# Moving Along



VOLUME 14, ISSUE 1 · 2010 · EDITORS, DR. CARLO COLOSIMO, DR. MARK STACY

#### Is Parkinson's Disease Genetic?

### (No)

—Caroline Tanner, MD, PhD, Director of Clinical Research, The Parkinson's Institute, Sunnyvale, CA, USA

More than 16 genetic causes of parkinsonism have been reported, but most are rare. Mutations in the most common disease-causing gene, the leucine-rich repeat kinase 2 (LRRK2) gene, are associated with parkinsonism worldwide. In North America, 1-2% of persons with apparently idiopathic PD have LRRK2 gene mutations, but not all carriers get PD-penetrance is estimated at 30%-50%.1, <sup>2</sup> In Asia, single mutations are rare, but several polymorphisms in the LRRK2 gene are associated with greater PD risk.3 Thus, multiple determinants, likely both environmental and genetic, influence the development of parkinsonism even in those with an identified genetic factor. Genome-wide association

studies suggest that most PD is complex in etiology; variation in tau and PD-causing genes contributes to risk of sporadic PD.<sup>4</sup> Epigenetic changes may be due non-genetic factors.<sup>5</sup> This evidence does not support the hypothesis that PD is "genetic" – that is, that only genetic factors cause PD.

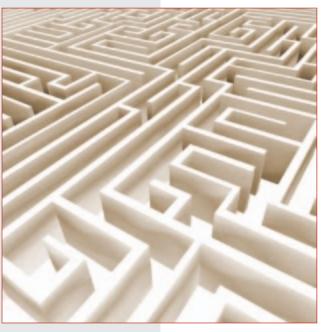
PD is very rarely due to a discrete environmental insult. MPTP-induced parkinsonism, the toxicant-induced form most closely resembling sporadic PD, affected few people but provided important mechanistic insights. Recently, pathological changes in fetal tissue—including Lewy body-like inclusions—were observed 14 years *after* transplantation into the striatum of an individual with PD. Thus, something in the extra-cellular environment caused pathology in the grafted cells, causing the classical pathology of PD to develop in the previously normal fetal neurons. These two observations support a non-genetic cause of PD in some.

Certain non-genetic factors have consistently been associated with the risk of PD. While evidence in human populations is strong

CONTINUED ON PAGE 10

#### (Yes)

—Lawrence I. Golbe, MD, Professor of Neurology, UMDNJ-Robert Wood Johnson Medical School, New Brunswick, New Jersey, USA



Consider a malevolent chef designing a dinner party with the intent to cause PD. Each course can consist of any of several dishes, each recipe includes ingredients that can be effective in multiple combinations and no two guests receive exactly the same meal. The list of available dishes starts with systems for mitochondrial energy production, ubiquitin-proteasomal protein disposal and the antioxidative response. Other appealing options are pathways for the stress response, detoxification, regulation of apoptosis and perhaps microtubular transport. The basic ingredients are both genetic and environmental.

In the 1990s, attention was drawn to genetics as a plausible cause of PD by reports of families with autopsy-

proven Lewy-body parkinsonism occurring in Mendelian dominant fashion. Although only about 10% of PD occurs in Mendelian patterns and another 10-15% in less-definable familial clusters, indirect evidence shows that a large fraction of the population's burden of "sporadic" PD is the result of genetic defects. In Iceland, genealogical records show that randomly paired persons with sporadic PD are, on average, more closely related than random pairs of controls. Serial fluorodopa PET, presumably a highly sensitive marker for PD, demonstrates that nearly all of the clinically unaffected monozygotic co-twins of affected individuals are themselves subclinically affected, while the same is true for fewer than half of dizygotic co-twins.

These results demonstrate the subtlety and ubiquity of PD familial clustering. The low degree of phenotypic penetrance is probably explained by the need for multiple mutations to interact in the individual with one or more exogenous toxin exposures and/or with stochastic factors related to protein conformation. Similarly, perhaps

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This issue of Moving Along features updates of MDS activities throughout the world, and continues "Controversies" and "Where are They Now." Professor Roger Duvoisin was kind enough to share his thoughts about his career, particularly about his mentors, his life with levodopa, and his work searching for genetic linkage in Parkinson's disease. Throughout the conversation, it was apparent that the immense kindness of the man, his warm sense of humor, and his efforts to promote collegial interaction, were important to the advance of levodopa as a treatment for PD, and for the collection of clinical and genetic information leading to the identification of the  $\alpha$ -synuclein gene. The Controversies articles feature two investigators who have made major contributions to the epidemiology of PD. Dr. Carlie Tanner, at the Parkinson Institute in Sunnyvale, CA, has published extensively concerning risk factors of PD and related disorders. Topics among her many publications include systematic study of a wide variety of risk factors for the development of PD and Multiple System Atrophy. Dr. Lawrence Golbe worked with Dr. Duvoisin at the School of Medicine and Dentistry at the University of New Jersey and has published manuscripts (mainly on the genetics of PD and on the epidemiology and clinical features of Progressive Supranuclear Palsy). Dr. Duvoisin readily admits that it was Dr. Golbe's energy and carefulness that identified many of the subjects in the Contursi kindred, remarking with some amusement, "he even learned Italian to do the work!" Both have been active in a wide variety of research



Carlo Colosimo, MD



Mark Stacy, MD

activities, and their contributions to this newsletter underscore the convergence of genetic and environmental risk factors as a two-hit hypothesis for PD. Dr. Tanner has also provided a picture of the initial DATATOP investigator meeting – the future North American Parkinson Study Group, circa 1985 (see below). While Dr. Tanner was already positioned in the middle of the group, Dr. Golbe is located at the far right! How many others can you identify?



Please be sure to review the President's Letter from Prof. Philip Thompson, highlighting MDS educational programming, as well as updates concerning the 14<sup>th</sup> Congress in Buenos Aires in June, including Congress registration (May 3), and housing (May 24) deadlines and further details. In addition, an article by Hubert Fernandez and Marcelo Merello describes the various features of the

MDS Web site. Also, Members of the Society have been busy in the last half of 2009, and reviews of activities in Mali, Prague, Yerevan, and Boston are summarized. The newsletter also features updates from the Archives committee, and provides notice of the potential changes in the MDS bylaws.

Please contact us if you have a photograph, topic or individual to be featured in a future issue of Moving Along!



## **LETTERS TO THE EDITORS**

**Your Comments and Questions Are Always Welcome** 

## **Editorial Policy**

As part of its democratic commitment, MDS welcomes the input of all its members about the features and articles that appear in this newsletter. Have a comment or question? Each issue will include responses in the "Letters to the Editor" section. All materials submitted become the property of MDS.

#### Address your communications to:

Editor: *Moving Along*The *Movement* Disorder Society
555 East Wells Street, Suite 1100
Milwaukee, WI 53202-3823 USA
Tel: +1 414-276-2145

Fax: +1 414-276-3349

E-mail: info@movementdisorders.org





For this first issue of Moving Along in 2010, I am pleased to look back on a highly successful year for The Movement Disorder Society (MDS). The accomplishments of the Society depend heavily on the participation of its membership, which reached an

all-time high this year to over 3,000 members from more than 80 countries.

This active participation was seen at the 13th International Congress of Parkinson's Disease and Movement Disorders held in Paris, France in June 2009, which turned out to be one of the most successful, attracting a record breaking attendance of over 5,000 attendees.

The success of the Society and the growing enthusiasm from members around the world lead the Society to expand a number of programs this year that encourage scientific developments in our field and enhance physicians' knowledge of Movement Disorders. Please visit the MDS Web site to learn how to participate during 2010 in the specific programs highlighted below.

MDS Visiting Professor Program supports educational opportunities in Movement Disorders in regions of the world not adequately served by local resources. Visiting Professor programs took place in the following countries:

#### Asia & Oceanian

Beijing, China; Shanghai, China; Bangkok, Thailand, March 2009 Beijing, China, July 2009

#### Africa

Tunis, Tunisia, March 2009

MDS Regional Section Education Fund provides funds for educational opportunities in developing countries in their region. Courses were held in the following countries:

#### Asia & Oceanian

Movement Disorders: From Basic to Clinical Update. Bandung, Indonesia, January 2009 ASNA & MDS-AOS Educational Course on Movement Disorders. Kuala Lumpur, Malaysia, April 2009 The Treatment of Parkinson's Disease & Recognizing Hyperkinetic and Hypokinetic Movement Disorders. Ho Chi Minh City, Vietnam, May 2009

Ephedrone Epidemic – The New Cause of Chronic Maganism. Tartu, Estonia, September 2008 Non-motor symptoms in Parkinson's disease teaching course. Brasov, Romania, April 2009

MDS Ambassador Program provides the opportunity for internationally recognized experts to speak at existing regional neurological meetings. Programs took place in the following countries:

#### Asia & Oceanian

Cebu City, Philippines, November 2009

Bamako, Republic of Mali, November 2009

MDS Supported Meetings provides support for new and novel scientific meetings. The following meetings were supported in 2009:

5th International Workshop on Dementia with Lewy Body and Parkinson's Disease Dementia. March 8-11, 2009, Kassel, Germany.

Psychogenic Movement Disorders & Other Conversion Disorders. April 2-4, 2009, Washington, DC, USA. Parkinson Study Group 23rd Annual Symposium on Etiology, Pathogenesis and Treatment of Parkinson's Disease and Other Movement Disorders. October 11, 2009, Bethesda, MD, USA.

Looking forward to 2010, I expect this growth in programming to continue. Our MDS Committees are hard at work and a number of new programs are planned.

During the first quarter of 2010, the Society will be launching the online MDS-UPDRS certificate program.

Under the direction of numerous program leaders, the MDS-UPDRS is being translated and validated in Spanish, Italian, French, Estonian, German, Japanese, Chinese, Korean and Slovakian. To participate in this project, please review the material on the Web site http://www.movementdisorders.org/about/ updrs/non-english\_translation.php

As you may have seen, a new Health Professionals Section of the MDS Web site was launched in December. Additional enhancements to these pages are expected in 2010.

