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FEB 2022

ENCOURAGE SUPPORT INSPIRE



Women in Hypertension Research



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MESSAGE FROM THE CHAIR

Dear Member of the Women in Hypertension Research Network,

Welcome to the 1st edition of our newsletter in 2022.

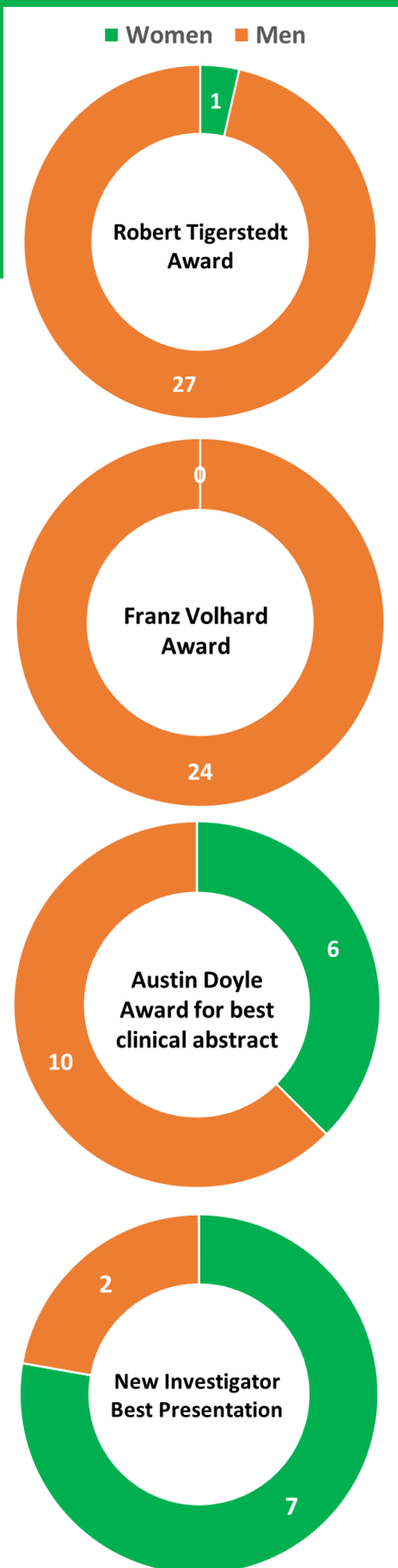
This newsletter will be published around the **UN International Day of Women and Girls in Science**.

Established in 2015, this day reflects the recognition by the UN General Assembly that women and girls continue to be excluded from participating fully in science. Examples of this inequality, which persists until now, are underrepresentation of women in leadership positions at institutions, scientific societies and editorial boards of scientific journals, lower salaries despite equal qualifications, underrepresentation among speakers and chairs at scientific meetings or smaller research grants, to name a few.

As such, this issue of our newsletter focuses on one area of underrepresentation of women which is awards that are given out by scientific societies. Remarkably, the two most prestigious awards of the International Society of Hypertension, the Franz Volhard and the Robert Tigerstedt Awards, which have been presented since 1974/1976, had only one female recipient during all these years.

We should use the International Day of Women and Girls in Science to raise awareness of these inequalities and also to support each other. One thing, we can do is to nominate women for important awards. Therefore, please watch out for the call of nominations for ISH awards this year, which will be released soon.... and let's support and promote each other!

With best wishes,
Muscha Steckelings



CELEBRATE SUCCESSFUL WOMEN: ISH AWARDS 2022

The majority of nomination-based ISH award recipients across the years have been men. In contrast, awards based on presentations and abstracts a much higher percentage are awarded to women. Since award recognition can be important for promotion, funding, and status at institutional, regional, and national levels, it is key to increase the number of women being awarded by ISH for their contributions to hypertension research at their different levels.

WiHRC encourages all ish members to nominate women for all ish award categories.

