



WHL • NEWSLETTER

News from the World Hypertension League (WHL).
In Official Relations with the International Society of Hypertension and the
World Health Organization.

No. 151, March 2016

President's Column



The first quarter of 2016 has heralded a renaissance for high blood pressure control with the World Hypertension League and partners and member societies. Our global high blood pressure

management and risk factor education program has entered the next phase with the plans for the implementation of the state of the art professional education content, with plans to incorporate the SPRINT results and the development of new guidelines for the management of hypertension and disease risks. This is indeed an exciting and productive time for the World Hypertension League. The development and release of the FACT sheets and focus on accurate blood pressure measurement address critical global issues. The plans for joint scientific sessions at meetings of the American Society of Hypertension, the American Heart Association, BP CON (India), and of course the International Society of Hypertension in Seoul Korea have potential high impact. And most important – our plans for Hypertension Day 2016 with all our partners will truly make this a sentinel global event. I do appreciate the help and commitment from all Societies and look forward to the opportunities offered.

Daniel Lackland
President, WHL



Note from the Editor



This month's newsletter includes highlights on the following topics:
World Hypertension Day 2016.

Requests for nominations for WHL awards.

More on "SPRINT" and targets for blood pressure reduction.

DOHAD and hypertension: A report on the 2015 Developmental Origins of Health and Disease International Scientific Meeting in Cape Town.

Institute Report: The International George Institute, Sydney; the first of a series on Research Institutes worldwide with strong programs on Hypertension.

New collaborations: with a range of International Organizations.

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Note from the Editor Continued

And sadly, In Memoriam: on the late Dr. Pat Mulrow, an outstanding past Secretary General of WHL.

Lawrie Beilin
Editor, WHL Newsletter

WHL Notable Achievement Awards

WHL Notable Achievement Awards 2016 to Contribute Towards Improving Awareness of Hypertension

By: World Hypertension League Global Office

In conjunction with World Hypertension Day, WHL will be holding its annual Notable Achievement Awards. There are three categories of notable achievement awards, namely:

- 1.) The Notable Achievement in Prevention, Treatment and Control of Hypertension at a Population Level Award is designed to recognize sustained achievements by individuals or organizations in this arena to reduce the burden of hypertension globally.
- 2.) The Notable Achievement in Dietary Salt Reduction at a Population Level Award is designed to recognize the sustained achievements of individuals or organizations in this arena.
- 3.) The WHL Rising Star Award is intended for an up and coming young professional who has made great strides and contributions towards interventions in and/or promotion of public health in cardiovascular disease and hypertension prevention and control.

We hope to have a wide variety of locations and individuals and organizations represented in our awards this year. The WHL awards are a way to honor those who work in areas of hypertension, including dietary salt reduction, as well as to involve the global community in WHL's Mission & Mandate. We greatly appreciate your help in ensuring nominations are submitted from all WHL regions.

Awards nominations are due by March 31st, 2016. A completed nomination submission will need to include:

A letter signed by two nominators summarizing the nominee's contributions in the category they are being nominated for.

Accompanying documents substantiating the nomination can be included where appropriate (e.g. curriculum vitae, organizational charter, publication, media releases, etc.). The nominee's contact information (Name, Corresponding individual if the nominee is an organization, mailing address, e-mail address, and phone number).

The primary and secondary nominator's contact information (e.g. mailing address, e-mail address, and phone number).

All of this necessary information is available on the WHL website at:

<http://www.whleague.org/index.php/news-awards-recognition/nomination-guidance-information-for-notable-achievement-awards>

Completed applications can be sent to kimbree.redburn@gmail.com or CEO@whleague.org.

Award winners will be announced on World Hypertension Day 2016 and in the WHL Newsletter, our website, conference presentations, and more.

Both WHD and the WHL Notable Achievement Awards would not be possible without the continued effort and support of WHL members and partners. We encourage each member and partner organization to participate in each of these events and continue to help raise global awareness for hypertension. We cannot do it without your support!

