

Program Book





ISN International Society for Neurochemistry



Asian-Pacific Society for Neurochemistry

www.neurochemistry.org

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CONTENTS

ISN Officers and Council	
APSN Officers and Council	
Biennial Program Committee 2021	
Local Host Committee	
ISN-APSN-2022 Welcome Letter	4
Venue Floor Plan	
Mobile Application	
General Information	7
Information for Presenters	
Meeting Program	
Business Meetings	
Poster Session A (MTU)	
Poster Session B (WTH)	
Optional Networking Events Program	
Travel Awardees	41
Mark A Smith Prize Winners	
Young Scientist Lectureship Awards	
Young Members Symposia Awards	
Sponsors	







ISN OFFICERS AND COUNCIL

Officers

Flávia Gomes, President, Brazil Caroline Rae, Secretary, Australia Alessandro Prinetti, Treasurer, Italy

Appointed by Council

Ralf Dringen, Past President, Germany Monica J. Carson, Company Secretary, USA Anthony J. Turner, Chair of Publications Committee, UK

Council

Christian Gonzales-Billault, Chile Amadi Ihunwo, South Africa Jean-Pierre Mothet, France James O. Olopade, Nigeria Vladimir Parpura, USA Vania Prado, Canada Ago Rinken, Estonia Constanze Seidenbecher, Germany Akio Wanaka, Japan

APSN OFFICERS AND COUNCIL

Officers

Ying-Shing Chan, Hong Kong SAR, China, APSN President Woong Sun, Korea, APSN Secretary Chian-Ming Low, Singapore, APSN Treasurer

Council

Ranil De Silva, Sri Lanka Jee-Hyun Kim, Australia Peng Lei, China Sudip Paul, India Itsuki Ajioka, Japan On Lai Kowk, Hong Kong SAR, China Hwa Ling Michael King, Malaysia Pankaj,Seth, India Ohtan Wang Dan, Japan Akio Wanaka, Japan, Immediate-past APSN President

BIENNIAL PROGRAM COMMITTEE 2021

Vania Prado (Program Chair), Canada Mike Cousin, UK Ralf Dringen, Germany Caroline (Lindy) Rae, Australia Flavia Gomes, Brazil Akio Wanaka, Japan Jorg Schulz, Germany Woong Sun, South Korea Ying-Shing Chan, Hong Kong Eva-Maria Blumrich, Germany Itsuki Ajioka, Japan Dan Ohtan Wang, Japan Jee Hyun Kim, Australia Sergio Ferreira, Brazil Ronald Schnaar, USA Jessica Kwok, UK Frederic Checler, France Sarah Gordon, Australia Juan Bolanos, Spain Nilesh Patel, Kenya Ana Belen Elgoyhen, Argentina Tammy Kielian, USA

LOCAL HOST COMMITTEE

Akio Wanaka (Local Host Chair), Japan Jonas Vibell, (Local Host Honolulu), USA Itsuki Ajioka, Japan Ying Shing Chan, Hong Kong Woong Sun, South Korea Chian Ming Low, Singapore Judy Sng, Singapore Dan Ohtan Wang, Japan Kouko Tatsumi, Japan Manabu Makinodan, Japan Tatsuhide Tanaka, Japan Shoko Takemura, Japan







ISN-APSN-2022 WELCOME LETTER

We are excited and hope you will join us in Honolulu to participate in the joint meeting of the International Society for Neurochemistry (ISN) and the Asian Pacific Society for Neurochemistry (APSN), from August 28-September 1, 2022.

The Programme brings a collection of Plenary Lectures, Symposia and Workshops, carefully selected by the Program Committee, encompassing a diverse array of topics ranging from cellular, molecular, systemic to behavioral neurochemistry. Notably, we will have the second ever "Marthe Vogt Lecture", which recognises the work of female scientists who have made key contributions to Neurochemistry. We have also allocated generous time for poster presentations, exhibits and events to encourage networking, the formation of new collaborations and professional development.

As part of ISN and APSNs' strong engagement in supporting early career researchers, we will be supporting the participation and showcasing exciting work from early career scientists in our Young Members Symposia.

Last, but not least, with the instrumental support of the local organising committee, a series of social events for researchers at every career stage have been planned. The relaxed, friendly and fun atmosphere of these events are ideal to stimulate networking and exchanging of ideas.

We welcome you to Honolulu and hope that you all have a successful and rewarding 2022 ISN-**APSN Meeting.**



Vania Prado



Akio Wanada Program Chair Local Host Committee Chair ISN President



Flávia Gomes



Ying-Shing Chan **APSN President**



Jonas Vibell Local Host Honolulu







VENUE FLOOR PLAN











MOBILE APPLICATION

Be sure to download the official ISN-APSN 2022 app!

