bring peace of mind as well. Set your spouse up for success by letting them in on financial goals, current ways of management, and how to access important information, if that should become necessary.

Whether you're building a house, planning for your retirement, or looking at the weather before heading out, a little planning can go a long way. Take the time now to make sure you and your loved ones are prepared for the future.

About The Cypress Group

The Cypress Group is the one of the newest members of the Parkinson's Resource Organization's Wellness Village and is a division of Integrated Wealth Management, an independent RIA firm providing financial planning and investment management to individuals, families, business owners, and institutions. With an 11-person team of professionals with diverse backgrounds and extensive experience and qualifications, The Cypress Group is uniquely qualified to serve a broad range of client needs. Their experience and expertise act as a foundation for their client service process, The Second Growth, which focuses on efficiently protecting, growing, and transferring to your loved ones or charity of choice the wealth and legacy a person has already built. With offices in Palm Desert, Newport Beach, and Anchorage, the firm serves clients across the country. Learn more by visiting ParkinsonsResource.org/estate-planning-financial-advisers/

Some other benefits of participating in a clinical research study include:

- Participants may gain access to cutting edge treatments and expert medical care
- Any medical exams, tests and/or procedures that participants receive as part of the study will be provided at no cost to them
- Free meals and care for the duration of the in-clinic stay

CLINICAL RESEARCH – cont. from page 2

• Patients may receive monetary compensation for their time, travel and participation for the duration of the study

Parexel is one of the newest members of the Parkinson's Resource Organization Wellness Village under the category of Clinical Trials. If a volunteer is interested in learning more about our research studies and finding out if they qualify, go to the Parkinson's Resource Organization Wellness Village under the category of Clinical Trials and click on PAREXEL.



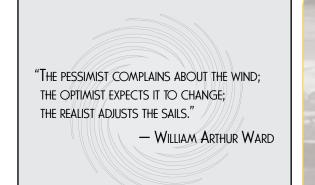
The current support group meeting locations are listed below. For any information regarding any of these meetings, please contact the PRO Office at 877-775-4111.

		-				
				2	3	4
			LONG BEACH CLOSED UNTIL MARCH			
5	PALM DESERT 6 Caregivers Only	7	GLENDORA 8	NEWPORT BEACH 9 Educational Speaker	10	11
	10:00 am PRO Office		Caregivers Only 6:30 pm Kindred Rehab at	for Caregivers & Public 6:30 pm Oasis Senior Center		
	74-090 El Paseo Suite 104		Foothill 401 W Ada Ave	801 Narcissus Corona Del Mar		
12	PALM DESERT 13 Emotional & Educational Round Table for Everyone 6:30 pm Atria Hacienda 44-600 Monterey Ave	14	ENCINO 15 Caregiver Only 7:00 pm Providence Tarzana Outpatient Therapy Cntr 5359 Balboa Blvd	Educational Support Group for Everyone 6:30 pm	17	18
19	PALM DESERT Caregivers Only 10:00 am PRO Office 74-090 El Paseo Suite 104	21	22	23	24	25
26	PALM DESERT 27 Emotional & Educational Speaker Meeting 6:30 pm Atria Hacienda 44-600 Monterey Ave	MANHATTAN BEACH Emotional & Educational Support for Everyone 6:30 pm Parish House 659 15th Street	28			

CAREGIVER MEETING: (For caregivers only) Come share the ups and downs of living with someone with Parkinson's. Together there are ways of finding solutions that, when alone, might never be considered. No need to continue with your frustrations because you are not alone. Give yourself a break.

EDUCATIONAL MEETING: We invite the community, especially the Person with Parkinson's and their family or friends, to attend. Educational meetings usually feature guest speakers who are professionals servicing the Parkinson's Community. Educational meetings are packed with a wealth of amazing information so bring your pencil and notepad!

"ROSEN ROUND TABLE" MEETING: Join a loving circle of like-minded individuals including local professionals. Learn what works for others, share what works for you. Find out what doesn't work for certain individuals. Share emotional trials and tribulations. Realize that you are not alone and that others can relate to and learn from your story.



Newsworth Nones

February 2017, Issue No. 291, published monthly

Parkinson's Resource Organization

Working so no one is isolated because of Parkinson's 74-478 Highway 111, No 102 • Palm Desert, CA 92260-4112

760/773-5628 • 310/476-7030 • 877/775-4111 • 760/773-9803

eMail: info@ParkinsonsResource.org • web: ParkinsonsResource.org 501(C)(3)#95-4304276

We do not intend the PRO Newsletter as legal or medical advice, nor to endorse any product or service; we intend it to serve as an information guide.