World Hypertension Day 2016

Prepare to Celebrate World Hypertension Day May 17th-24th 2016

By: World Hypertension League Global Office

The WHL, in partnership with the American Society of Hypertension (ASH), the International Society of Hypertension (ISH) and other organizations, has hosted World Hypertension Day (WHD) annually. For the five-year period 2013-2018, the theme of WHD is 'Know Your Numbers' with the goal of increasing blood

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World Hypertension Day 2016 Continued

pressure awareness in all populations around the world. Increasing blood pressure (BP) screening and detection of hypertension, by participation in WHD-2016 is a great starting point towards achieving the United Nations' (UN) 2025 goal of a 25% reduction in uncontrolled hypertension.



Can we match the successes from last year? In 2015, the goal for the WHD campaign was for WHL members and partners to screen and submit BP readings for over one million people. This goal was not only achieved but far-surpassed with over 2.4 million BP screenings taking place. This effort was achieved by participation from many nations including; Argentina, Bangladesh, Brazil, Bulgaria, Cameroon, Canada, China, India, Indonesia, Malaysia, Nigeria, Pakistan, Singapore, South Africa, Sudan, Thailand, Vietnam, and the United States with likely some others not reporting. Alongside the screenings, many provided awareness on understanding their BP numbers, lifestyle modification and dietary salt reduction to help reduce the risk for stroke, cardiovascular disease, and kidney disease in their communities. Many participants bolstered their efforts with the involvement of healthcare providers, local health champions, special events such as awards, and media releases. Encouraged by this success, the WHL challenge for 2016 is to screen three million people in coordination with heightened awareness of non-communicable diseases (NCDs) and continued educational efforts.

To accommodate WHL member nations' schedules and itineraries, we are celebrating WHD-2016 for one week May 17-24 and opening up a six-week window to report blood pressure screenings recorded between April 17th and May 24th 2016. Screenings performed in the weeks prior will be acceptable as well. A template for submitting BP Screenings, contact information, photographs, and key lessons learned along with WHD 2016 logos can be found at <http://www.whleague.org/index.php/features/world-hypertension-day>. Further information can be obtained by emailing

the WHL office and Kimbree Redburn (kimbree.redburn@gmail.com). Please begin making preparations for your Celebration of WHD-2016!!

Welcome to New WHL Vice President



Dr. Marcelo Orias

The WHL is very pleased to announce Dr. Marcelo Orias, the current Director of the WHL Regional Latin America Office, as our new Vice President. Dr. Orias is the Chief of Nephrology at Sanatorio Al-lende and a Professor of Internal Medicine at the National University of Córdoba in Argentina.

He received his medical degree from the National University of Córdoba and completed an Internal Medicine residency and Chief residency at Danbury Hospital, affiliated with Yale University in the United States. He also completed a Nephrology Fellowship at Yale University. Dr. Orias also received a PhD in Medicine from the National University of Córdoba for his work on the cloning of potassium channel gated by cyclic GMP. He is very engaged in hypertension screening and research and has a special interest in genotypes and phenotypes in young hypertensive patients. It is a true honor to have Dr. Marcelo Orias serve as the Vice President for the World Hypertension League and we look forward to all we will accomplish together. Welcome aboard Marcelo!

Medaval

Medaval: An independent resource for advice on performance of blood pressure monitors and related medical devices



The time in which we live could be named aptly as the 'age of measurement'. Technology has advanced at such a pace that almost any physiological function can be measured, and not only

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Medaval Continued

measured at a moment in time but over periods of time.

This technological development has resulted in the marketing of an unprecedented array of devices for personal and professional use, often with a facility for combining different measurement modalities. However, although many measurements have important implications for health, such as the levels of blood pressure and glucose, the accuracy of the majority of medical devices is not regulated and there is little or no guidance or advice being provided for the consumer, who takes device accuracy for granted.

Medaval was established in 2015 to provide a single independent scientific resource for medical device information and to promote the use of medical devices that meet the highest accuracy and performance requirements in line with technological advancements, so that users of devices are provided with the information they need to make a decision as to which device is most suitable for their needs.

At present, **the Medaval website (<http://www.medaval.ie/>) provides information on over 1000 blood pressure monitors** and information on over 400 blood glucose meters that are currently available. Shortly, Medaval will begin assessing the following categories of medical devices:

- Heart Rate Monitors
- Arrhythmia detection devices
- Electrocardiograph devices
- INR monitoring devices
- Sleep Apnoea detecting devices
- Cardiovascular Apps

Highlights from the 9th World Congress

Some Highlights from the 9th World Congress on Developmental Origins of Health and Disease – Relevance to Adult Hypertensive Disease.