Plans are also underway for the next Congress in Buenos Aires, Argentina June 13-17, 2010. Under the direction of Chris Goetz and Oscar Gershanik a superb scientific program is planned. Please see the article on page 4 for additional details.

As you know, our shared goal is to enhance patient care by advancing scientific and medical knowledge in our field. By working together, it is possible for us to achieve this worthwhile goal. Thank you for your ongoing participation in The Movement Disorder Society and best wishes for another successful year.



Philip Thompson, MB, BS, PhD, FRACP MDS President 2009 - 2011



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The Movement Disorder Society International Secretariat 555 East Wells Street, Suite 1100 Milwaukee, Wisconsin 53202-3823 USA Tel: +1 414-276-2145

Fax: +1 414-276-3349

E-mail:

info@movementdisorders.org

## 14th International Congress Updates

Planning is well underway for The *Movement* Disorder Society's 14th International Congress of Parkinson's Disease and Movement Disorders, to be held June 13-17, 2010 in Buenos, Aires.

#### **Congress Registration and Housing Reservations**

Congress registration and housing are now available by visiting: http://www.movementdisorders.org/congress/congress10/.

For more information regarding congress registration contact the MDS Registration Bureau at MDSCongress@laser-registration.com or by calling +1 514-847-0512.

For more information regarding housing contact the MDS Housing Bureau, MCI Buenos Aires at mds.housing@mci-group.com or by calling + 54 11 5252 9801.

#### 2010 Theme: "Neuroimaging in Movement Disorders"

The Congress Scientific Program Committee selected "Neuroimaging in Movement Disorders" as the theme for this year's International Congress. The theme will be highlighted on Monday, June 14, 2010 during the Plenary Sessions and carried forward with Parallel and Video/Skills workshops throughout the meeting. International experts working in the interface between Neuroimaging and Movement Disorders will serve as faculty, and the presentations will range from new research to practical applications. Meeting participants can elect to attend any or all of the sessions.

#### **Scientific Sessions**

The 2010 Scientific Program will incorporate Therapeutic Plenary Sessions, Plenary and Parallel Sessions, Teaching Courses, Video Sessions, Skills Workshops and Guided Poster Tours.

Sessions will focus on the latest developments in:

- Neuroimaging in Movement Disorders
- Movement Disorder topics, including, but not limited to, ataxia, chorea, dystonia, myoclonus, Parkinson's disease, restless legs syndrome, spasticity, stereotypies, tics and tremors
- · Basic Science issues, including, but not limited to, genetics, neuroimaging, neuropharmacology, surgical therapy and transplantation
- Other less common clinical conditions

Spanish Translation: All Plenary Session and Teaching Courses at the 14th International Congress will be translated in Spanish. More information on the translation system is available in the Preliminary Program.

A complete listing of all session offerings as well as faculty may be found at http://www.movementdisorders.org/congress/congress10/ program.php.

Although the regular abstract submission deadline has passed, the late-breaking abstract submission deadline is April 2, 2010. A latebreaking abstract is any abstract reporting information that became available for public dissemination after the deadline of the regular abstract submission. It must be of critical importance to the clinical and/or scientific community and/or the public and should be newsworthy. Previously published material could also be considered as late breaking abstract only if, in addition to the published material, the

abstract contains additional, unpublished, new information, rectification, clarification, and/or correction of critical importance to the clinical and/or scientific community and/or the public and which became available for public dissemination after the deadline of the regular abstract submission. This is not designed to favor investigators who inadvertently missed the deadline for the regular abstract submission.

#### **Social Events**

#### Opening Ceremony and Welcome Reception

All International Congress attendees are warmly invited to meet friends and colleagues during the traditional International Congress Opening Ceremony at the Sheraton Buenos Aires Hotel and Convention Center. A Welcome Reception will directly follow the Opening Ceremony. These events are open to all registered delegates. Guests are welcome to purchase a Welcome Reception Pass that will allow them admission to the Opening Ceremony and Welcome Reception. This can be purchased during the registration process.

All participants of the 14th International Congress are invited to attend the Gala Event at the Opera Pampa. The show, which takes place in an outdoor heated amphitheatre, is a masterpiece about Argentina, its traditions, songs, dance and gaucho culture. Afterwards, guests will feast on the world-famous Argentine beef grilled in a typical gaucho barbecue pit. Transportation will be provided and suggested attire is smart casual. The cost for one Gala Event ticket is \$125 USD and can be purchased along with the International Congress registration. A ticket is required for entrance to the Gala Event and will be enclosed in delegates' registration materials. As the capacity for this event is limited, an early reservation is highly recommended.

#### Video Olympics

Please join Masters of Ceremony Anthony Lang and Kapil Sethi as they host a world-renowned panel of Movement Disorders experts in guiding participants through unique Movement Disorder cases. The cases will be presented by representatives from Movement Disorder Centers around the world and discussed by the two teams of Experts. Awards will be given for the most interesting and challenging cases and the teams of Experts will compete for the highest number of correct diagnoses that they make. Country pride will add an enjoyable spirit of competition to this event. The goal of this session is for attendees to learn from a series of unusual, very interesting patients and see how senior experts approach these types of challenging cases.

The two teams of Experts are:

#### Team 1:

Victor Fung, Sydney, Australia Federico Micheli, Buenos Aires, Argentina Wolfgang Oertel, Marburg, Germany C. Warren Olanow, New York, NY, USA

#### 14th International Updates CONTINUED FROM PAGE 4

David John Burn, Newcastle upon Tyne, United Kingdom Francisco Cardoso, Belo Horizonte, Brazil Boem Jeon, Seoul, Korea Stephen Reich, Baltimore, MD, USA

Following the International Congress, the cases presented could be developed further for publication in the Journal or presentation on the Society's Web site. This social event is open to all registered delegates. For more information about the Video Olympics, please contact Sarah Smith at ssmith@movementdisorders.org.



#### SOCIETY ANNOUNCEMENTS

## **MDS Archives Committee Update**

-William Weiner, MD, University of Maryland School of Medicine; Chair of the MDS Archives Committee

The Movement Disorder Society is committed to actively preserving the history of the field of Movement Disorders. In this respect, the Archives Committee has undertaken recording a series of oral histories. These interviews focus on recognized world leaders within the field of Movement Disorders, as selected by the Society's Archives Committee. MDS is currently in the process of digitizing the interviews conducted during the 13th International Congress in Paris. These interviews include Yoshikumi Mizuno, Reiner Benecke, Richard Morimoto, and Christopher Goetz. The audio from these interviews will be placed on the Archives Committee Web site soon. Additional interviews are being planned by the Archives Committee. Please visit the Archives Committee's Web site to suggest colleagues to be included in the oral histories project. In addition, the Presidential Lectures from the 13th Congress have been recorded and the Presidential Lectures from the 14th Congress are scheduled to be recorded in

The Archives Committee is preserving aspects of the history of Movement Disorders by posting all Final Programs from past congresses on The Movement Disorder Society Web site. Currently, the 2002 Congress held in Miami, FL, USA through the 2009 Congress held in Paris, France are posted on the Web site. The Archives Committee is seeking copies of the Final Program from the 1990 Congress held in Washington D.C., USA through the 2000 Congress in Barcelona. Please contact Jennifer Peterson at jpeterson@movementdisorders.org or +1 (414) 276-2145 for forwarding information.

#### NOTICE TO MEMBERS!

#### 2010 MDS Bylaws Amendment

All voting members of The Movement Disorder Society (MDS) will be given the opportunity to vote on amendments to the Society's Bylaws at the Annual MDS Business Meeting to be held during the 14th International Congress of Parkinson's Disease and Movement Disorders, at the Sheraton Buenos Aires Hotel and Convention Center on June 15, 2010. A notice detailing the amendment and a proxy ballot will be sent to the membership in the weeks prior to the International Congress. For more information, please contact the International Secretariat at info@movementdisorders.org, or +1-414-276-2145.

## **RENEW FOR 2010!**

The Movement Disorder Society's (MDS) 2010 Dues Renewal process is underway! With your 2010 membership renewal, you will be able to continue taking advantage of the many benefits MDS has to offer, including reduced fees to our 14th International Congress of Parkinson's Disease and Movement Disorders, June 13-17, 2010 in Buenos Aires, Argentina.

If you have not renewed for 2010, you may do so by logging in to the MDS Members Only section at www.movementdisorders.org/membersonly or by contacting the MDS Secretariat at +1 414-276-2145 or info@movementdisorders.org.

#### **Health Professionals section debuts on MDS Web site**

—By Carol Moskowitz, MS, APRN-C and Mariella Graziano, BSc, (Hons)

After many months of discussion and planning, Health Professionals now have a new home on the MDS Web site.

Here you will find resources and the latest information about the many health disciplines, including: speech/language therapy, physical therapy, occupational therapy, genetics, nursing, clinical psychology and dietetics/nutrition.

The section also includes continuing medical education information, links to international health professional organizations, guidelines for standards of care and more! New features are being planned and our hope is that the section will continue to expand as we move forward with information and news you can use in your professional work.

We'd like your feedback! Send an e-mail to Heidi Schudrowitz, Web Site Manager, at hschudrowitz@movementdisorders.org, with your comments and suggestions. Be sure to bookmark the page and return in 2010 to complete the needs assessment survey so we can get to know you and your educational needs.

## **MDS Web Site expands with new features**

—Hubert H. Fernandez, MD, Gainesville, Florida; Marcelo Merello, MD, PhD, Buenos Aires, Argentina – Co-Medical Editors, MDS Web Site

During the past year, we have worked at making the MDS Web site more user-friendly and easy-to-navigate. Most recently, we have redesigned the home page while keeping "the look" that we are all used to.

You will notice that there are now more direct links to our most popular Web features: the *Movement* Disorders Journal; the Education Portal (where you will find all our on-going and upcoming CME activities); the collection of MDS Evidence-Based Reviews and Task Force Papers; the library of Rating Scales owned by The *Movement* Disorder Society, or recommended by the MDS Task Force on Rating Scales for PD.

Of course, we maintain our other popular features: Case of the Month; Quick Opinion Please; Editor's Choice Article and our Featured Articles. We also recently introduced the new Health Professionals section where nurses, physical therapists, occupational therapists, dietitians, and others have a place for relevant information about Movement Disorders as it relates to their profession.

