ESN GOES VIRTUAL!

The Virtual Mini-Conference at the FENS Forum

"Molecular mechanisms of cognitive impairment and intellectual disability"

July 2020 organized by the European Society for Neurochemistry (ESN)

Conference organizers
Co-Chairs:
Illana Gozes (Israel), ESN Secretary
Eva-Maria Blumrich (UK), ESN Council Member

Steering Committee:
Natalia N Nalivaeva (UK/Russia), ESN President
Johannes Hirrlinger (Germany), ESN Treasurer
Ago Rinken (Estonia), Past President ESN
Anthony J. Turner (UK), Abstract Committee

On Saturday, the 11th of July 2020, ESN did what it does best: bringing people together and joining young and more experienced ESN members and non-members for presentation and discussion of their achievements in neurochemistry. Like in all parts of our lives, the devastating COVID19 pandemic has made its mark also on the scientific meetings. What was planned to take place in an impressive building of SEC-Hydro in Glasgow (Scotland) ahead of the FENS Forum 2020 has been converted into a virtual event, from the home offices of the speakers to the living rooms of their audience. The focus of the Mini-Conference was set on deciphering the molecular mechanisms of cognitive impairment and intellectual disability, a highly relevant and diverse neurochemical topic. In fact, its coverage is a perfect display of the diversity of research within ESN and collaborating international scientists. Moreover, it gave ESN another chance to involve young scientists from outside the Society by bringing in the Edinburgh-based Simons Initiative for the Developing Brain (SIDB).

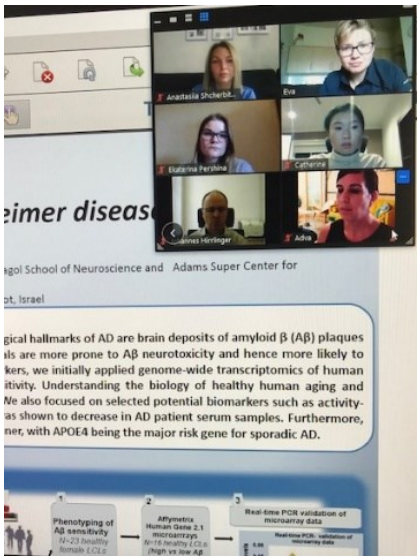
From a scientific point of view, cognitive impairment and intellectual disability affect a large population of children suffering from neurodevelopmental diseases as well as the elderly population succumbing to age-associated cognitive impairments. Understanding the molecular mechanisms of these disorders should help development of better diagnosis and improved treatments. The topics at the Mini-Conference ranged from the genes involved in autism/intellectual disability syndromes, like ADNP, to enzymes, energy metabolism and electrophysiology studies underlying intellectual disability. The role of environmental factors, such as prenatal hypoxia, as well as the basic mechanisms of synaptic transmission and neuro-glial interactions were also elucidated. Finally, innovative drug developments were discussed toward better cognitive functions both in children and the elderly.

The Mini-Conference was a part of the Virtual FENS Forum2020 and built on a sequence of pre-recorded lectures followed by a live Q&A session with poster presentations. It was structured in three main topics, each addressed by excellent international speakers:

Development and Intellectual disabilities: Prof I. Gozes (Tel Aviv University, Israel, ESN secretary); Prof A. McKinney (McGill University, Montreal, Canada); Dr N.N. Nalivaeva (Institute of Evolutionary Physiology and Biochemistry, Russia, ESN president)

Key mechanisms and drug development: Prof J. Hirrlinger (Carl-Ludwig-Institute, Leipzig; Max-Planck-Institut Göttingen, Germany, ESN treasurer); Prof F. Michetti (Catholic University, Rome, Italy); Prof J-P. Mothet (CNRS, Marseille, France)

Simons Initiative for the Developing Brain: Dr S.A. Booker and Dr S. Ribeiro Dos Louros (both SIDB, The University of Edinburgh, Scotland)



Left Image - Panelists of the Q&A Session (from left to right): top row - Illana Gozes, Natalia Nalivaeva, Anastasiya Shchertbitskaia, middle row - Eva-Maria Blumrich, Ekaterina Pershina, Catherine Li; bottom row - Johannes Hirrlinger, Adva Hadar.

Right image - poster presentation by Adva Hadar.

Apart from this noteworthy line-up, it would not be an ESN-organised conference without a special emphasis on the work of young scientists. Therefore, young (as well as senior) ESN member and non-member participants were asked in advance to submit their **posters and abstracts**, all of which are published in the Mini-Conference abstract book (available on the ESN website - https://neurochemsoc.eu). Out of 17 excellent poster presenters (https://neurochemsoc.eu/conference-2020-programme/), four very talented young scientists who have been awarded ESN travel grants to attend the FENS Forum have been given an opportunity to kick-off the live Q&A Session at the Mini-Conference by presenting

their posters as short talks. Adva Hadar (Tel Aviv, Israel), Catherine Li (Sydney, Australia), Ekaterina Pershina (Puschino, Russia) and Anastasiya Shcherbitskaia (Saint Petersburg, Russia) did an excellent job and gave a glimpse into the bright future of the next generation of neurochemists. The active discussion during the Q&A session tackled questions that participants had posted during the whole duration of the Mini-Conference. The speakers answered the questions by text messages or live in the video call, which was recorded and made available to all the participants of the FENS Forum2020 at (https://forum2020.fens.org/event/mini-conference-molecular-mechanisms-of-cognitive-impairment-and-intellectual-disability/). The organisers were thrilled to see more than 90 people tuning in and creating a lively conference feeling with their curiosity.

This virtual Mini-Conference was a new experience for all of us at ESN. We are very grateful to all participants, presenters and especially to FENS for providing us with such a unique opportunity as well as for their constant support and guidance. Whilst we are looking back with very positive impressions, we also feel that a purely virtual event cannot compete with a face-to-face meeting. The captivating atmosphere of a scientific meeting starting from greeting your colleagues at the registration desk, talking to them over the poster sessions and symposia as well as interacting with them at the social events is, despite all the attractiveness of the virtual conferences, irreplaceable. Therefore, we are planning to continue the discussions started at the Mini-Conference at the Biennial ESN meeting in St. Petersburg 2021. We would love to have you joining us in Saint Petersburg, so please check ESN website or the meeting site (https://esn2021.com/) regularly and also read future ISN newsletters for updates.