Trevor Mori. School of Medicine and Pharmacology. University of Western Australia

Over a thousand delegates attended this congress in Cape Town South Africa in November 2015. A small sample of the many papers on early life precursors of hypertension and cardiovascular disease is summarised below. Researchers from the Generation R Study in Rotterdam reported several studies. The first by Vincent Jaddoe et al examined associations between maternal BP development and hypertensive disorders during pregnancy, with microvasculature adaptations in childhood. In this population-based cohort study, higher maternal SBP and DBP in early pregnancy associated with retinal arteriolar narrowing, measured using retinal photographs, in the offspring at 6 years. These associations were independent of maternal BP in mid- or late pregnancy. Maternal BP in mid-pregnancy was not independently associated with childhood retinal vessel calibre, whereas higher maternal SBP in late pregnancy associated with childhood narrower retinal venular calibre.

Offspring of mothers with gestational hypertensive disorders tended to have narrower retinal arteriolar calibre. These data show that higher maternal BP during pregnancy associates with persistent microvasculature adaptations in the offspring that manifest at 6 years of age. Further studies will need to determine whether these observations are evident in the long-term.

Liza Toemen et al examined whether low birth weight associates with cardiovascular disease in later life. Using data from the Generation R Study, the study examined fetal femur length and estimated weight using ultrasounds during pregnancy, as well as child length and weight at birth through to 6 years in 6,239 children. BP, carotid-femoral pulse wave velocity, aortic root diameter, left ventricular mass and fractional shortening were also examined. Lower gestational age, birth weight and gestational age adjusted birth weight associated with higher BP and smaller aortic root diameter. Children with increased BP tended to be smaller during late fetal life followed by higher growth rates during infancy.

Those children with increased aortic root diameter or left ventricular mass at 6 years, had higher growth rates during fetal life and infancy.

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Highlights from 9th Congress Continued

These data suggest that specific fetal and infant growth patterns associate with different cardiovascular outcomes in children.

Further studies will be required to ascertain whether there are long-term clinical cardiovascular consequences into adulthood.

Juliana Kagura et al from the University of Witwatersrand in Johannesburg, South Africa presented findings from the Birth to Twenty cohort. Using latent variable growth curve modelling three trajectories of SBP and DBP were identified, low, moderate and elevated for boys (n=932) and girls (n= 1005). Relative weight gain in infancy significantly predicted the likelihood of boys being in the elevated SBP trajectory (1.93-fold) and a 2-fold increased risk of girls being in the elevated DBP trajectory. In girls, relative weight gain in mid-childhood significantly associated with being in the elevated SBP trajectory compared to the low trajectory. Small for gestational age was not significant in all the models. The study suggests that relative weight gain in early life may program to elevated life course BP trajectories.

Heloisa Bettiol et al from the University of Sao Paulo, reported on a study that examined the association between caesarean section delivery and hypertension in adulthood in a prospective birth cohort in Ribeirao Preto, Brazil. BP measurements were obtained in 1,141 adults from a birth cohort recruited in 1978-1979. Individuals born by caesarean section had a 51% higher risk of hypertension compared to those who were born by vaginal delivery after adjustments for socio-demographic and anthropometric variables.

Alan Macken et al from the National Children's Research Centres Children's Hospital, in Crumlin, Ireland, examined the metabolic and vascular profiles of 53 children aged 8-14 years whose fathers had premature cardiovascular disease, which was defined as either myocardial infarction or coronary artery bypass grafting before aged 56 years. Compared with 39 age-, gender- and BMI-matched healthy controls, offspring of fathers with premature cardiovascular disease had significantly higher DBP and endothelial dysfunction. Fasting glucose, insulin sensitivity and

blood lipids were not different. The results of this small study show early impaired vascular and metabolic health in young children whose fathers have premature cardiovascular disease.