In addition, we have launched a Book Section, where you may buy Movement Disorders books and the Society benefits from each purchase. In the meantime, prepare for the Buenos Aires Congress 2010 by registering early online. Or, perhaps you are looking for resources on Movement Disorders. If so, take advantage of our "Links" section to find contact information for nonprofit organizations and patient support groups. Get in touch with others in the field by joining our group on Facebook. Download the Membership Directory on your mobile phone to search for colleagues around the globe.

Last but not least, you may have noticed that the Membership section has been greatly improved to make it easier to join and manage your membership. Members can update

their contact information, change a password, renew 2010 dues, and much

Our goal is to make the Web site
your main resource for
information to keep you
updated, informed, and
connected at all times. As
always, we welcome your
feedback and look forward to
bigger and better things for the Web

site in 2010!



Dear Colleagues,

The second half of 2009 has been very busy for MDS-ES, and as always there is a lot to report! In July I had the pleasure of serving on the faculty of the second MDS-ES Movement Disorders Summer School in Marburg, directed by Wolfgang Oertel and Niall Quinn. I would like to thank the Directors, the Marburg Team and

the MDS Secretariat for organising this complex activity with such efficiency. The faculty of European experts presented a series of introductory lectures, and supervised student examinations of patients with a wide variety of movement disorders. Enthusiastic on-site evaluations showed that the students had found the Summer School of great value. A frequent request was for the Summer School duration to be extended, because so much learning is packed into three intensive days. The overall format, the patient examinations, and the interactive nature of the activity are much appreciated, and students commented on the unique opportunity to learn first-hand from the international expert faculty.

The success of the Summer Schools has proved the need for this to be an annual activity, and Bastiaan Bloem and his colleagues will host the next Summer School in Nijmegen, The Netherlands in

This year there were twice as many applications as there were places available, and this has encouraged us to consider the creation of a European Winter School. We aim for the first Winter School to be organised by Werner Poewe and Gregor Wenning in Innsbruck in January 2011.

We are planning a new course entitled De Novo Parkinson's Disease: Diagnosis and Treatment, to be organised by Joaquim Ferreira in Lisbon. Two courses are to be supported from the MDS-ES budget for educational activities in underserved countries in Europe. Cristian Falup-Pecurariu is organising a course in Brasov, Romania on Movement Disorders and Sleep, and Arben Taravari from Skopje, Macedonia is organising a Teaching Course on Movement Disorders.

#### **Collaboration with EFNS**

The 2009 EFNS Congress in Florence was a successful event for MDS-ES. The Officers and ESEC held meetings on the day before the Congress, and we moved into the Congress Program with our Basic Level and Advanced Level Movement Disorders Teaching Courses. The EFNS Teaching Course Committee reported that of the 18 Teaching Courses offered, the Movement Disorders Teaching Courses once again received the top ranking in terms of attendance, and our courses in Madrid 2008 had received the highest participant evaluations. Our program continued with the Main Session Symposium, Advances in Movement Disorders 2009, chaired by Günther Deuschl and Eduardo Tolosa, with presentations on Pain and Parkinson's Disease (Olivier Rascol), Abnormalities of Cortical Connectivity in Movement Disorders (Alfredo Berardelli), and Pre-clinical Diagnosis of Parkinson's Disease (Wolfgang Oertel). Focused Workshops on Management of Psychiatric Features in Parkinson's Disease organised by Martin Rabey, and Pathophysiology of Hyperkinesias convened by John Rothwell were well attended. The final activity of

the Movement Disorders program was the European Basal Ganglia Club at which MDS President Phillip Thompson gave an excellent presentation on Facial Dyskinesias.

As Chairman of the joint EFNS/MDS-ES Scientist Panel on Parkinson's disease and other movement disorders, I am pleased to report that in Florence the representative of the European Young Neurologists in Training and MDS member, Cristian Falup-Pecurariu, was unanimously elected as Secretary to the Panel.

EFNS is keen to publish new or revised European Guidelines on different topics in Neurology. Wolfgang Oertel is overseeing revision of the 2006 EFNS/MDS-ES Recommendations on therapy of Parkinson's disease. The 2006 EFNS/MDS-ES Dystonia Guidelines are also in the process of revision, and Marie Vidailhet will join me to represent MDS-ES on the author group. A new Guideline on the diagnostic work-up of Parkinson's disease has been proposed, to assist general neurologists when considering differential diagnoses of Parkinsonian disorders, and the appropriate use of diagnostic tests (genetic screening, imaging scans and others).

Alfredo Bezordelli

Alfredo Berardelli Chairman, MDS-ES



## **MDS Ambassador Program in Mali a Great Success**

On November 15-18, 2009, the MDS Ambassador Program sponsored Michel Gonce, Belgium and James Bower, United States, to attend the First Bamako Neurosciences Congress in Bamako Mali. Bamako is the capital city of Mali, a country in West Africa. Currently in Mali, with a population of 13 million people, there are six neurologists, all located in Bamako. These neurologists received their training outside Mali, as Mali does not currently have a Neurosciences Program of its own.

The Congress was organized with the leadership of Prof. Moussa Traoré, President of the University of Bamako. All Congress activities were held at the International Conference Center in Bamako. The Opening Ceremony was presided over by the Prime Minister of Mali: Representative President of the Republic, Head of the State. Other figures present included the Malian Minister of Health and Malian Minister of Higher Education and Scientific Research. The Congress was divided into Plenary Sessions and Parallel Sessions taking place over three days. During the Abnormal Movements Session, Dr. Gonce lectured on, "Clinical Aspects and Physiopathology of Gilles de la Tourette Syndrome"

and Dr. Bower lectured on, "Overview of Gait Disorders". Dr. Gonce also presented a series of video cases. At the end of Dr. Gonce's presentation, he held a quiz in which three prizes were awarded. Additionally, during the Congress, Dr. Gonce lectured on "Treatment of Parkinson's Disease" and Dr. Bower lectured on "Neuroepidemiology in Africa". Both doctors' lectures were exceptionally well-received and they have been invited to return for future Congresses.

Over 250 delegates were in attendance from the following countries: Mali, Gabon, Burkina Faso, Benin, Togo, Djibouti, Morocco, France and Cuba. Prof. Traoré noted, "The Congress is a tremendous opportunity for Senior Neurologists in Africa to strengthen their expertise in a field as specialized, evolving and stimulating as the field of Neurosciences". MDS is moving forward with educational opportunities in Africa. This Congress demonstrated MDS may play a larger role in Movement Disorders education in Africa in the future.

## **MDS Sponsors Movement Disorders Day at EFNS Course in Yerevan**

The European Federation of Neurological Society's (EFNS) International Neurological Teaching Course was held from October 15-17, 2009, in Yerevan, Armenia. This is part of a wider educational program focused on Eastern Europe which has been run by the EFNS for the past ten years. Over 120 delegates attended the event from throughout Armenia and neighboring Georgia. Located at the elegant Golden Palace Hotel in Yerevan, the course was held in both Russian and English. Delegates included medical students, neurologists in training and neurologists. Each day featured one of the following topics: Movement Disorders, Cerebrovascular diseases and Pediatric neurology.

The Movement Disorders day was October 15. Faculty included MDS Members: Evzen Ruzicka (Prague, Czech Republic), Mark Edwards (London, United Kingdom) and Carlo Colosimo (Rome, Italy). The lectures covered various topics such as diagnosis of myoclonus, non-motor symptoms of Parkinson's disease, Wilson's disease, diagnosis of gait disorders, treatment of dystonia and management of late-stage Parkinson's disease. The lectures were well received and delegates enjoyed the question and answer sessions after each lecture.

MDS efforts, including the Visiting Professor Program and Eastern European Education Fund have increased the Society's presence in Eastern Europe. Currently, MDS has 23 active Members in Armenia, a country of three million people. The Armenian Young Neurologists Group is also highly active and many members participate enthusiastically in MDS events. Past courses have proven successful in this region and MDS looks forward to hosting many more in the future.

Professors Ruzicka and Colosimo and Dr. Edwards would like to thank Prof. Hovhannes Manvelyahn for being an excellent host in Yerevan. They look forward to speaking in Armenia again soon.

For more information about the MDS Visiting Professor Program, please visit www.movementdisorders.org/education

For more information about the Eastern European/North African Education Fund, please visit http://www.movementdisorders.org/regional\_sections/es/

MDS would like to thank GlaxoSmithKline and UCB Pharma for their generous support of this meeting.

## **Dopamine Transporter Imaging Workshop, Prague, Czech Republic**



On November 20, 2009 the course Dopamine Transporter Imaging in Neurological Practice took place at Charles University, 1st Medical Faculty in Prague, Czech Republic. This one-day course was intended to introduce participants to the potential of dopamine transporter single photon emission computed tomography (SPECT) imaging in neurological practice.

During the morning session, international experts were invited to speak on the applications of dopamine transporter imaging in the diagnosis of Parkinson's disease and other disorders. In the afternoon, participants were divided into three groups and instructed by the Charles University Nuclear Medicine Department on the use and interpretation of DaTSCANTM.

A total of 25 participants attended this course from the Czech Republic and 12 additional countries including Bulgaria, Estonia, Georgia, Germany, Ireland, Lebanon, Macedonia, Moldova, Poland, Romania, Serbia and the United Kingdom. Evaluations have shown an extremely positive response. On behalf of The Movement Disorder Society I would like to thank the DTI Prague Faculty for their contributions to this excellent program.

This course was part of an ongoing series of workshops that have taken place at many locations across Europe including Marburg, Germany; Naples, Italy; Innsbruck, Austria; Madrid, Spain; Toulouse, France; and Glasgow, Scotland, UK. For information on upcoming courses please contact MDS Education at education@ movementdisorders.org.