- Navigate the meeting program
- Customize your own schedule
- Post to social media accounts
- Follow meeting news as well as see the posts from other meeting attendees

You may download the app from IOS/App Store or Android/ Google Play through the below QR codes:



Download from IOS/App Store



Download from Android/Google Play

The event code for the mobile application **isnapsn22**. To login the mobile app, please use the credentials that have been sent to you via e-mail before the meeting.



ISN-APSN MEETING

HONOLULU, USA AUGUST 28 -SEPTEMBER 1, 2022



GENERAL INFORMATION

MEETING VENUE

Hawaii Convention Center 1801 Kalākaua Avenue Honolulu, HI 96815 USA Telephone: 1 (808) 943-3500 Website: https://www.meethawaii.com/convention-center/

LANGUAGE

The official language of the Meeting is English.

REGISTRATION DESK HOURS

28 August 2022, Sunday	13:00 – 18:00
29 August 2022, Monday	08:00 - 17:00
30 August 2022, Tuesday	08:00 - 17:00
31 August 2022, Wednesday	08:00 - 17:00
1 September 2022, Thursday	08:30 - 17:00

POSTER VIEWING AND PRESENTATION TIMES

Monday, August 29th

10:00 – 10:30 Posters Viewing A (Coffee Break) 14:00 – 15:00 Posters Viewing A (Coffee Break) 17:00 – 19:00 Posters Session A (Reception)

Tuesday, August 30th

10:30 – 11:00 Posters Viewing A (Coffee Break) 14:00 – 15:00 Posters Viewing A (Coffee Break)

Wednesday, August 31st

10:00 – 10:30 Posters Viewing B (Coffee Break) 14:00 – 15:00 Posters Viewing B (Coffee Break) 17:00 – 19:00 Posters Session B (Reception)

Thursday, September 1st

10:00 – 10:30 Posters Viewing B (Coffee Break) 14:00 – 15:00 Posters Viewing B (Coffee Break)

NAME BADGES

All participants and exhibitors are requested to wear their name badges throughout the Meeting to be admitted to the lecture halls and scheduled activities.







GENERAL INFORMATION

PHOTOGRAPHY IN SCIENTIFIC SESSIONS AND POSTER PRESENTATIONS

ISN-APSN

MEETING

Photography in scientific sessions, in poster presentations, and of any scientific information is strictly forbidden. Any photos taken will be deleted. We reserve the right to ask the unofficial photographer to leave the meeting venue.

We have a hired photographer to take photos throughout the meeting, these pictures will be published.

MOBILE PHONES

We ask that you have your mobile devices on silent or switched off in the scientific sessions

WIFI

Free WIFI is available to Meeting participants in public areas and in the Exhibition Area. **USERNAME**: ISN-APSN 2022 **PASSWORD**: ISN*2022

ABSTRACTS

Abstracts will be accessible and searchable to all delegates via the My ISN Account page during and after the Meeting.

ONLINE JOURNAL PUBLICATION

The Abstracts from the meeting will be published in a supplement of the Journal of Neurochemistry (JNC).

COFFEE BREAKS

Coffee, tea, and light refreshments will be served to all participants in the Exhibition and Poster Area as indicated in the timetable.

REGISTERED PARTICIPANT ATTENDANCE POLICY

All event activities (including scientific sessions, meal functions, exhibit hall, etc.) are exclusively reserved for registered attendees. Non-registered guests are not allowed in any of the event areas. An exception will be made for young children, they will need to get a child-guest badge at the registration desk. Badges provided at registration are required for entrance into all functions and will be strictly enforced.







GENERAL INFORMATION

SOCIAL GUEST ATTENDANCE POLICY

Social Guests may enter for the Welcome reception and the Farewell. This excludes the Exhibition and Poster Area. They may not enter the scientific sessions. Badges provided at registration are required for entrance into all functions and will be strictly enforced.

Children are welcome to all areas under supervision of a legal guardian.

COVID-19 PRECAUTIONS & POLICY

Children It is the express intention of ISN to safeguard the health of attendees at the biennial meeting in Honolulu. The following conditions are in place:

- Attendees will be required to show proof of immunization against SARS-COV2 upon registration. Attendees who are unable to provide proof of immunization may provide proof of negative covid infection status such as a negative PCR or rapid antigen test.
- Attendees exhibiting symptoms of infection such as cough, sore throat, fever or respiratory infection are strongly encouraged not to attend out of consideration for others.
- Attendees will be strongly encouraged to wear a mask inside conference rooms, apart from when presenting, and in situations where social distancing is not possible. Masks will be made available to attendees, but we strongly encourage attendees to bring a suitable supply of quality masks such as N95.
- ISN is using conference rooms that are larger than required and that are well ventilated to allow for space. Rooms will be sanitized between sessions.
- The conference center has corridors and spaces which are covered but which are open to the outdoors, and which catch the breeze.
- All social events (opening reception, YSSC social, President's reception and Farewell reception) will be held outdoors. The weather in Hawai'i in August is warm.
- Attendees are advised to ensure that their travel insurance covers them adequately for covidrelated impacts as far as is possible under current insurance conditions.