Lene Haakstad et al from the Norwegian School of Sport Sciences in Oslo presented a paper on the effect of regular exercise on arterial BP at rest and during uphill walking in normotensive pregnant women. Healthy, inactive nulliparous women were assigned to either exercise (n =35) or control (n = 26) from approximately 17 weeks gestation. The intervention included two 60 min aerobic dance classes, plus 30 min daily self-imposed physical activity performed for a minimum of 12 weeks. At the completion of the intervention the rise in resting SBP and DBP during pregnancy was significantly attenuated in the exercise group compared with the control group. These data suggest that aerobic exercise can reduce resting BP in healthy inactive pregnant women. This may be relevant to the prevention of gestational diabetes, preeclampsia and of offspring hypertension.

Valene See et al from the University of Western Australia examined whether n-3 fatty acid supplementation in pregnancy programs cardiometabolic risk factors postnatally. The study entailed a recall of 55 children aged 12 years of 98 mothers that had been supplemented with 4g/day of n-3 fatty acids or olive oil from 20 weeks of gestation until delivery. Measurements in the offspring included BP, heart rate, anthropometry, adipokines and biochemistry. The study reported a significant 4.4 bpm lower heart rate in the offspring whose mothers had received n-3 fatty acid supplementation during pregnancy. There were, however, no significant differences in BP, clinical and biochemical measurements between the offspring. Although these data suggest that maternal n-3 fatty acids during pregnancy do not provide programmed benefits in metabolic risk factors to 12 years of age, a lower heart rate if maintained into adolescence and adulthood, could be clinically important.

In a second study from the University of Western Australia, Denise Demmer et al examined the relationship between muscle fitness and cardiometabolic risk factors from childhood

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Highlights from 9th Congress Continued

through to late adolescence in 1,916 participants from the Western Australia Pregnancy (Raine) Study at ages 10, 14 and 17 years.

Paradoxically handgrip strength and/or back endurance were positively associated with systolic BP. However as predicted Childhood muscle strength and/or endurance inversely associated with diastolic BP, the homeostasis model of insulin resistance and with triglycerides. The contrast in the 'adverse' effects of muscle strength on systolic blood pressure with 'beneficial effects' on diastolic BP and cardio-metabolic risk factors warrant further investigation.

Many of the other presentations focussed on the developmental origins of obesity with papers from around the world increasingly focussed on both maternal and paternal factors, the environment, behaviour, epigenetics and transgenerational transmission of disease. All conference abstracts can be found in the **JOURNAL OF DEVELOPMENTAL ORIGINS OF HEALTH AND DISEASE Volume 6 Supplement 2 November 2015 PP S1–S196** ISSN: 2040-1744

Research Institute Profile

International Update from the George Institute for Global Health, Sydney, Australia: Prevention is key to a healthier world

Cardiovascular diseases (CVD's) are the leading cause of death in the world, responsible for killing more than 17 million people every year. While deaths associated with CVD are disproportionately high in most countries around the world, 80% of these deaths occur in low- to middle-income countries, according to the World Health Organization. Cost effective and scalable approaches to treatment and prevention are going to be required to achieve the United Nations targets of a 25% reduction in non-communicable diseases by 2025.

For 16 years The George Institute for Global Health, a global medical research institute, has been working to reduce the burden of cardiovascular disease. Its accolades include improving the treatment options for stroke survivors and

people with diabetes; developing low-cost community-based approaches to identify and treat individuals who are at greatest risk of developing cardiovascular diseases; developing a text messaging support system to help heart attack survivors manage their risk factors; and the development of cost effective, generic fixed-dose combination pills to improve long-term adherence to preventive medications. The George Institute is also leading work to develop, implement and monitor population-wide programs to reduce salt intake – such interventions are among the most cost effective approaches for countries to reduce cardiovascular disease burden.

Evidence-based solutions such as these, which can have a long lasting impact on the health of millions of people around the world, are urgently needed. By identifying new ways to deliver healthcare, using technology and other innovative approaches, discovering the most effective and affordable ways to prevent and treat chronic diseases, and working with communities and local health systems around the world, improving the health outcomes of people in the next decade becomes infinitely more possible.

As the rates of cardiovascular disease falls disproportionately on low- to middle-income countries and disadvantaged populations, a major focus of The George Institute's research is on resource-poor settings. With this in mind, The George Institute, Australia is currently working on the INTEGRATE study, which is evaluating an evidence-based model of community care as a prevention strategy for patients at high risk of stroke and heart attack.