Prof. Evžen Růžička, MD, DM Course Director DTI Prague



## De Novo Parkinson's Disease: Diagnosis& Treatment

Course Director: Joaquim Ferreira, MD, PhD

For more information, contact Hope Wallace, MDS Program Manager at hwallace@movementdisorders.org



www.movementdisorders.org/education/

#### (NO) CONTINUED FROM COVER

for associations like cigarette smoking and pesticide use, these putative environmental risk factors have less often been studied in the laboratory than have disease-associated genes. The inverse association of cigarette smoking, smokeless tobacco and passive exposure to cigarette smoke is the most consistently observed environmental modifier of PD risk,8-10 and laboratory studies suggest a protective effect of nicotine.<sup>11</sup> Pesticide exposure has been associated with two-fold or greater increase in PD risk in a number of populations. 12, 13 Many of the pathophysiologic features associated with PD have been replicated in laboratory studies of pesticides, such as paraquat, rotenone, 2,4-D and dieldrin, providing biologic plausibility for a causal effect. 14-17 The mechanisms implicated include mitochondrial dysfunction, oxidative stress, alpha-synuclein aggregation and impairment of the ubiquitin/proteasomal and lysosomal/ autophagy systems. Similar mechanistic changes have been associated with the PD-causing genes.<sup>18</sup>

The common pathophysiologic effects of the environmental and genetic factors associated with PD suggest that it is time to put to rest a debate of genes vs. environment. Both are likely important in most cases. Most PD is likely multifactorial, due to the combination of genetic and environmental factors. Future research efforts should focus on ways to use all of the information available from human population studies—both genetic and environmental—in concert, to develop laboratory investigations that hasten our understanding of disease mechanisms and, ultimately, our ability to prevent or cure PD.

#### References

- Clark LN, Wang Y, Karlins E, et al. Frequency of LRRK2 mutations in earlyand late-onset Parkinson disease. Neurology 2006;67(10):1786-1791.
- Ozelius LJ, Senthil G, Saunders-Pullman R, et al. LRRK2 G2019S as a cause of Parkinson's disease in Ashkenazi Jews. New England Journal of Medicine 2006;354(4):424-425.
- An XK, Peng R, Li T, et al. LRRK2 Gly2385Arg variant is a risk factor of Parkinson's disease among Han-Chinese from mainland China. Eur J Neurol 2008;15(3):301-305.
- 4. Simón-Sánchez J, Schulte C, Bras JM, et al. Genome-wide association study reveals genetic risk underlying Parkinson's disease. Nat Genet. 2009;41(12):1308-12.
- 5. Migliore L, Coppedè F. Environmental-induced oxidative stress in neurodegenerative disorders and aging. Mutat Res. 2009;674(1-2):73-84.
- 6. Langston JW, Ballard P, Tetrud JW, Irwin I. Chronic Parkinsonism in humans due to a product of meperidine-analog synthesis. Science. 1983;25;219(4587):979-80.
- Kordower JH, Chu Y, Hauser RA, et al. Lewy body-like pathology in longterm embryonic nigral transplants in Parkinson's disease. Nat Med. 2008 May;14(5):504-6.
- Hernan MA, Takkouche B, Caamano-Isorna F, Gestal-Otero JJ. A metaanalysis of coffee drinking, cigarette smoking, and the risk of Parkinson's disease. Ann Neurol 2002;52(3):276-284.
- Chade AR, Kasten M, Tanner CM. Nongenetic causes of Parkinson's disease. J Neural Transm Suppl 2006(70):147-151.
- Mellick GD, Gartner CE, Silburn PA, Battistutta D. Passive smoking and Parkinson disease. Neurology 2006;67(1):179-180.
- 11. Quik M, O'Leary K, Tanner CM. Nicotine and Parkinson's disease: implications for therapy. Mov Disord 2008;23(12):1641-1652.

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genetic variability explains the rarity of geographical or occupational PD clusters.

The list of genes suspected of contributing to the population's burden of PD is growing rapidly, as is the fraction of that burden explainable by genetic associations. Recent hypothesis-free whole-genome analyses<sup>5,6</sup> have confirmed older studies<sup>7,8</sup> revealing variants in the genes for  $\alpha$ -synuclein and tau as leading contributors to sporadic PD. Hypothesis-driven allelic association studies have shown that variants in genes for glucocerebrosidase, LRRK2 and parkin each accounts for up to about 3% of sporadic PD in unselected populations and for higher fractions in certain ethnic groups.<sup>9</sup>

We are starting to demonstrate gene-toxin interactions in PD. For example:

- Exposure to toxins related to rural living, most likely pesticides, increases PD risk and variants in detoxification genes have been linked to PD onset age in toxin-exposed individuals.<sup>10</sup>
- Misfolding of  $\alpha$ -synuclein with formation of toxic protoaggregates can be caused in vitro by environmentally relevant metals and pesticides and by exogenously-induced oxidative stress. Similar protoaggregates are induced by  $\alpha$ -synuclein point mutations² or by  $\alpha$ -synuclein region multiplications causing overproduction of normal  $\alpha$ -synuclein protein. The  $\alpha$ -synuclein regulatory region variant that is over-represented in sporadic PD may overproduce the protein, inducing it to aggregate. The synuclein regulatory region to aggregate.
- The mitochondrion is a site of action of pesticides epidemiologically associated with PD. Five genes linked to parkinsonian disorders, LRRK2, parkin, PINK-1, DJ-1 and Omi/HtrA2, have major actions there as well.<sup>8</sup>

So the interesting issue at this point is not the relative etiologic importance of mutations or toxins, but the relative pathogenetic importance of the various subcellular systems and their upstreamdownstream order, realizing that these will vary among individual patients. Then, we must unravel the specific combinations of genetic and exogenous insults that most commonly affect each such system. Only then will we put the malevolent chef out of business.

- Golbe LI, Di Iorio G, Bonavita V, Miller DC, Duvoisin RC. A large kindred with autosomal dominant Parkinson's disease. Annals of Neurology 1990; 27: 276-282.
- Polymeropoulos MH, Lavedan C, Leroy E, et al. Mutation in the alpha-synuclein gene identified in families with Parkinson's disease. Science 1997; 276: 2045–2047.
- Sveinbjörnsdottir S, Hicks AA, Jonsson T, et al. Familial aggregation of Parkinson's disease in Iceland. N Engl J Med 2000; 343: 1765-1770.
- 4. Piccini P, Burn DJ, Ceravolo R, et al. The role of inheritance in sporadic Parkinson's disease: evidence from a longitudinal study of dopaminergic function in twins. Ann Neurol 1999; 45: 577–582.
- Simón-Sánchez J, Schulte C, Bras JM, et al. Genome-wide association study reveals genetic risk underlying Parkinson's disease. Nat Genet 2009; 41: 1308-1132.
- Tobin JE, Latourelle JC, Lew MF, et al. Haplotypes and gene expression implicate the MAPT region for Parkinson disease: The GenePD Study. Neurology 2008; 71: 28-34.
- Lazzarini AM, Golbe LI, Dickson DW, Duvoisin RC, Johnson WG. Tau intronic polymorphism in Parkinson's disease and progressive supranuclear palsy. Neurology 1997; 48: A427.



Dear Colleagues

On November 19-20<sup>,</sup> 2009, the much anticipated course *Focus on Movement Disorders*, took place in Cebu City, Philippines. Held in conjunction with the Annual Congress of the Philippine Neurological Association, this AOS Education course brought together local, regional, and international experts to provide a comprehensive overview of

Movement Disorders diagnosis and treatment. The course host Prof. Raymond Rosales and the Movement Disorder Society of the Philippines (MDSP) also welcomed MDS President, Prof. Philip Thompson, to deliver an oration as part of the MDS Ambassador Program. Prof. Thompson's role in Cebu City was two-fold as he was also the official MDS representative to welcome the MDSP to MDS Affiliate Member Status. Congratulations to the MDSP on the beginning of their new relationship with MDS!

One of the main goals of the AOS is to further Movement Disorders education in our region. There are three MDS programs available to our members designed specifically to facilitate regional education: the AOS Education Course Sponsorship Program, the Visiting Professor Program, and the Ambassador Program.

The AOS Education Course Sponsorship Program which sponsors educational activities such as *Focus on Movement Disorders*, is a valuable resource available to AOS Members. It is designed to offset the cost of a one-, two-, or three-day education course in addition to sponsoring international experts. Interested applicants are required to submit a course schedule and an estimate of the budget. There is an application guideline available on the MDS Web site, which provides detailed instructions on this process.

The Visiting Professor Program (VPP) is designed to aid in the development of an educational program by sponsoring the travel and honorarium of two internationally recognized experts in Movement Disorders. They would give several lectures and partake in the teaching program. The Ambassador Program augments an already existing meeting by sponsoring the travel and honorarium of up to two regional experts to deliver a key-note lecture during the program.

The AOS Education Committee (Co-chairs Dr. Louis Tan and Prof. Ryosuke Takahashi) is always willing to assist those who are interested with the preparation of their application and with the development of their course once it is accepted. An accepted application will also receive the support of the MDS International Secretariat which can provide administrative support for these programs, as well as information on educational needs assessment for course planning, and supporting materials. More information on all of these programs is available at the MDS Web site and on the AOS Web site at www. movementdisorders.org/regional\_Sections/AOS. Besides MDS members, their colleagues can also apply for any of the education programs discussed in this letter. These excellent and effective programs are a valuable resource to AOS members and also to their colleagues. Members are urged to take full advantage of these programs to further the goals of the AOS.

As we enter the New Year, I wish you all the best in 2010 and hope you had a very happy holiday season.

33 Enoul

Bhim Singhal MD, FRCP Chairman, MDS-AOS

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- 12. Priyadarshi A, Khuder SA, Schaub EA, Shrivastava S. A meta-analysis of Parkinson's disease and exposure to pesticides. Neurotoxicology 2000;21(4):435-440.
- Fleming L, Mann JB, Bean J, et al. Parkinson's disease and brain levels of organochlorine pesticides. Ann Neurol 1994;36(1):100-103.
- Betarbet R, Sherer TB, MacKenzie G, et al. Chronic systemic pesticide exposure reproduces features of Parkinson's disease. Nat Neurosci 2000;3(12):1301-1306.
- Manning-Bog AB, McCormack AL, Li J, et al. The herbicide paraquat causes upregulation and aggregation of alpha-synuclein in mice: paraquat and alpha-synuclein. J Biol Chem 2002;277(3):1641-1644.
- 16. Thiruchelvam M, Richfield EK, Baggs RB, et al. The nigrostriatal dopaminergic system as a preferential target of repeated exposures to combined paraquat and maneb: implications for Parkinson's disease. J Neurosci 2000;20(24):9207-9214.
- Tanner CM, Ross GW, Jewell SA, et al. Occupation and risk of parkinsonism: a multicenter case-control study. Arch Neurol. 2009;66(9):1106-13.
- Henchcliffe C, Beal MF. Mitochondrial biology and oxidative stress in Parkinson disease pathogenesis. Nat Clin Pract Neurol. 2008 Nov;4(11):600-9.