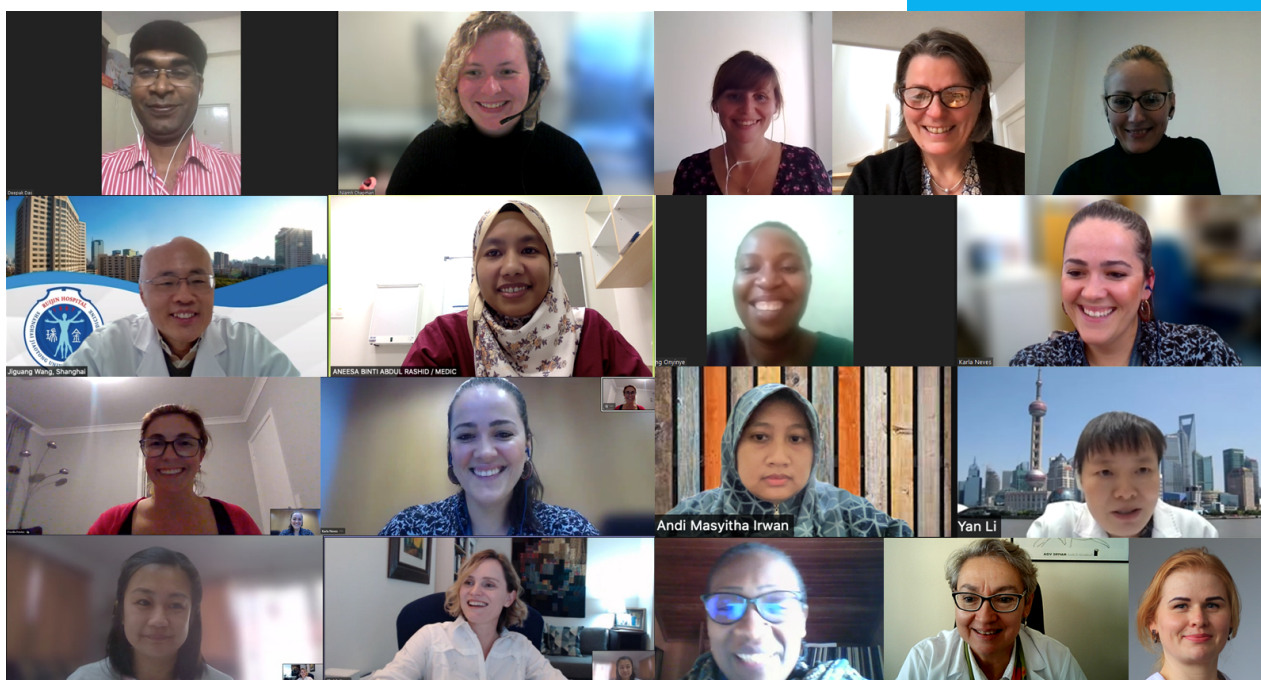
We want researchers to nominate their female colleagues and for the many excellent women in our network to nominate themselves or encourage your inspiring colleagues to submit a nomination!

Let's enable women hypertension researchers to maximise their visibility and get the acknowledgement they deserve.

A call for nominations will be issued shortly! Please visit the [ISH website](#) for more details about the ISH awards for 2022, awards include:

- Franz Volhard Award
- Robert Tigerstedt Award
- Paul Korner Award
- Developing World Award
- Honorary Fellow Award
- Distinguished Fellow Award
- Award of Excellence for Research in Cardiovascular Health and Disease in Women
- Honour for Senior Women Researchers
- Mid-Career Award for Women Researchers

Figure shows the number of women (green) and men (orange) that have received awards. Top two: awards based on nomination. Bottom two: awards based on presentation or abstract.



WIHRC MENTORING CATCH UP

Dr Karla Neves on behalf of the WiHR committee has organised 30-minute online mentoring meetings with young (mentee) and senior (mentor) scientists between 11-22 October 2021 to stimulate scientific networking and provide a space to facilitate discussion not limited to science, where mentees would have an opportunity to talk freely about any concern/topic they wanted to address.