These security measures are subjected to change depending on the evolution of Covid-19 and local laws/rules in Honolulu.

LIABILITY AND INSURANCE

The Meeting Secretariat and Organisers cannot accept liability for personal accidents or loss of or damage to private property of participants. Participants are advised to take out their own personal travel and health insurance for their trip.

ISN-ASN 2019 MEETING SECRETARIAT



ISN-ASN Meeting Office:

ISN Secretariat Office Contact: secretariat@neurochemistry.org Website: www.neurochemistry.org



ISN-APSN MEETING

HONOLULU, USA AUGUST 28 -SEPTEMBER 1, 2022



INFORMATION FOR PRESENTERS

ORAL PRESENTATIONS

You are kindly requested to upload your presentation at least **3 hours before** the start of your session at the Speaker Ready Room. If your presentation is early in the morning, you are strongly encouraged to load your presentation the day before in order to avoid the morning rush.

The presentation document must be prepared in **16:9 format**. Please bring your presentation with a **USB** to upload at Speaker Ready Room before the start of your session (not individual talk).

Due to networking system, internet connection will not be available on uploading computers. It will not be possible to download your presentation at Speaker Ready room.

To minimize technical problems and delays during the actual presentation, we require you to load your presentations at the Speaker Ready Room.

If you prefer not to load your presentation in the speaker ready room and wish to use your own computer, please **bring your connection cable/adapter** with you and **do notify Speaker Ready Room a day before your presentation.**

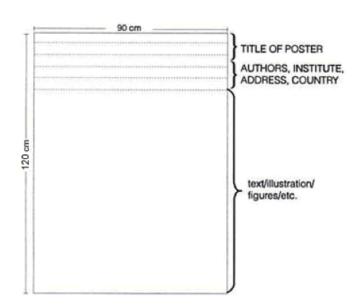
The Speaker Ready Room will be marked clearly with a signage at the meeting venue.

Please refer to the Scientific Program for the date and time of your presentation.

POSTER PRESENTATIONS

Your poster should be displayed on the poster board with the abstract code you have received via email. The abstract codes can also be found in the program book.

- All posters will stay up for 2 days
- MTU-coded posters will stay up on Monday 29th and Tuesday 30th
- WTH-coded posters will stay up on Wednesday 31st and Thursday 1st
- Please prepare your poster on one sheet of Bristol board or laminated paper. Alternatively, presenters may display their material on several smaller sheets.
- The dimensions of the poster should not exceed **90 cm wide x 120 cm high (35 inches x 47 inches).** Allocate the top of the poster for the title and authors.
- The text, illustrations, etc should be bold enough to be read from a distance of two meters (six feet).



• Tacks and technical equipment will be available for the mounting of posters.



ISN-APSN MEETING

HONOLULU, USA AUGUST 28 -SEPTEMBER 1, 2022



INFORMATION FOR PRESENTERS

Monday, August 29th

10:00 – 10:30 Posters Viewing A (Coffee Break)

14:00 – 15:00 Posters Viewing A (Coffee Break)

17:00 – 19:00 Posters Session A (Reception)*

*Poster presenters with odd numbers should be at their poster between 17:00-18:00 and those presenting posters with even numbers between 18:00-19:00.

Tuesday, August 30th

10:30 – 11:00 Posters Viewing A (Coffee Break) 14:00 – 15:00 Posters Viewing A (Coffee Break) 16:00 – 17:00 Take down MTU posters

Wednesday, August 31st

10:00 – 10:30 Posters Viewing B (Coffee Break) 14:00 – 15:00 Posters Viewing B (Coffee Break) 17:00 – 19:00 Posters Session B (Reception)*

* Poster presenters with odd numbers should be at their poster between 17:00-18:00 and those presenting posters with even numbers between 18:00-19:00.