#### (YES) CONTINUED FROM PAGE 10

- Kruger R, Vieira-Saecker AM, Kuhn W et al. Increased susceptibility to sporadic Parkinson's disease by a certain combined α-synuclein/apolipoprotein E genotype. Ann Neurol 1999; 45: 611–617.
- 9. Bras JM, Singleton A. Genetic susceptibility in Parkinson's disease. Biochim Biophys Acta 2009; 1792: 597-603.
- Wilk JB, Tobin JE, Suchowersky O, et al. Herbicide exposure modifies GSTP1 haplotype association to Parkinson onset age: The GenePD Study. Neurology 2006; 67: 2206-2210.
- 11. Singleton AB, Farrer M, Johnson J, et al. alpha-Synuclein locus triplication causes Parkinson's disease. Science 2003; 302: 841.
- Sotiriou S, Gibney G, Baxevanis AD, Nussbaum RL. A single nucleotide polymorphism in the 3'UTR of the SNCA gene encoding alpha-synuclein is a new potential susceptibility locus for Parkinson disease. Neurosci Lett 2009; 461: 196-201.

## Where are they now? An Interview with Roger Duvoisin

-Mark Stacy, MD, Duke University Medical Center, Durham, NC, USA; Co-Editor, Moving Along



Roger Duvoisin was born in Towaco, NJ on July 27, 1927. His career spans the discovery and development of levodopa to the identification of the  $\alpha$ -synuclein gene. After graduating from high school in 1945, he served almost two years as a Hospital Apprentice to a Pharmacist's Mate - although he really preferred to be a pilot. Upon returning to the United States he received his

undergraduate degree from Columbia University with the help of the GI Bill, an educational program established for Veterans. He chose medicine as a career, because he always admired the country doctors in rural New Jersey – and because his parents thought this was a good fit. He graduated from New York Medical College in 1954. During this busy time in his life, he met and married Winifred Murray, a schoolteacher – and championship diver, and started his family. During the last two years as a Medical student, he joined the Army Reserve Medical Officer's Training Corps, and during residency the Air Force Medical Corps, worked nights as an orderly, and assisted in student laboratories – all to make ends meet.

He began a rotating Internship at Lenox Hill Hospital, intent on becoming a cardiologist, before discovering his interest in Neurology. Upon completing his residency in 1958, Dr. Duvoisin owed four years to the service, most of which was completed in San Antonio, Texas. During that time he evaluated a pilot in the Mercury program, who suffered a loss of consciousness in a low gravity condition. As a result, he published extensively on syncope and convulsions associated with Valsalva and hyperventilation, and initiated a prescreening program for military pilots.

In 1962 he returned to Columbia after Dr. Houston Merritt asked him to assume responsibility for a Parkinson Clinic run by Dr. Louis Dochay. Duvoisin became interested in genetic causes of the Parkinson's disease (PD). His initial study, comparing 96 patients and their spouses, found no differences in the incidence of PD between the two groups. His next effort, an initial survey of six twin pairs, also found complete discordance between the two groups.

After a sabbatical with David Marsden, Duvoisin moved to Mount Sinai with Dr. Melvin Yahr, where he continued twin studies until moving to chair the Department of Neurology at the University of New Jersey School of Medicine and Dentistry. In 1990 a large Italian kindred of Parkinson's disease patients, identified after decades of Duvoisin's twin and family studies, were reported by his colleague Dr. Larry Golbe, and lead to collaborations that identified the 4q21-q23 allele,  $\alpha$ -synuclein.

Prior to retiring in 1996, Dr. Duvoisin served on the Editorial Boards for *Advances in Neurology, Annals of Neurology, Clinical Neuropharmacology, Movement Disorders* and the *International Journal of Neurology*. He also served as the Editor of Transactions of the American Neurological Association. He published nearly 200 peerreviewed journal articles and four books.

Roger now lives in Chapel Hill, NC near one of his four children. Winifred, his wife of more than 50 years passed away in 2004. He married Mary McGaw Duvoisin in 2006. Although "retired," he remains active locally, and continues to follow the life of Parkinson's disease closely.

#### Who was your most influential teacher?

That is a difficult question to answer. I have had so many great teachers. I developed an interest in Neurology after my father had a stroke. Dr. Aaron Bell – one of Foster Kennedy's men – kindled my enthusiasm for neurology, and encouraged me to follow my interest in carotid arteriogram, because I "was handy with a needle." Neurology should have never let that go to the radiologists.

Bell thought I should complete Psychiatry at Bellevue. Another attending, Melvin Yahr, convinced me to apply to the Neurological Institute. I never tried to resolve the Psychiatry and Neurology paradox, but Dr. Houston Merritt, we called him "the boss," provided guidance on the matter: he said that "they practiced Psychiatry for a living, but got their pleasure from Neurology."

Dr. Merritt was a great teacher – but was very subtle, and you had to pay attention. We had a rule that Dr. Merritt had to approve all cisternal taps back then. There was a boy, who was a son of a very influential faculty member with a neurological problem, and we could not get the spinal tap. I was new to the service that month, but still had to present the case to Dr. Merritt, which was always stressful. I worked hard on the case, and presented pretty well. When I was finished, Dr. Merritt got out his flashlight, looked in the boy's eyes, and said, "no." And left; never said why. But then I knew, I looked at his eyes, and saw that the pupils did not react. I then got the tap to confirm the diagnosis. You know what it was?… neurosyphillis.

#### Which aspect of your work gave you the most pleasure?

More than anything, I loved the meetings. It was exciting to hear others share ideas and develop new therapies. The meetings we had about levodopa therapy in which chemists, pharmacologists and scientists talked were just great.

#### Which event has most affected your work?

Levodopa changed everything. It was the most exciting decade of my life. For that brief period of time laboratory, pathology, pharmacology and chemistry all converged to assist clinicians in the production and testing of levodopa. I remember a person from Hoffman la Roche visiting Columbia, asking us to look at levodopa, saying, "Birkmayer is either a magician or levodopa works." He sent us 1 kg of levodopa. That was enough to test 38 patients, and we published it in 1968 or 1969.

#### What is your unrealized ambition?

To become a Neuropathologist

## The Edward I. Rudman Parkinson's Disease Patient and Caregiver **Symposium: Nonmotor Aspects of Parkinson's Disease**

The Conference Center at Harvard Medical - Boston, Massachusetts, USA

Course Report — by Dr. Daniel Tarsy, MD, Beth Israel Deaconess Medical Center.

On October 31st, 2009, Beth Israel Deaconess Medical Center (BIMDC), in collaboration with The Movement Disorder Society (MDS), hosted a half-day patient education activity entitled, The Edward I. Rudman Parkinson's Disease Patient and Caregiver Symposium: Nonmotor Aspects of Parkinson's Disease. This activity was intended to give an overview of nonmotor aspects of Parkinson's disease for patients with Parkinson's disease and their caregivers. The topics discussed were depression, anxiety, sleep disorders, autonomic disturbances and cognitive deficits, which often impact the quality of life of patients with Parkinson's disease as much as, or sometimes even more than, motor symptoms. Over 250 people attended the live event in Boston, Massa-

chusetts and their response was extremely positive.

Due to the generous support of the Edmond J. Safra Foundation, MDS was able to produce a webcast of the live Symposium. The recording of this webcast will be archived on the MDS Web site for the period of one year, available to the public at no cost as an online resource for patients and caregivers. This webcast is accessible at http://www.movementdisorders.org/education/patient\_education/.

Four organizations arranged group webcast viewings, with over 140 individual webcast attendees. Participating organizations were: BIMDC Community Benefits (at YMCA Cape Cod); Outer Cape Health Services, Inc (at Wellfleet Council on Aging); Parkinson's



Association of West Michigan (at St. Mary's Health Care); and University at Buffalo Comprehensive Movement Disorders Center (at University at Buffalo -Center for Tomorrow).

Please read below some of the feedback we have received from our webcast sites.

- Outer Cape Health Services, Inc in Wellfleet, Massachusetts reported attendees who were "very appreciative to have this special access [to PD information]."
- University at Buffalo Comprehensive Movement Disorders Center in Buffalo, New York indicated that their attendees were pleased with the course and that they "hope to present this again next year, if offered.'
- Parkinson's Association of West Michigan in Grand Rapids, Michigan reported that "everyone learned a lot and appreciated the conference."

MDS and BIMDC would like to thank Mr. Edward I. Rudman, the Edmond J. Safra Foundation, and the National Parkinson Foundation for their generous support of this meeting. We would like to thank the American Parkinson Disease Association for their assistance in promoting this meeting. We would also like to thank Boehringer-Ingelheim, Teva Neuroscience, and UCB Pharma for their kind support of this meeting. For more information on the archived webcast please contact Catherine Breckenridge, Program Manager at cbreckenridge@movementdisorders.org.

#### Roger Duvoisin CONTINUED FROM PAGE 12

#### What was your biggest regret?

I was planning to start a Neuropathology Fellowship with Abner Wolf, when levodopa came along. I had to abandon Neuropathology to do clinical trials in Neurology.

In the almost 40 years since levodopa was approved by the FDA, we have still not found anything better - and it's amazing that it worked at all.

#### What would be your advice to a newly qualified doctor?

Work on your clinical skills, but develop an interest and cultivate it. Just seeing things one after another is not good enough.

#### Whom do you most admire?

Houston Merritt. He had vision; he had large vision. He had a way of summarizing every opinion at a meeting, and distilling it down to the essence of the meeting.