In this first WiHRC mentoring event, we were very fortunate to have 10 exceptional mentors participating in this initiative, and 16 mentees were enrolled and paired with one or two mentors for the meetings, according to their interests.

The feedback from the meetings was very positive, with reports of very open and productive discussions for example about work-family-balance, research during the pandemic and career planning. We also received feedback highlighting that the one-to-one mentoring meetings format was a very good opportunity to communicate with mentors from all over the world and establish a relationship with them. We hope to offer new sessions again soon, and hopefully gather more people to join us in this wonderful initiative.



CELEBRATE WOMEN AND GIRLS IN SCIENCE

The Women in Hypertension Research Committee celebrates International Day of Women and Girls in Science on 11 February - an annual occasion to recognise the critical role women and girls play in science and technology.



LIVED EXPERIENCE OF A WOMAN IN HYPERTENSION RESEARCH NETWORK MEMBER: AMELA JUSIC

This issue our lived experience article is by Amela Jusic from Bosnia and Herzegovina, Postdoctoral Research Fellow, Department of Population Health, Luxembourg Institute of Health

Since April 1992, Bosnia and Herzegovina (BiH) is internationally recognized as a new independent country and became a member of the United Nations, which triggered a brutal war that lasted four years. In December 1995, the Dayton Peace agreement established Bosnia and Herzegovina as a country of two entities and one district—the Federation of BiH, Republika Srpska and District Brcko.

The long post-war transition had a strong impact and caused a poor socioeconomic situation with unemployment, unhealthy and unsafe food and unhealthy lifestyles, common among the population which is mirrored in high prevalence of hypertension (42% of adult population) and one of the highest morbidity and mortality in Europe due to cardiovascular diseases.

The complex structure of Dayton BiH caused decentralization of the health system and the 26 years following the termination of the Bosnian war, it has not returned to normal. Currently, the main public health challenge in Bosnia and Herzegovina is reducing non-communicable diseases including hypertension. However, due to the complexity of the country and health system, there is still no national hypertension association nor diagnostic and treatment guidelines.

As a result of numerous limiting economic and societal factors, low transfer of knowledge and technology between Bosnian and international institutions, except limited reports on hypertension prevalence in Bosnia and Herzegovina, there is no study investigating hypertension on the multiomics level.

Despite these numerous challenges I faced through working with limited research and academic resources, I was eagerly focused on building capacities to bring genomics research at University of Tuzla, Bosnia and Herzegovina where I have been working since graduation.

As a result of my strong motivation and effort to foster genomics research in Bosnian academic and health institutions, I received funding for three grants investigating genomic biomarkers for cardiovascular diseases from the Federal Ministry of Education and Science, Federation of Bosnia and Herzegovina. These projects resulted in several important publications reporting pioneering results on genetic polymorphisms associated with cardiovascular diseases in the Bosnian population.

Through leading these small projects and recent reports on the global burden of hypertension, I recognized the importance of genomic biomarkers, which will allow not only early diagnosis of hypertension but also prognosis and response on hypertension therapy.

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Since the investigation of genomics biomarkers requires state of the art technologies, I realized the research environment and resources in my home country are not sufficient to perform high quality research to deeply investigate biomarkers for hypertension or educate a novel generation of young scientists.

To move genomics research forward in my home country I invest a lot of effort in establishing international collaborations with eminent researchers from the cardiovascular field as a member of the management committee for three Cost Actions. In early 2019, I established collaboration with the Cardiovascular Research Unit, Department of Precision Health of the Luxembourg Institute of Health. As result, I received funding from the European Union's Horizon 2020 research and innovative programme Marie Skłodowska-Curie Actions Individual fellowship for the project "The function and biomarker potential of mitochondrial microRNAs in hypertension (MITO)".

For this project, we collected blood samples of hypertension patients and healthy controls in collaboration with clinicians and the office for the international affairs of the University of Tuzla in Bosnia and Herzegovina and transferred them to Luxembourg to investigate novel RNA biomarkers and methods to improve healthcare of hypertension patients.