Thursday, September 1st

10:00 – 10:30 Posters Viewing B (Coffee Break) 14:00 – 15:00 Posters Viewing B (Coffee Break) 16:00 – 17:00 Take down WTH posters

Authors are kindly requested to stand next to their poster boards where possible during the dedicated poster session viewing times. Authors are responsible for setting up and removing their posters. Posters nor taken from the board on time will be discarded





MEETING PROGRAM

ISN-APSN

MEETING

Sunday August 28 , 2022			
Time	Plenary Hall / 310 Theater		
14:30 - 16:30	S01 History of Neurochemistry Chair: Philip Beart (Australia) Speakers: S01-01 - A brief history of APSN, neurochemists of Asia-Pacific and their roles in ISN/APSN, Philip Beart (Australia) S01-02 - Indian Neurochemistry: Contribution of Neurochemists and Journey, Prakash Babu (India) S01-03 - A history of the origin and development of Japanese Society for Neurochemistry and international cooperation and contribution, Katsuhiko Mikoshiba (China)		
16:30 - 17:00	Opening Ceremony		
17:00 - 17:30	Mark A Smith Award 2020 & 2021 2020 Awardee: Silvia Oldani 2021 Awardee: Md. Omar Faruk Chair: JNC editor in Chief, Andrew Lawrence (Australia)		
17:30 - 18:30	PL01 Plenary Session 1: Multiplex imaging of neural activity and signaling dynamics Haruhiko Bito (Japan) Chair: ISN President (2019-2021) Ralf Dringen (Germany)		
	Other Halls		
8:30 - 15:30	1st ISN Council Meeting		
13:00 - 16:00	APSN Council Meeting		
13:30 - 14:30	ISN-YSSC My First Conference		
18:30 - 20:30	Welcome Reception at HCC Roof Top		

Legend:	Plenary Lecture	Workshop	Symposium
	Young ISN/APSN	Young	ISN / APSN / JSN
	Member Symposium	Scientist Lectureship	Business Meeting

12





Monday August 29, 2022						
Time	ne Plenary Hali / 310 Theater Parallel Hali 1 / 301 Parallel Hali 3 / 308 Parallel Hali 2 / 304					
08:30 - 09:30	PL02 Plenary Session 2: Innate Immunity in Neurodegenerative Disorders Michael Heneka (Germany) Chair: APSN Secretary (2020-2022),					
09:30 - 10:00 10:00 - 10:30	Ying-Shing Chan (Hong Kong) YSLA-01 ISN Young Scientist Lectureship Award: Aberrant upregulation of glycolysis mediates CLN7 neuronal ceroid lipofuscinosis Chair: ISN Secretary (2019-2023), Caroline Rae (Australia) Awardee: Marina Garcia-Macia (Spain)	Coffee Break / Poster Viewin	g A/ Exhibition - Ballroom AB S04-T#10 Innovations advancing our			
10:30 - 12:30	S02-T#5 Cerebral cortex assembly: neuron migration, folding and connectivity Chair: Jeroen Pasterkamp (Netherlands) Speakers: S02-01 Development and evolution of visual projections Alain Chedotaql (France) S02-02 Molecular control of neuronal subtype specification and integration in the cerebral cortex Carina Hanashima (Japan) S02-03 Semaphorins regulate cortical layer-specific morphogenesis and function Jeroen Pasterkamp (Netherlands) S02-04 Simon Hippenmeyer (Germany)	 S03-T#7 Novel mechanisms of memory storage and retrieval Chairs: Peter Giese (UK) / Satoshi Kida (Japan) Speakers: S03-01 Endoplasmic reticulum chaperone genes encode effectors of long-term memory Snehajyoti Chatterjee (USA) S03-02 Generation of multi-input synapses enables memory storage in old age Peter Giese (UK) Satoshi Kida (Japan) Sylvie Lesuis (Canada) 	understanding of microglia in Alzheimer's Disease: from in vitro to in vivo models Chairs: Lezanne Ooi (Australia) / Lorena Arancibia-Carcamo (UK) Speakers: S04-01 Regulation of microglia morphology and surveillance in health	S05-T#4 il6st/gp130 as central hub for health and disease in the nervous system Chairs: Hermona Soreq (Israel) S05-01 Hermona Soreq (Israel) S05-02 Jana Vukovic (Australia) S05-03 Theodora Kalpachidou (Austria)		
12:30 - 13:00		LUNCH BREAK - E	Sallroom C & Foyer			
13:00 - 15:00		W04-T#15 Climbing the ladder – the steps and key aspects of scientific careers Chairs: Sara Grassi (Italy) Charikleia Peta (Greece) Speakers: W04-01 Measuring amyloid-β dynamics in response to selective excitation and inhibition of glutamatergic and GABAergic signaling Rachel Hendrix (USA) W04-02 How to find a mentor and move on after your PhD Felipe Ribeiro (Brazil) W04-03 Mental health and well-being in academia Loretta White (Japan) W04-04 Christopher Pena (USA), W04-05 Astrid Cardona (USA)				

Legend:	Plenary Lecture	Workshop	Symposium
	Young ISN/APSN	Young	ISN / APSN / JSN
	Member Symposium	Scientist Lectureship	Business Meeting