The intervention, which integrates three proven interventions for cardiovascular disease risk management into one package, is one such example of how evidence-based, innovation focused research projects could have a significant role to play in the establishment of effective disease prevention and risk management programs.

In China, an estimated 270 million people suffer from hypertension and over 50% of cardiovascular diseases are attributable to hypertension.

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These excessively high rates of hypertension are closely linked to extreme levels of salt intake in both the adult and child population. The George Institute, China developed a novel approach to addressing hypertension through a child-led, school-based, salt reduction program.

The School-EduSalt program teaches children how to educate their own families about reducing the amount of salt used in the home, and this intervention resulted in a 25% reduction in daily salt intake for those families. It shows how simple programs such as these can have a real impact on people's lives. The George Institute, China is currently advocating for the School-Edu-Salt Program to be implemented across high risk areas of China, where a major reduction in death associated with raised blood pressure and cardiac disease is probable through such initiatives.

The World Health Organization Collaborating Centre on Population Salt Reduction at The George Institute, Australia facilitates the translation of research findings such as these, into policy and practice around the world. With a remit to support countries around the world to achieve the WHO salt targets of a 30% by 2025, it is pioneering new research to understand how to ensure that salt reduction strategies are effective, including by undertaking regular systematic reviews to collate new evidence and providing support with monitoring and evaluation.

Unfortunately, China is not the only country battling with excessively high rates of hypertension in the community. In India it is estimated that over 140 million people are suffering from hypertension, and 170,000 lose their lives every year to the condition.

One of the major causes for these devastatingly high numbers is a lack of understanding about hypertension in the general population. Many people either do not know what hypertension is, how to detect it, or simply do not have access to healthcare providers who can diagnose and then help the individual to manage it.

Particularly in rural India, the burden of chronic disease that results from hypertension is exponential. As such, The George Institute, India is undertaking research that will help to identify the barriers and facilitators in hypertension control for rural communities of India.

The results will be used to develop strategies to better manage hypertension in these areas as well as preventing chronic diseases that emerge as a result of hypertension.

At The George Institute, UK researchers are taking a different approach to the prevention of cardiovascular disease, with a special focus on children. By examining a large dataset of patient medical history, researchers are establishing if there are any links between lifestyle and biological factors that children are exposed to, and the prevalence of cardiovascular disease later in life. Currently global health policies around prevention and treatment of cardiovascular disease are geared at adults and it's time we found out whether there are extra gains to be had from combating factors like obesity, exercise, diet and blood pressure in childhood. By moving away from more traditional, country-based research and assembling all the available data globally, the large data pool will provide much clearer insights that can be used to inform global health policy and approaches to prevention.

The story of cardiovascular disease health always begins with prevention, and ground breaking results recently published in the New England Medical Journal serve as a stark reminder that addressing the root of the problem is essential if we are going to save lives. The Systolic Blood Pressure Intervention Trial has challenged current conceptions of hypertension by discovering that people at risk of a cardiac event should in fact be lowering their blood pressure levels to below 120 mm Hg, not to 140 mm Hg as previously thought. The research found that those who are treated to the lower target, reduced their risk of having a cardiac event by one quarter and the risk of dying reduced by 27%.

While we know that the journey towards reducing the burden of cardiovascular diseases isn't linear, evidenced-based medical research projects that target prevention are the most effective strategy we have.

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Research Institute Profile Continued

The George Institute for Global Health is committed to tackling this global epidemic by producing high-quality, innovation focused solutions that address the burden of cardiovascular disease in real world settings.

Jacqui Webster
jwebster@georgeinstitute.org
www.georgeinstitute.org.au/

WHL Welcomes First Corporate Sponsor

WHL Welcomes First Corporate Sponsor

By: World Hypertension League Global Office

The World Hypertension League (WHL) would like to welcome our first corporate sponsor PharmaSmart®! Headquartered in Rochester, New York, USA (<http://pharma-smart.com/>), PharmaSmart® is the world leader in design, production, and distribution of clinically validated blood pressure monitoring systems to assist in the management of hypertension. They are one of the first companies in North America to distribute automated blood pressure kiosks to pharmacies and corporate worksites across Canada and the state of New York. A recent media release on them may be viewed at: <http://www.chaindrugreview.com/pharmasmart-cdr-launch-pharmacist-challenge/>.