He had me appointed to the Executive Committee of the department when I was just barely above the rank of Instructor. He would listen to everyone's opinion in those meetings, and then go off and make up his mind. Sometimes we would never know what he decided. Sometimes you would think he was not listening, but he always was.

#### **Announcements**

## The International Essential Tremor Foundation - Request for Proposals

Submission Deadline: February 28, 2010
Announcement of Award: June 1, 2010
Funding Period Begins: July 1, 2010

The IETF is receptive to receiving proposals for grants addressing the nosology, etiology, pathogenesis, treatment or other topics relevant to essential tremor (ET).

The aim is to stimulate inquiry into this poorly understood clinical disorder and to provide support to projects that are innovative and give promise of receiving more substantial support from NIH and/or other sources if sufficient preliminary information can be obtained from projects supported by the IETF.

Concise, clearly written proposals that are hypothesis-driven have the best chance of being funded. The scope of the proposal should be appropriate for a one-year funding period with the possibility of being renewed for a second year. Additional project support beyond the first year of funding requires a second proposal and explanation for additional funding, to be reviewed in competition with all proposals submitted during that funding cycle. In general, each IETF research grant award will not exceed \$25,000. There are a minimum of 2 this grant cycle. Institutional indirect costs will not be provided.

The Grant Guideline, the Application, the Conflict of Interest Policy and Questionnaire can be obtained by downloading it from the IETF website at www.essentialtremor.org, click research at the top of the page, then grant program research applications or emailing your request to crice@essentialtremor.org.

All completed applications and the conflict of interest policy questionnaire must be submitted in one file electronically to: crice@essentialtremor.org.

Hard copy submissions will not be accepted nor will multiple electronic folders or files.

## Huntington Society of Canada/Huntington Study Group – Request for Proposals

We are pleased to announce that the Huntington Society of Canada (HSC), in partnership with the Huntington Study Group (HSG) is again making available up to \$150,000 Canadian each for meritorious research projects, from investigators in Canada, the United States, Australia or Europe to be funded by June 2010 and completed by October 2011.

A PDF of the full Request for Proposals, detailing the timeline and requirements is available at: http://www.huntington-study-group.org/ClinicalResearch/RequestforProposals

#### Important Dates

Required letter of intent due: February 1, 2010

Full proposals: March 23, 2010

Notification to successful Applicants: June 30, 2010

We hope that both the HD Researchers and the HD community share our enthusiasm for this RFP initiative, and we look forward to receipt of many interesting proposals!

#### Huntington Society of Canada – New Pathways for HD Research – 2010 Application for Funding

This Request for Proposals is intended to foster innovative lines of enquiry that will eventually lead to the next generation of targets for the treatment of Huntington disease. All applicants must use the format shown in section B below to apply for funding. Please send one completed application form, with necessary signatures, in hard copy to Shirley Barnes at the Huntington Society of Canada (HSC) at the address shown below; and one electronic copy to info@huntingtonsociety.ca Applications for the 2010 competition must be received no later than 5:00 PM EDT May 7, 2010. Late and/or incomplete applications will be returned to the applicant. Applications received by this deadline will be reviewed and the Society will strive to provide a formal response by June 30, 2010 with funding to begin immediately.

#### **HUNTINGTON SOCIETY OF CANADA**

151 Frederick Street, Suite 400, Kitchener, Ontario, N2H 2M2 519 749 7063 (phone) / 519 749 8965 (fax) / info@huntingtonsociety.ca

Questions regarding this Request for Proposal or any of the information below should be directed to Don Lamont, HSC Executive Director, at dlamont@huntingonsociety.ca

#### Parkinson Study Group: Request for Proposals for a Mentored Clinical Research Award for new investigators in patient oriented research in Parkinson's disease and related disorders

Submission deadline: Friday, March 26, 2010

The Mentored Clinical Research Award (MCRA) for new investigators is funded by a grant from the Parkinson's Disease Foundation (PDF) to the Parkinson Study Group (PSG). The PDF has partnered with the PSG to encourage the professional and scientific development of young investigators on their path to independence. To this end, this grant will support a new investigator for a one year project in patient oriented research in Parkinson's disease or other parkinsonian disorders under the mentorship of an experienced investigator. The training should lead a junior investigator to gain skills in clinical research. The research plan should address unmet needs of people living with PD, have the potential for broad application among the PD community, and lead to advances in clinically relevant treatment options.

Appropriate applicants for the MCRA are clinicians and scientists who are within 5 years of having completed formal training (this includes PhD professionals working in the field of Parkinson's disease). Fellows may apply.

Proposals received will be reviewed by the PSG Mentoring Committee and applicants notified by May 21, 2010. Funding will begin on July 1, 2010 and continue until June 30, 2011.

For more details, please visit the PSG web site at www.parkinson-study-group.org.

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#### **Private Practice Opportunity in Austin, Texas**

Neurology Solutions Consultants is seeking a board certified neurologist with experience in movement disorders to work with another fellowship trained neurologist, nurse practitioner, physical therapist and chiropractor. We are a growing, independent, movement disorders practice focusing on Parkinson's disease, tremor, spasticity and dystonia. We are involved in clinical research trials and are developing a comprehensive physical therapy program for neurological disorders.

Experience with research, DBS, ITB and botulinum toxin therapy is preferred. Salary, comprehensive benefits and scheduled hospital call are negotiable. General neurology emergency room and hospital floor consult call is not required. Austin is a great place to live, and this is a fantastic opportunity.

Please send a current C.V. and three professional references to Tammy Anders, business manager (512)977-7000. Email: tammy@ neurologysolutions.com. Address: 12201 Renfert Way, Suite 360, Austin, Texas 78758

#### Junior Movement Disorders Neurologist to join PD and **Movement Disorder Center team at Scripps Clinic**

The Division of Neurology at Scripps Clinic in La Jolla, California (San Diego) is seeking a BC/BE neurologist who has recently completed or is completing fellowship training in movement disorders. EMG experience, an interest in either dementia or autonomic dysfunction is desirable, but not required. The position involves participation in a thriving clinical practice, an active DBS program, and provides opportunity in clinical trials and collaborative research.

The position offers competitive salary and an excellent benefits package. Interested candidates are invited to submit CV, brief statement of goals and three letters of recommendation to:

Melissa Houser, M.D.

Director, Scripps Clinic Parkinson's Disease and Movement Disorder Center

Scripps Clinic

10666 N. Torrey Pines Rd.

MS 313

La Jolla, CA 92037

mhouser@scrippsclinic.com

#### **Movement Disorders Specialist in Sacramento**

Medical Clinic of Sacramento, Inc. (MCS), a multi-specialty group with more than 200 healthcare providers in the Sacramento region, is looking to add a provider to our busy Neurology Department. MCS doctors provide services to patients at CHW Medical Foundation's Mercy Medical Group locations throughout Sacramento.

MCS is seeking a BE/BC fellowship trained Movement Disorders Specialist to provide excellent clinic based patient care and neurology consults at Mercy General Hospital (www.mercygeneral. org). Call will be 1:5 with access to hospitalists 24/7 and a strong built-in referral system. All outpatient care locations have a full electronic medical records system, as well.

This shareholder track opportunity offers a very competitive compensation and benefits package, including bonus potential and a very desirable retirement plan.

Mercy Medical Group is a service of CHW Medical Foundation (CHWMF). CHWMF is affiliated with Catholic Healthcare West, one of the leading healthcare systems in the country.

#### **Rocky Mountain Movement Disorders Center Seeks Movement Disorders Partner**

We are assisting Rocky Mountain Movement Disorders Center recruit a future partner. This is an opportunity for a Neurologist with Movement Disorders training to join Dr. Rajeev Kumar and be affiliated with the Colorado Neurological Institute.

You can look forward to:

- Salary guarantee and comprehensive benefit package
- Shared call with minimal inpatient or general neurology
- Practice is active in botulinum toxin injection therapy
- Active deep brain stimulation and stereotactic neurosurgery
- Extensive clinical research opportunities
- National Center of Excellence in Huntington's Disease
- National Parkinson Foundation Care Center
- Worldwide leaders, including, neurologists, neurosurgeons and interventional neuroradiologists, performing complex brain surgeries and treating arterial venous malformations
- 2006-2009 Consumer Choice Preferred Hospital in Denver

www.swedishhospital.com www.thecni.org www.denver.org

#### **BC/BE Neurologist at Albany Medical Center**

The Parkinson's Disease and Movement Disorder Center of Albany Medical Center is seeking a full-time BC/BE neurologist who has completed fellowship training in movement disorders. The position is intended for a highly motivated clinician/scientist to begin at the assistant, associate or full professor level. The successful applicant will participate in a busy outpatient practice and will also be expected to participate in the conduct of an active clinical trial and collaborative research program. The ideal candidate will have an interest in the screening, operative monitoring and postoperative management of patients treated with DBS. A commitment to teaching of residents and medical students is required.

The position offers a competitive salary and benefits package. Interested candidates should send a CV, brief statement of career goals and letters of recommendation to: Eric S. Molho, M.D., Riley Family Chair in Parkinson's Disease, Parkinson's Disease and Movement Disorder Center of Albany Medical Center, 47 New Scotland Ave., Albany, NY 12208. Tel: (518)262-6611.

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FAX: (518)262-6612. EEO/AA Employer M/F/D. A smoke-free institution.

## Movement Disorders Fellowship at the National Neuroscience Institute, Singapore

The Parkinson's Disease and Movement Disorders Centre (PDMDC), National Neuroscience Institute, Singapore has fellowship positions available. The Centre has been accredited by the US-based National Parkinson Foundation as one of its International Centre of Excellence. The PDMDC is dedicated to patient care and research into Parkinson's disease and related neurodegenerative disorders, dystonia, tremors, Huntington's disease, and other movement disorders.

We are seeking motivated neurologists who have completed their neurology training and are interested to pursue the subspecialty of Movement Disorders. Successful candidates will join our team of movement disorders specialists who are supported by a multidisciplinary team of allied health professionals. The fellowship program is for 1-2 years and commences in the 4th quarter of 2009 or January 2010. Fellows will receive intensive training in the diagnosis and management of a wide variety of movement disorders and gain experience in deep brain stimulation and the use of botulinum toxin. Fellows will also participate in clinical research including exposure to clinical trials, epidemiology and genetics.