ISN-APSN MEETING HONOLULU, USA AUGUST 28 -SEPTEMBER 1, 2022



MEETING PROGRAM

Monday August 29, 2022					
Time	Plenary Hall / 310 Theater	Parallel Hall 1 / 301	Parallel Hall 3 / 308	Parallel Hall 2 / 304	
15:00 - 17:00	S06-T#2- Mechanisms and circuit function of neurotransmitter and neuromodulator release unveiled with gene-encoded optical sensors Chair: Dmitri Rusakov (UK) Speakers: S06-01 Recent progress on genetically encoded sensors for calcium, neurotransmitters, neuromodulators, and drugs Abhi Aggarwal USA S06-02 Imaging spatial and temporal dynamics of neurochemical release in living brain with genetically encoded indicators Alessio Andreoni (USA) S06-02 Dissection of hippocampal NMDA receptor co-agonist signalling assisted by new optical sensors Christian Henneberger (Germany) S06-04 Probing mechanisms of neurotransmitter release and inter- synaptic cross-talk with multiplexed imaging in vivo Dmitri Rusakov (UK)	 S07-T#7 From synaptic plasticity to cognitive function Chair: Ying-Shing Chan (HongKong) Speakers: S07-01 GABAergic plasticity directs developmental assembly of vestibular circuitry for behavior Ying-Shing Chan (HongKong) S07-02 Astrocytes shape the variability of basal synaptic strengths in the hippocampus Yukiko Goda (Japan) S07-03 The Ins and Outs of Neurexins in homeostatic plasticity and Learning Lu Chen (USA) S07-04 Role of Chandelier Interneurons in network oscillations in the amygdala Pankaj Sah (Australia) 	W01 - Journal of Neurochemistry Workshop Speakers: Frank Middleton Kim Kwan Anthony J Hannan Marco Prado	S08-T#9 Microglia as functional gate keepers for physiological brain functions: consequences on behavior across contexts of health and disease Chairs: Hiroaki Wake(Japan) / Marie-Eve Tremblay (Canada) Speakers: S08-01 Local apoptosis promotes complement tagging of synapses for microglia phagocytosis Ryuta Koyama (Japan) S08-02 Rosa Chiare Paolicelli (Switzerland) S08-03 Hiroaki Wake (Japan) S08-04 Marie-Eve Tremblay (Canada	
17:00 - 19:00					
	Other Halls				
13:00 - 14:00	APSN- Annual Business Meeting				
13:00 - 14:00	JNC Editorial Board Luncheon (on invitation)				
19:30 - 22:00	JNC Social (by Invitation)				
19:30 - 22:00	YSSC Reception (by Invitation)				

Legend:	Plenary Lecture	Workshop	Symposium
	Young ISN/APSN	Young	ISN / APSN / JSN
	Member Symposium	Scientist Lectureship	Business Meeting