Alongside the duties for this ongoing project, I have produced several publications and a book chapter related to noncoding RNAs biology and their biomarker and therapeutic potential in cardiovascular diseases.

In line with recent reports on global hypertension prevalence and as a scientist working in hypertension research, I also published the brochure "*Hypertension: know what is behind your numbers*", compiling my knowledge about hypertension, recent evidence and current work at the Luxembourg Institute of Health. In order to be read and understood by the entire Luxembourgish population as well as the population in my home country, the brochure has been translated in six languages (English, French, German, Luxembourgish, Portuguese and Bosnian).

Since the global burden of hypertension is substantial, my plan for the near future is to continue to investigate RNA biomarkers and therapeutic targets for hypertension and cardiovascular disease, participate in the improvement of global health care and personalized medicine as well as to transfer know how to the next generations of young researchers.

If you would like to collaborate on funding applications or have upcoming positions about RNA biomarkers for hypertension contact Amela: amelajusic88@gmail.com.

WOMEN IN HYPERTENSION RESEARCH SPOTLIGHT



Ching Siew Mooi

Professor, Department of Family Medicine, Universiti Putra Malaysia, Malaysia

WHAT IS YOUR ROLE?

I am a family physician and a senior consultant in a primary care clinic. I am an academic teaching postgraduate students and leading research projects in the field of hypertension. I'm collaborating with organisations and societies in community projects to improve cardiovascular health in Malaysia.

WHAT CHALLENGES HAVE YOU FACED?

As a researcher in a low-middle income country, lack of funding to establish a hypertension registry/dataset that represents the local population is a challenge. Therefore, I collaborate with senior researchers from other countries to gain more experience analysing big data and exploring future collaboration in grants application.

WHAT ADVICE WOULD YOU GIVE?

Find a mentor who will guide and enlighten you in the academic path. Never say "No" to the opportunities offered in front of us.



Yan Li

Professor of cardiovascular medicine, Shanghai Institute of Hypertension, Ruijin Hospital Affiliated to Shanghai Jiaotong University School of Medicine

WHAT IS YOUR ROLE?

I am a researcher focusing on hypertension and arterial stiffness. I am leading a team doing epidemiological population studies and clinical trials on the prevention, diagnosis, and treatment of hypertension.

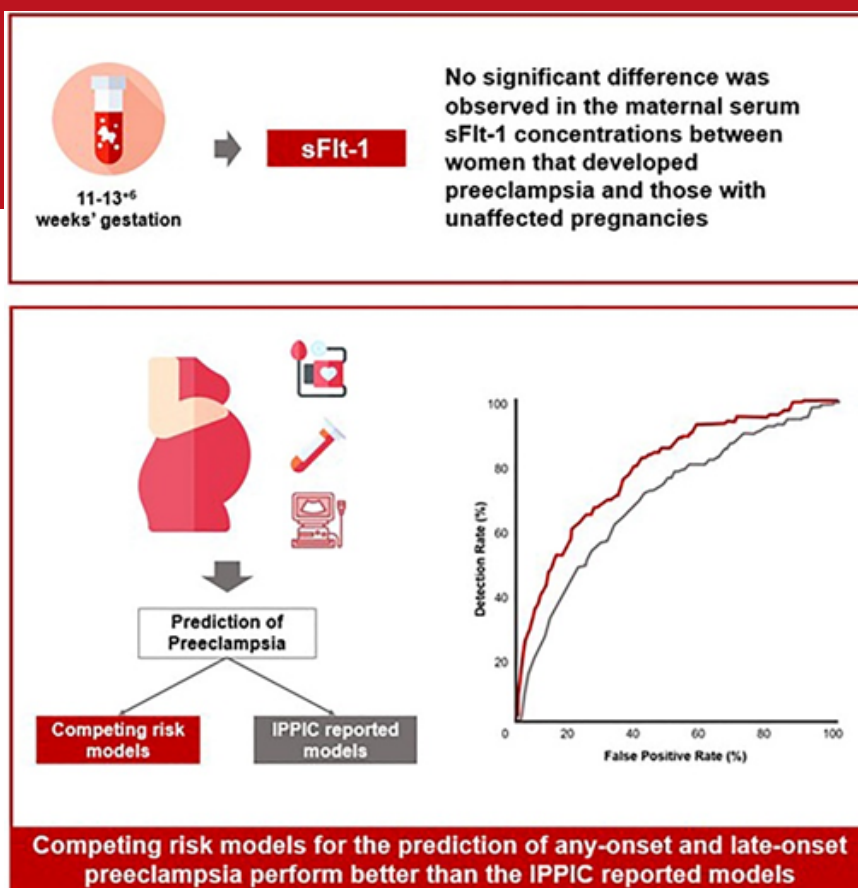
WHAT CHALLENGES HAVE YOU FACED?