Candidate should send their CVs with contact information and references to Dr Louis Tan at nni\_hr@nni.com.sg.

## University of Colorado School of Medicine – Department of Neurology

The University of Colorado Denver is pleased to offer a one year fellowship in Movement Disorders beginning July 2010. Our program offers fellows training in clinical movement disorders, deep brain stimulation surgery and botulinum toxin injections. Fellows will also have the opportunity to take part in clinical research, including clinical research trials. Fellows interested in research may have the opportunity to extend their fellowship to two-years. Interested candidates should contact Dr. Benzi Kluger by email at benzi.kluger@ucdenver.edu.

#### **University of Louisville Fellowship Position**

The University of Louisville (UofL) Division of Movement Disorders is pleased to announce one- and two-year fellowships with a position available beginning in July 2010. Our program is built upon excellence in patient care, research, education, and community involvement. The Division is a referral center that serves Kentucky and Southern Indiana movement disorder patients and families with a staff of specialists in movement disorders (Drs. Litvan, Houghton, & Ferrara), neurosurgery, genetics, neuropsychology, psychiatry, physical therapy, occupational therapy, speech therapy, and case management. Located within the state-of-the-art Frazier Rehab and Neuroscience Institute, fellowship training is highly integrated within this interdisciplinary framework. Training emphasizes the diagnosis and treatment of a wide range of movement disorders, with exposure to deep brain stimulation,

botulinum toxin injections, and experimental therapeutics via clinical trials. Fellows will be encouraged to participate in clinical and/or basic research studies with multiple opportunities to publish. Unique exposure to telemedicine for patient care is underway. Educational enrichment and professional development through local, national, and international meetings is available.

Candidates should email their CV, personal statement and three letters of recommendation to Dr. Irene Litvan at i.litvan@louisville.edu.

#### **Clinical Fellowship at Albany Medical Center**

The Parkinson's Disease and Movement Disorder Center of Albany Medical Center is offering a one year clinical fellowship in movement disorders starting July 2010. Training will involve participation in an active movement disorders clinic with an in depth exposure to the diagnosis and management of the full range of movement disorders including parkinsonian disorders, tremor, dystonia and drug-induced syndromes. Trainees will also actively participate in a well-established botulinum toxin clinic and a rapidly expanding program in the surgical treatment of movement disorders. The fellow will have the opportunity to participate in several ongoing clinical research projects including Parkinson Study Group, Huntington Study Group, industry and government sponsored projects. Applicants must be board-eligible neurologists. Interested applicants should contact Dr. Eric S Molho, Riley Family Chair in Parkinson's Disease, Parkinson's Disease and Movement Disorder Center of Albany Medical Center, 47 New Scotland Avenue, Albany, NY 12208. Tel: (518) 262-6611. FAX: (518) 262-6612. EEO/AA Employer M/F/D. A smoke-free institution.

#### Neurologist/Fellowship Position at Hertie-Institute for Clinical Brain Diseases

Novel genetic and phenotypic markers of Parkinson's disease and Essential Tremor

Hertie-Institute for Clinical Brain Diseases, Department of Neurodegenerative Diseases (Chairman: Prof. Dr. Thomas Gasser), Clinical Neurodegeneration Group (Head: Prof. Dr. Daniela Berg)

One fully funded neurologist/fellowship position is available in March 2010 in the Hertie-Institute for Clinical Brain Diseases, Department of Neurodegenerative Diseases, Clinical Neurodegeneration Group (Contact: Prof. Dr. Daniela Berg at daniela. berg@uni-tuebingen.de) for the EU funded project: "MarkMD. Novel genetic and phenotypic markers of Parkinson's disease and Essential Tremor".

OBJECTIVE OF THE EUROPEAN PROJECT MarkMD MarkMD is a cooperative project of deCODE genetics (Iceland) and University of Tuebingen (Germany) and aims to establish new tools for the detection of disease associated genetic and clinical markers in patients as well as healthy at-risk groups of Parkinson's disease (PD) and Essential Tremor (ET).

QUALIFICATIONS and CONTENT of work:

CONTINUED FROM PAGE 16...

Applicants should preferably have experience:

- in the clinical investigation of patients with movement disorders including the application of different movement scales,
- in the exertion of neuroimaging techniques (MRI and possibly others like PET, SPECT or TCS)
- in the evaluation and analysis of images

The successful applicant will work in a well established team and will thereby:

- investigate patients with different form of movement disorders and subjects suspected to be at risk
- perform premotor assessment batteries for Parkinson's disease
- apply different neuroimaging techniques (including TCS and MRI and possibly functional neuroimaging)
- be involved in data analysis

#### Eligibility:

Only applicants qualify who have spent less then 12 months of the previous 3 years in Germany.

## Clinical Research Fellows in Parkinson's Disease and Movement Disorders

The Oxford Parkinson's Disease Centre (OPDC; http://opdc. medsci.ox.ac.uk) is a new grouping of scientists and clinicians studying the genetics and neuropathology of PD, the generation of cell and animal models, and the wiring of neuronal circuitry, with clinical experts in the diagnosis and treatment of PD. Two Clinical Research Fellows are required to help recruit and maintain a clinical cohort of 2000 PD patients across the Thames Valley, 300 age-matched controls and 300 subjects at-risk for PD under the clinical supervision of Dr Michele Hu. Each Fellow will assist in the collection of biosamples, assess patients with motor and non-motor rating scales, and be expected to register for a DPhil degree integrating the molecular pathogenesis of PD identified by proteomic analysis, in-vivo and post-mortem MRI at the Oxford Centre for Functional MRI of the Brain, and neuropathology. These posts are funded by the Parkinson's Disease Society for three years and are based at the John Radcliffe Hospital, Oxford. The post is suitable for somebody wishing to pursue a career in neurology. Successful candidates will hold a medical degree and GMC registration, MRCP/ equivalent qualification and clinical neurology experience is desirable. Informal enquiries should be made to Dr Michele Hu or Dr Kevin Talbot (email: michele.hu@clneuro.ox.ac. uk and kevin.talbot@clneuro.ox.ac.uk). For further information please see the job description downloadable from www.clneuro. ox.ac.uk/vacancies; alternatively tel UK 01865 231909 or e-mail personnel@clneuro.ox.ac.uk, quoting job reference HM/09/023. Closing date 11/01/10.

#### Fellowship in Movement Disorders at University of Texas Health Science Center at Houston

A one or two year fellowship program is available to a highly qualified individual at The University of Texas Health Science Center at Houston, Department of Neurology, Division of Movement Disorders, beginning July 2010. This program offers focused attention on the neurological conditions of motor systems disruption, including the movement disorders, cerebral palsy, spasticity, the neurodegenerative diseases and dementias. It incorporates both an adult, geriatric and pediatric population, with expert faculty in each area. The faculty and participants in this program offer expertise in diagnosis, management, as well as medical and surgical therapeutic interventions for the specific disease states. The program is based in a strong academic neurology department at a university based medical center with a tertiary care hospital association and multiple affiliated ambulatory clinics. Our population base includes Harris County, the surrounding areas and a referral network from the entire state. This is a two-year program. The first year provides the necessary clinical exposure and training while the second year- which is not mandatory- provides experience and training in clinical and basic research and additional clinical experience. If you have any questions please contact: Annie Rose, Administrative Coordinator; Phone 713-500-7051 or Fax 713-500-5055; Email: annie.m.rose@uth.tmc.edu

Interested applicants should send CV and 3 letters of recommendation to:

Mya C. Schiess, M.D.
Professor & Vice Chairman
Department of Neurology
Director, Movement Disorders Program
6431 Fannin St., # MSB 7.044
Houston, Texas 77030
Fax: 713-500-5055

Email: mya.c.schiess@uth.tmc.edu

\* Meetings Sponsored, Supported and/or Endorsed by MDS

#### \*February 5-7, 2010

Knowledge Gaps in Parkinson's Disease and Other Movement Disorders. Taormina, Sicily, Italy. TEL: +39090345281; FAX: +3909047044; E-mail: gaps.in.mds@gmail.com; Web site: www.gapsinmds.com

#### February 15-16, 2010

6th Annual Update Symposium Series on Clinical Neurology and Neurophysiology. Metropolitan Hotel, Tel Aviv, Israel. Contact: Helen Goldmunz, ISAS International Seminars, POB 574, Jerusalem 91004, Israel; TEL: +972-2-6520574; FAX: +972-2-6520558; E-mail: seminars@isas.co.il; Web site: www.neurophysiology-symposium.com

#### \*February 24-25, 2010

Freezing of Gait Workshop. Washington, DC. Contact: E-mail: nuttj@ohsu.edu; Web site: www.ohsu.edu/pco

#### February 26-28, 2010

The 3<sup>rd</sup> International Congress on Gait and Mental Function. Shoreham Hotel, Washington, D.C., USA. Contact: Kenes International, 17 Rue du Cendrier, P.O. Box 1726, CH-1211 Geneva 1, Switzerland; TEL: +41-22-908-0488; FAX: +41-22-732-2850; E-mail: gait@kenes.com; Web site: www.kenes.com/gait/

#### March 4-6, 2010

3rd International Conference on Hypertension, Lipids, Diabetes & Stroke Prevention. Maritim Hotel, Berlin, Germany. Contact: KENES International, 1-3, Rue de Chantepoulet PO Box 1726, CH-1211 Geneva 1 Switzerland; Tel: +41 22 908 0488; Fax: +41 22 906 9140, E-mail: ebaron@kenes.com; Web site: www.kenes.com/strokeprevention

#### \*March 9-11, 2010

3<sup>rd</sup> Ataxia Investigators Meeting. Regency O'Hare Hotel, Chicago, IL, USA. Contact: National Ataxia Foundation, 2600 Fernbrook Lane No, Suite 119, Minneapolis, MN 55447, USA; TEL: +1-763-553-0020; FAX: +1-763-553-0167; E-mail: susan@ataxia.org; Web site: www.ataxia.org