14



ISN-APSN MEETING

HONOLULU, USA AUGUST 28 -SEPTEMBER 1, 2022



		Tuesday August	30, 2022	
Time	Plenary Hall / 310 Theater	Parallel Hall 1 / 301	Parallel Hall 3 / 308	Parallel Hall 2 / 304
08:30 - 09:30	PL03 Plenary Session 3: Synapse degeneration in Alzheimer's disease Tara Spires-Jones (UK) Chair: Chair of Program Committee, Vania Prado (Canada)			
09:30 - 10:30	YMS01Young Members Symposia Chair: ISN Council Member (2017-2021), Babete Fuss (USA) Speakers: YMS01-01 Involvement of nucleus accumbens neurons in cue-reward associative learning Carina Soares-Cunha YMS01-02 Medial Prefrontal Serotonergic Input Regulates Cognitive Flexibility Behavior in Mice Nuno Dinis Alves YMS01-03 Laterodorsal tegmentum- Nucleus accumbens projections underlie cocaine-induced preference Barbara Coimbra	YMS02 Young Members Symposia Chair: ISN Council Member (2017-2021), Amadi Ihunwo (South Africa) Speakers: YMS02-01 TIMP-1 released early in Alzheimer's disease from reactive astrocytes enhances memory and synaptic plasticity in 5xFAD mice Sukanya Sarkar YMS02-02 Pathogenesis of white matter microglial dystrophy in human microvascular brain injury and Alzheimer's disease Philip Adeyemi Adeniyi YMS02-03 Correction of mTORC1- mediated protein synthesis rescues memory in mouse models of Alzheimer's disease Danielle Cozachenco	YMS03 Young Members Symposia Chair: ISN Council Member (2017-2021), Schuichi Koizumi (Japan) Speakers: YMS03-01 Protein kinase signalling cascades associated with neuronal death in excitotoxicity Ashfaqul Hoque YMS03-02 The role of activity-dependent phosphorylation in the presynaptic function of α-synuclein Elysa M Carr YMS03-03 REPRESSION OF EIF2- MEDIATED BRAIN PROTEIN SYNTHESIS IN THE PATHOPHYSIOLOGY OF MAJOR DEPRESSIVE DISORDER Alinny Rosendo Isaac	YMS04 Young Members Symposia Chair: ISN Council Member (2019-2023), Constanze Seidenbecher (Germany) Speakers: YMS04-01 Chemogenetic regulation of microglial activity in an Alzheimer's disease model Aja Hogan-Cann YMS04-02 Schizophrenic patients hiPSC- derived astrocytes impair synaptic engulfment by induced microglial-like cells (iMGs) in vitro Pablo Leal Cardozo YMS04-03 Ketogenic diet promotes resilience to social stress and modifies microglial morphology and ultrastructure in male mice Fernando Gonzales Ibanes
10:30 - 11:00			g A/ Exhibition - Ballroom AB	
11:00 - 12:30	YMS05 Young Members Symposia Chair: ISN Council Member (2019-2023), Ago Rinken (Estonia) Speakers: YMS05-01 Frontotemporal Dementia caused by Progranulin mutations is characterised by disrupted myelin lipid metabolism. Oana C Marian YMS05-02 Lipid-mediated impairment of axonal lysosome transport contributing to autophagic stress in Niemann-Pick disease type C Joseph Roney YMS05-03 Impacted brain perfusion upon genetic deletion of hormone-sensitive lipase in mice Cecilia Skoug YMS05-04 Differential brain lipid composition in the Octodon degus, a matter of age and sex. Lorena Cuenca-Berrnejo	YMS06 Young Members Symposia Chair: ISN Council Member (2019-2023), Christian Gonzalez-Billault (Chile) Speakers: YMS06-01 Therapeutic effects with lesion- specific delivery of the NgR-Fc peptide in an experimental model of multiple sclerosis Paschalis Theotokis YMS06-02 Cannabidivarin and Neural Stem cells, a new hope for Rett Syndrome? Diogo Miguel Lourenco, YMS06-03 CoREST3 is involved in neuronal differentiation and HDAC2 expression in cortical neurons derived from human pluripotent stem cells Simon Maksour, YMS06-04 Characterizing the role of Mitochondrial Dynamics in postnatal Neural Stem Cell fate Rita Abunhosa Soares	Speakers: YMS07-01 Trafficking of the glutamate transporter is impaired in LRRK2-related Parkinson's disease Ludovico Iovino, YMS07-02 It takes two kinases to tango: regulation of LRRK2 by PAK6 in health and disease Lucia lannotta YMS07-03 Metabolic and plasma membrane alterations in β- glucocerebrosidase- related pathologies: steps to understand neurodegeneration Emma Veronica Carsana	YMS08 Young Members Symposia Chair: ISN Council Member (2019-2023), Vladimir Parpura (USA) Speakers: YMS08-01 Sensory processing dysregulations as reliable translational biomarkers in SYNGAP1 haploinsufficiency Maria Isabel Carreno-Munoz, YMS08-02 Withania somnifera (L.) Dunal helps regain earlier muscle function restoration after a compression injury to Sciatic nerve in mice Faiqa Sajid, YMS08-03 Furran neurotoxicity in Wistar rats involves behavioural defects, microgliosis, astrogliosis and oxidative damagelfeoluwa Oluleke Awogbindin YMS08-04 Reboxetine treatment reduces neuroinflammation and glial activation in the P301S mouse model Irene Lopez Gutierrez
12:30 - 13:00	LUNCH BREAK - Ballroom C & Foyer			
13:00 - 14:00 14:00 - 15:00	ISN Annual Business Meeting	Coffee Break / Poster Viewin	g A/ Exhibition - Ballroom AB	
15:00 - 17:00	S09-T#2 Molecular components regulating assembly of synapses Chairs: Katherine Roche (USA) / Michisuke Yuzaki (Japan) Speakers: S09-01 Molecular and structural mechanisms of PTPRD-mediated synapse formation Tomoyuki Yoshida (Japan) S09-02 Bridge over Troubled Synapses with C1q Family Proteins Michisuke Yuzaki (Japan) S09-03 Dissecting the molecular connectome in developing circuits Joris de Wit (Belgium) S09-04 Katherine Roche (USA)	S10-T#14 Regulation of complex behavior by cholinergic signalling Chair: Marco Prado (Canada) Speakers: S10-1 Expression and function of nicotinic acetylcholine receptors expressed by striatal interneurons Helena Janickova (Czech Republic) S10-2 Cholinergic mechanisms in the basolateral amygdala underlying cue- reward learning Marina Picciotto (USA) S10-3 Cholinergic striatal interneurons use parallel and convergent neurochemical signals in the service of behavior Marco Prado (Canada) S10-4 Lorna Role(USA)	W02-T#12 Genetic and Epigenetic Mechanisms for Neural Repair Chair: Richard Q Lu (USA) Speakers: W02-01 Overcoming molecular brakes for	S11-T#5 Microtubules in nervous system development and disease Chairs: Peter Baas(USA) / Hongyan Wang (Singapore) Speakers: S11-01 Microtubule basis of hereditary spastic paraplegia Peter Baas (USA) S11-02 Depletion of Fidgetin promotes axon growth via both local mTOR activation and labile microtubule augment Mei Liu (China) S11-03 Microtubule defects resulted from a panoply of tau pathology may underlie the axonal degeneration in Tauopathy. Liang Qiang (USA) S11-05 Microtubule Mechanisms in Dendrite Pruning of Nociceptive Sensory Neurons in Drosophila Fengwei Yu (Singapore)
17.00	Marte Vogt Lecture: Non-coding RNA controllers of acetylcholine signaling as body-brain communicators Speaker: Hermona Soreq (Israel)			
17:00 - 18:00	Chair: ISN President (2021-2023), Flavia Gomes (Brazil) Other Halls			