PharmaSmart® was an extremely active participant in World Hypertension Day (WHD) 2015, contributing a substantial number of the estimated 2.5 million people screened. Better yet, they have agreed to participate again in WHD 2016. Recently, PharmaSmart® in conjunction with the American Society of Hypertension has helped establish a clinical guide for blood pressure kiosks (<http://www.benzinga.com/pressreleases/15/05/p5502953/pharmasmart-exclusively-recognized-by-american-society-of-hypertension->). This effort was the basis for the WHL's "World Hypertension League Position on Public use of Blood Pressure Kiosks" which can be found at <http://onlinelibrary.wiley.com/doi/10.1111/jch.12671/abstract>.

As a corporate sponsor, PharmaSmart® has been working with WHL leadership on helping promote

various aspects of WHL activities and operations including getting pharmacists more engaged on the prevention and control of hypertension (2016 media release: <http://www.chaindrugreview.com/pharmasmart-cdr-launch-pharmacist-challenge/>). To obtain WHL Corporate Sponsor Information please visit <http://www.whleague.org/index.php/features/corporate-sponsors>. WHL is incredibly pleased to welcome PharmaSmart® as a corporate sponsor and we look forward to the work that we will be able to do together! Welcome PharmaSmart®!

Update from JCH

A Message from Michael A. Weber, MD, Editor, *The Journal of Clinical Hypertension*, Official Journal of The World Hypertension League

Recent publications have provided important new information about optimal blood pressure thresholds for diagnosing and treating hypertension. The SPRINT trial (NEJM On-line Nov 9, 2015) and a meta-analysis in the Lancet (Ettehad et al. Lancet On-line Dec 23, 2015) have both provided evidence suggesting that BP thresholds lower than those recommended in current guidelines would improve cardiovascular protection in people with hypertension. In SPRINT, non-diabetic patients who achieved systolic BPs in the low 120 mmHg range had significantly lower fatal and non-fatal event rates than patients treated to below 140 mmHg.

The meta-analysis similarly claimed that treating patients to below 130 mmHg was associated with clear benefits.

On the one hand, this information is interesting and valuable, particularly in communities where access to health care and modern medications is readily available. The dilemma comes with deciding how to interpret these new findings in the context of treating patients in settings with limited resources. Clearly, figuring out how to manage this issue will be an important part of The WHL's agenda in the months ahead. It is my hope that new guidelines can be constructed to provide realistic approaches to hypertension management that can optimize care for as many people as possible.

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Update from JCH Continued

What will be helpful is that almost all the medications used in the recent reports are now widely available and, for the most part, can be obtained in relatively inexpensive generic formulations. Even so, there are many obstacles to taking full advantage of these opportunities, including major shortages of trained medical personnel and physical facilities and equipment in many parts of the World. The commitment, wisdom and ingenuity of WHL and its member organizations will be needed to meet these challenges.

Dr. Mulrow: In Memoria



It is with sadness we report that Dr. Patrick Joseph Mulrow, MD, an early WHL contributor and noted hypertension researcher, passed away on Thursday, December 3rd, 2015. Dr. Mulrow

made extensive lifelong contributions to the field of hypertension research and the medical community in general. Amongst this work, he served the WHL as Secretary General during which time he had several publications on hypertension prevention & control and implemented the WHL student art competition that was so widely appreciated. Even in retirement, he continued thinking fondly of WHL punctuated by the fact that in his final months he was busy helping write the history of the WHL, which can be found at: http://www.whleague.org/images/WHL_History_1984_2001.pdf.

Condolences to his family and Rest in Peace Dr. Mulrow!

A wonderful article about the life and work of Dr. Mulrow can be found in the Journal of Clinical Hypertension at the following link: <http://onlinelibrary.wiley.com/doi/10.1111/jch.12802/abstract>.

Celebration of World Stroke Day!



Similar to WHL's celebration of World Hypertension Day, the World Stroke Organization (WSO) <http://www.world-stroke.org/> celebrates World Stroke Day (WSD) annually and have built the event into a global stroke campaign and with a spotlight on stroke. WSD features awards, proclamations, media releases, brochures, posters, unique events in over 40 nations, and more which may be viewed at <http://www.worldstrokecampaign.org/>. The WHL asks all members and partners to please plan to participate in WSD 2016 and expect more information on the October event from us.