What I always feel challenging is to balance the time on research and family. It has to be a dynamic balance. Sometimes I have to compromise. Prepare a to-do list and check every day might improve work efficiency.

WHAT ADVICE WOULD YOU GIVE?

Do not wait, just start doing. Done is better than perfect.

[Check the WiHRC ISH webpage](#) to read the above spotlights in full and read the submissions from other women.



RECENT INTERESTING ARTICLE RECOMMENDED BY YAN LI SHANGHAI INSTITUTE OF HYPERTENSION, CHINA

Preeclampsia is one of the life-threatening pregnancy-related complications. It is therefore very important to effectively identify pregnant women at high risk for preeclampsia. The role of soluble fms-like tyrosine kinase-1 (sFlt-1) and risk models in the prediction of preeclampsia remains controversial. This study from four regions of Asia provided new evidence on this regard.

In this prospective study involving 128 cases of late-onset preeclampsia and 13 cases of early-onset preeclampsia, serum sFlt-1 at 11-13 weeks' gestation and the predictive performance of two models were compared. The International Prediction of Pregnancy Complication (IPPIC) model includes various combination of maternal factors, systolic and diastolic blood pressure, placental growth factor (PlGF) and sFlt-1.

The competing risk (CR) model also includes various combination of maternal factors, mean arterial pressure and PlGF. The results of this analyses showed that there was no difference in the serum sFlt-1 levels in women who developed preeclampsia compared to those unaffected. The CR model performed better than the IPPIC model in the prediction of late-onset preeclampsia but not for early-onset preeclampsia (see the graphic abstract shown above). Graphical abstract used with premission from Hypertension (<https://doi.org/10.1161/HYPERTENSION.AHA.121.18421>) Full paper: Chaiyasit N, et al. Prospective Evaluation of International Prediction of Pregnancy Complications Collaborative Network Models for Prediction of Preeclampsia: Role of Serum sFlt-1 at 11-13 Weeks' Gestation. Hypertension. 2022;79:314-322.



UPCOMING EVENTS

Joint session of ISH with the **Indonesian Society of Hypertension at the 16th Annual Meeting** on February 19/20. Muscha Steckelings will talk about "Knowledge gaps related to hypertension in women" and Siska Suridanda Dany will speak about 'Hypertension across a woman's life cycle'.

Keep your eyes peeled for more information about the **29th Scientific Meeting of the ISH, Kyoto, 12-16 October 2022** and the WiHRC supported events focused on hypertension in women and supporting early career researchers.

NEWSLETTER EDITORIAL TEAM

**MUSCHA
STECKELINGS**



**NIAMH
CHAPMAN**



**MARISOL
FERNANDEZ**



**CHING SIEW
MOOI**



MANSI PATIL



HIND BEHEIRY



**Women in
Hypertension
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THANK YOU

Thanks for reading and remember, we'd love to hear from you. Write to us: WiHRC@ish-world.com or check out our [webpage](#).



**International Society
of Hypertension**