	Wednesday August 31, 2022			
Time	Plenary Hall / 310 Theater	Parallel Hall 1 / 301	Parallel Hall 3 / 308	Parallel Hall 2 / 304
08:30 - 09:30	PL04 Plenary Session: Improving ER proteostasis delays brain aging and age-related diseases Claudio Hetz (Chile) Chair: Chair Local Host Committee, Akio Wanaka (Japan)			
09:30 - 10:00	YSLA01-02 ISN Young Scientist Lectureship: Defining mechanisms of blood-brain barrier dysfunction in dementia using advanced organ-on-a- chip models Chair: ISN Treasurer (2021-2023), Alessandro Prinetti Awardee: Mootaz Salman	Coffee Presk / Poster Viewin	g B/ Exhibition - Ballroom AB	
10:00 - 10:30		Conee Break / Poster Viewing	g B/ Exhibition - Bairoom AB	
10:30 - 12:30	S12-T#13 Roles for lipids in neurosecretion from normal to pathological conditions Chair: Nicolas Vitale (France) Speakers: S12-01 Synaptotagmin 1 mediates botulinum neurotoxin type A toxicity Merja Joensuu (Australia) S12-02 Distinct functions of phospholipase D1-derived phosphatidic acid species during regulated exocytosis in neuroendocrine cells Nicolas Vitale (France) S12-03 Rescue of a lysosomal storage disorder caused by Grn loss-of-function with a brain penetrant progranulin biologic Gilbert Di Paolo (USA) S12-04 Ira Millosevic (Germany)	S13-T#1 Epigenetic (Dys)regulation in Cognitive Health and Disease Chairs: Philipp Mews (USA) / Erin Calipari (USA) Speakers: S13-01 Cell-type-specific epigenetic priming of gene expression by cocaine Philipp Mews (USA) S13-02 An emerging role of histone H2A variants in behavioural regulation Iva Zovkic (Canada) S13-03 Erin Calipari (USA) S13-04 Anthony J Hannan (Australia)	S14-T#2 Ionotropic glutamate receptors that signal metabotropically Chairs: Jesper Sjöström (Canada) / Inmaculada M. Gonzalez-Gonzalez (UK) Speakers: S14-01 Metabotropic NMDA receptor signaling, synaptic depression and Alzheimer's disease Kim Dore (USA) S14-02 Presynaptic NMDA receptors signal metabotropically in neocotical plasticity Jesper Sjöström (Canada) S14-03 Antonio Rodriguez-Moreno (Spain) S14-04 Roger Thompson (Canada)	 S15-T#4 Synapses, circuits & behavior in neurodevelopmental disorders Chair: Jess Nithianantharajah (Australia) Speakers: S15-01 Cell-type specific transcriptional networks related to autism Geneviewe Konopka (USA) S15-02 Cadherin-13 is a critical regulator of GABAergic modulation in human stem-cell-derived neuronal networks Nael Nadif Kasri (Netherlands) S15-03 Synapse imbalance, cognitive dysfunction and neurodevelopmental disorders Jess Nithianantharajah (Australia) S15-04 Towards understanding the pathophysiology of autism using disease models Toru Takumi (Japan)
12:30 - 13:00		LUNCH BREAK - E	Ballroom C & Foyer	•
13:00 - 14:00	JSN Annual Business meeting			
14:00 - 15:00		Coffee Break / Poster Viewin	g B/ Exhibition - Ballroom AB	
15:00 - 17:00	S16- T#10 The psychedelic revolution in Psychiatry: shedding light on neuroplastic and neurochemical mechanisms Chair: Viviana Trezza (Italy) Speakers: S16-01 Mechanism of action of LSD in mental disorders Danilo De Gregorio (Italy) S16-02 From plant synergy to neuroplasticity: 30 years of translational ayahuasca research in Brazil Rafael Guimarães Dos Santos (Brazil) S16-03 Psychedelics and Related Plasticity-Promoting Neurotherapeutics Lee Dunlap (USA) S16-04 Psilocybin mitigates the cognitive deficits observed in a rat model of Fragile X syndrome Viviana Trezza (Italy) S16-05 Franz Vollenweider (Switzerland)	 S17-T#2 Towards an understanding of how the cytoskeleton and intracellar transport are regulated for synapse development and plasticity Chair: Kwok-On Lai (HongKong) Speakers: S17-01 Dendritic spine initiation, stabilization and depletion in synaptic plasticity Pirta Hotulainen (Finland) S17-02 Oligodendrocyte dysfunctions underlie autism-related behaviors in a mouse model of the neurodevelopmental disorder ANKS1B syndrome Bryen Jordan (USA) S17-03 Control of neuronal cytoskeleton and intracellular transport machinery by arginine methylation Kwok-On Lai (HongKong) S17-04 The role of RNA methylation reader protein YTHDF1 in postmitotic neuron development Dan Ohtan Wang (Japan) 	 W03-T#5 Brain wiring in health and disease: molecular mechanisms and therapeutic potential Chairs: Simon Hippenmeyer (Austria) / Giovanni Piccoli (Italy) Speakers: W03-01 Neural Stem Cell Lineage Progression in Health and Disease Simon Hippenmeyer (Austria) W03-02 Neural Stem Cell Lineage Progression in Health and Disease Simon Hippenmeyer (Austria) W03-02 Neural circuits for multisensory integration in Health and Psychiatric Disorders Seung-Hee Lee (South Korea) W03-03 Molecular link among cortical development and psychiatric disorders: insight from Negr1 and FGFR2 biology Giovanni Piccoli (Italy) W03-04 RNA on the brain: Dynamic control of cortical development and gsease Debra Silver (USA) W03-05 Neuronal polarization and germinal zone exit are inhibited by a Hif1a pathway and oxygen tension-dependent development and sylexit. David Solecki (USA) P, even numbers 18:00-19:00) - Ballroom 	S18-T#9 "Emerging role of oligodendrocytes in learning and memory in the adult brain" Chair: Rashmi Bansal (USA) Speakers: S18-01 Role of FGF Receptor signaling in oligodendrocytes regulates synaptic plasticity, learning and memory in the adult brain Rashmi Bansal (USA) S18-02 Experience-dependent myelin plasticity in the encoding and recall of fear memories Mazen Kheirbek (USA) S18-03 Role of oligodendrocytes and myelin in motor skills learning and working memory training William D Richardson (UK) S18-04 Activity-dependent remodeling of myelinated axons and oligodendrocyte differentiation is stimulated by environmental enrichment Junhua Xiao (Australia)