WHL Welcomes Newest Member

The World Hypertension League would like to welcome the Mexican Institute of Nephrology Research as it's newest Associate Member.

Mexican Institute of Nephrology Research

Dr. José Antonio Niño Cruz—Contact Person
Juan Badiano 1. Colonia Sección XVI CP 14080
Ciudad de Mexico, Mexico
www.imin.org.mx

People



Dr. Graham MacGregor has published a book *Fast Facts: Hypertension, 5th Edition* to see the book blurb visit:

<http://www.fastfacts.com/fast-facts/Hypertension-5th-edn> a

20% discount is available for WHL Members by entering the code WHL20 at checkout! Congratulations on this publication Dr. MacGregor!

Events of Note

WHL encourages all our Members & Partners to participate in the Hypertension Seoul 2016 ISH Conference September 2016! Expect more News on this Exciting Event in the coming months

Find More Information At:

<http://www.ish2016.org/>



Find More Information at:

<http://www.whleague.org/index.php/features/world-hypertension-day>

2016 ASH Annual Scientific Meeting & Exposition

ASH will hold its annual meeting in New York May 13-17, 2016.

For Information Visit: <http://www.ash-us.org/Scientific-Meetings/2016-Meeting.aspx>

The World Health Summit

The World Health Summit will be Oct. 9-11, 2016 in Berlin Germany

For Information Visit:

<http://www.worldhealthsummit.org/>

Coming in Our Next Issue!

In our June Issue the WHL Newsletter will discuss:

- New Fact Sheets
- WHL in Seoul (Planning and events)
- WHL Awardees
- An Update from Kaiser Permanente (for their recent paper visit: <http://onlinelibrary.wiley.com/doi/10.1111/jch.12803/abstract>)
- An Update on World Hypertension Day 2016
- TRUE (Sodium Consortium) Update

Mission

The objectives of the WHL are to promote the detection, control and prevention of arterial hypertension in populations. The World Hypertension League (WHL) is a federation of leagues, societies and other national bodies devoted to this goal. Individual membership is not possible. The WHL is in official relations with both the International Society of Hypertension (ISH), and the World Health Organization (WHO).

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Calendar
<p>2016 Annual COSEHC Scientific Sessions March 3-4, 2016 Charleston, South Carolina Information: https://my.hostmysite.com/ssl/30/cosehc.org/V2/Register2016.aspx?eventID=COSEHC2016</p>
<p>The 4th International Conference on Prehypertension, Hypertension & Cardio Metabolic Syndrome March 3-6, 2016 Venice, Italy Information: http://2016.prehypertension.org/ E-mail: secretariat@prehypertension.org</p>
<p>WHL Awards Submission Due March 31, 2016 WHL Notable Achievement Award Submission s are due on March 31, 2016. For additional information visit: http://www.whleague.org/index.php/news-awards-recognition/nomination-guidance-information-for-notable-achievement-awards E-mail: CEO@whleague.org</p>
<p>ASH 2016 Annual Scientific Meeting May 13-17, 2016 New York, New York Information: http://www.ash-us.org/Scientific-Meetings/2016-Meeting.aspx</p>
<p>World Hypertension Day May 17th, 2016 Information: http://www.whleague.org/index.php/features/world-hypertension-day E-mail: CEO@whleague.org</p>
<p>26th European Meeting on Hypertension and Cardiovascular Protection The European Society of Hypertension Paris, France June 10-13, 2016 Information: http://www.esh2016.org/ E-mail: esh2016@aimgroup.eu</p>
<p>4th Asia-Pacific Global Summit & Expo n Healthcare July 18-20, 2016 Brisbane, Australia Information: http://healthcare.global-summit.com/asia-pacific/</p>
<p>Hypertension Seoul 2016 The 26th Scientific Meeting of the International Society of Hypertension Seoul, Korea September 24-29, 2016 Information: http://www.ish2016.org/ E-mail: info@ish2016.org</p>
<p>The World Health Summit Berlin, Germany October 9-11, 2016 Information: http://www.worldhealthsummit.org/</p>