#### March 12-14, 2010

3<sup>rd</sup> Annual Membership Meeting. Regency O'Hare Hotel, Chicago, IL, USA. Contact: National Ataxia Foundation, 2600 Fernbrook Lane No, Suite 119, Minneapolis, MN 55447, USA; TEL: +1-763-553-0020; FAX: +1-763-553-0167; E-mail: naf@ataxia.org; Web site: www.ataxia.org

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#### \*March 17-19, 2010

Birmingham Movement Disorders Course. Birmingham, United Kingdom. Contact: Mrs. Susan Pope, Royal College of Physicians, West Midlands Regional Office, Postgraduate Centre, Queen Elizabeth Hospital, Edgbaston, Birmingham B15 2TQ, United Kingdom; TEL: 44 (0)121 627 2859; FAX: 44 (0)121 627 5798; E-mail: susan.pope@uhb.nhs.uk; Web site: www.birminghammodis.com/default.htm

#### \*March 25-27, 2010

DISMOV-SIN National Congress & International Symposium Movement Disorders in Psychiatry. Verona, Italy. Contact: Michele Tinazzi, MD, PhD, University of Verona, Department of Neurological and Visual Sciences, Verona, Italy; TEL: +39 (0)45 8122690; E-mail: dismov@aristea.com/ Web site: www.aristea.com/ dismovsin2010

#### \*March 26-27, 2010

4th Singapore International Parkinson's Disease and Movement Disorders Symposium. Concorde Hotel, Singapore. Contact: Dr. Louis Tan or the National Neuroscience Institute, Singapore. E-mail: louis\_tan@nni.com.sg or nni\_secretariat@nni.com.sg. Web site: www.nni.com.sg

#### \*April 24, 2010

De Novo Parkinson's Disease: Diagnosis & Treatment. Lisbon, Portugal. Contact: Hope Wallace, MDS Program Manager, TEL: +1 414-276-2145; FAX: +1 414-276-3349; E-mail: hwallace@movementdisorders.org; Web site: http://www.movementdisorders.org/education/

#### April 22-24, 2010

EFNS Regional Teaching Course Odessa. Odessa Regional Medical Center, Odessa, Ukraine. Contact: Liliya Zvyagina, MD, PhD; TEL: +380487185867; E-mail: liliyazv@rambler.ru

#### \*April 25-27, 2010

Biomarkers for Lewy Body Diseases. Contact: Lewy Body Dementia Association, Howard Hurtig, MD, 912 Killian Hill Rd. SW, Ste 202C, Atlanta, GA, USA. Tel: +1 404 935 6444. Fax: +1 480 422 5434. E-mail: lbda@lbda.org Web site: www.lewybodydementia.org

#### April 28-May 1, 2009

Synaptic Plasticity: From Bench to Bed Side. Messina, Italy. Contact: E-mail: angelo. quartarone@unime.it; Web site: www.synapticplasticity.org

#### May 6-8, 2010

1st International Congress on Treatment of Dystonia. Hannover, Germany. Contact: Interplan AG, Office Hamburg, Eppendorfer Weg 204, 20251 Hamburg, Germany; TEL: +49 (0) 40 32509230; FAX: +49 (0) 40 32509244; E-mail: dystonia2010@interplan.de; Web page: www.treatment-of-dystonia.org

#### May 15, 2010

24th Annual PSG Symposium on Etiology, Pathogenesis, and Treatment of Parkinson's Disease and Other Movement Disorders. Four Seasons Resort, Irving, Texas, USA. Contact: Roseanna Battista, The Parkinson Study Group, 1351 Mt. Hope Avenue, Rochester, NY 14620, USA; TEL: +1 585-275-1642; FAX: +1 585-273-1074; E-mail: Roseanna.battista@ ctcc.rochester.edu; Web site: www.parkinsonstudy-group.org

#### June 3-2, 2010

3<sup>rd</sup> European Workshop on Lipid Mediators. Paris, France. Contact: Xavier Norel, INSERM U698, CHU X. Bichat, 46 rue H. Huchard, Paris 75018, France; TEL: 33140257529; FAX: 33140258602; E-mail: xnorel@hotmail.com; Web site: workshop-lipid.eu

#### \* June 13-17, 2010

14th International Congress of Parkinson's Disease and Movement Disorders. Buenos Aires, Argentina. Offered by The Movement Disorder Society. Contact: The Movement Disorder Society, 555 E. Wells Street, Suite 1100, Milwaukee, WI 53202 USA; TEL: +1 414-276-2145; FAX: +1 414-276-3349; E-mail: congress@movementdisorders.org; Web site: www.movementdisorders.org

#### June 19-23, 2010

20th Meeting of the European Neurological Society. International Congress Centrum (ICC), Berlin, Germany. Contact: European Neurological Society; Web site: www.ensinfo.org

#### **Advertisement Placement Information**

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For more information, contact: Elizabeth Laur, Membership and Communications Manager

The Movement Disorder Society

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#### \*June 30-July 2, 2010

Basal Ganglia Speech Disorders and Deep Brain Stimulation. Aix-en-Provence, France. Contact: E-mail: serge.pinto@lpl-aix.fr; Web site: aune. lpl.univ-aix.fr/~dbs-speech-symposium2010/

#### \*July 9-11, 2010

3<sup>rd</sup> Annual MDS European Section Summer School for Young Neurologists. Nijmegen, The Netherlands. Contact: Hope Wallace, MDS Program Manager, TEL: +1 414-276-2145; FAX: +1 414-276-3349; E-mail: hwallace@ movementdisorders.org; Web site: www. movement disorders.org/education/

#### \*July 26-29, 2010

20th Annual Course - A Comprehensive Review of Movement Disorders for the Clinical Practitioner. St. Regis Hotel, Aspen, Colorado, USA. Contact: Center for Continuing Medical Education, Columbia University College of Physicians & Surgeons, 630 Wet 168th Street, Unit 39, New York, NY 10032, USA; TEL: +1-212-305-3334; FAX: +1-212-781-6047; E-mail: cme@columbia.edu; Web site: ColumbiaCME.org

#### September 15-17, 2010

Tissue Engineering & Regenerative Medicine International Society TERMIS AP 2010. Sheraton on the Park, Sydney, Australia. Contact: Prof. Geoff McKellar, TERMIS AP 2010, P.O. Box 576, Sydney NSW, Australia; TEL: +61 2 9431 8638; FAX: +61 2 9431 8677; E-mail: TERMIS2010@ conferenceaction.com.au; Web site: www. termis.org

#### \*September 17, 2010

New Therapies for Advanced Parkinson's Disease. Duke University, Durham, NC, USA. Contact: Catherine Breckenridge, MDS Program Manager, TEL: +1 414-276-2145; FAX: +1 414-276-3349; E-mail: cbreckenridge@ movementdisorders.org; Web site: www. movement disorders.org/education/

#### September 25-28, 2010

14th Congress of the European Federation of Neurological Societies (EFNS 2010). Geneva, Switzerland. Contact: KENES International, 1-3, Rue de Chantepoulet PO Box 1726, CH-1211 Geneva 1 Switzerland; Tel: +41 22 908 0488; Fax: +41 22 906 9140; E-mail: efns2010@kenes.com; Web site: www.kenes. com/efns2010

#### October 13-16, 2010

The 7<sup>th</sup> World Stroke Congress, organized by the World Stroke Organization (WSO). Seoul, South Korea. Contact: KENES International, 1-3, Rue de Chantepoulet PO Box 1726, CH-1211 Geneva 1 Switzerland; Tel: +41 22 908 0488; Fax: +41 22 906 9140; E-mail: stroke2010@kenes.com; Web site: www. kenes.com/stroke

#### October 28-31, 2010

The 4<sup>th</sup> World Congress on Controversies in Neurology. Barcelona, Spain. Contact: Ilana Berkowitz, Comtec Med; TEL: +972-3-566-6166 ext. 216; FAX: +972-3-566-6177; E-mail: cony@comtecmed.com; Web: www. comtecmed.com

#### December 9-12, 2010

The 7<sup>th</sup> International Congress on Mental Dysfunctions & Other Non-Motor Features in Parkinson's Disease (MDPD 2010). Barcelona, Spain. Contact: KENES International, 1-3, Rue de Chantepoulet PO Box 1726, CH-1211 Geneva 1 Switzerland; Tel: +41 22 908 0488; Fax: +41 22 906 9140; E-mail: ebaron@kenes. com; Web site: www.kenes.com/mdpd



The goal of the Ambassador Program is to improve the quality of treatment available to persons living with Movement Disorders. MDS is committed to assisting the healthcare profession in countries throughout the world where Movement Disorders are under-represented. In accordance with this mission, MDS implements educational opportunities in regions of the world that may not have adequate available resources. By supporting the continuing medical education needs of healthcare professionals in these countries, MDS hopes to enhance the quality of treatment and care provided to the Movement Disorder patients dwelling in these countries.

The goals of the Ambassador Program are to:

- Provide international speakers to regional neurological society meetings to educate physicians and other healthcare professionals about Movement Disorders and the management of such disorders, in countries without adequate means to fund international speakers.
- Provide educational materials about Movement Disorders and their treatment.
- Provide a way to advance the educational mission of the MDS in under-represented countries without the costs of planning and implementing an additional program.

If you are aware of, or currently hosting a regional neurological society meeting in a region that could benefit from the program, please contact the MDS International Secretariat in order to submit an application.

Visit www.movementdisorders.org or email education@movementdisorders.org for more information.

14TH International Congress OF Parkinson's Disease AND Movement Disorders

# Save the Date



**April 2, 2010** 

Late-Breaking Abstract Deadline

**April 5, 2010** 

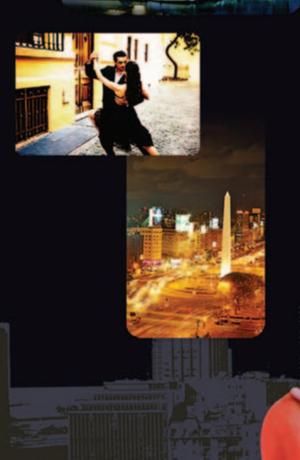
Early Registration Deadline

May 3, 2010

Final Registration Deadline

May 24, 2010

Housing Deadline



Buenos Aires GENTINA June 13-17