Legend:	Plenary Lecture	Workshop	Symposium
2090.00	Young ISN/APSN	Young	ISN / APSN / JSN
	Member Symposium	Scientist Lectureship	Business Meeting





Thursday, September 01, 2022				
Time	Plenary Hall / 310 Theater	Parallel Hall 1 / 301	Parallel Hall 3 / 308	Parallel Hall 2 / 304
09:00 - 10:00	PL05 Plenary Session: The activation mechanisms of PINK1 and Parkin during mitophagy David Komander (Australia) Chair: ISN-ESN 2023 Program Chair, Cheah Pike-See (Malaysia)			
10:00 - 10:30		Coffee Break / Poster Viewing	g B/ Exhibition - Ballroom AB	
10:30 - 12:30	S19-T#2 Mitochondrial dynamics in axon function, plasticity and pathology Chairs: Josef Kittler (UK) / Zuhang Sheng (USA) Speakers: S19-01 Regulation of presynaptic function and plasticity through mitochondrial dynamics and calcium buffering Josef Kittler (UK) S19-02 A mitophagy mechanism underlying synaptic defects in Alzheimer's disease Qian Cai (USA)) S19-03 Energy Matters: Reprogramming axonal mitochondrial transport and energy metabolism in CNS regeneration Zuhang Sheng (USA) S19-04 Maxim Katsenelson (Israel)	S20-T#9 Astrocytes control brain circuits underlying behavior Chairs: João Oliveira(Portugal) Speakers: S20-01 Astrocytes in higher brain function Tirzah Kreisel (Israel) S20-02 Do astrocytes encode behaviorally relevant information? Axel Nimmerjahn (USA) S20-03 The involvement of astrocyte calcium-dependent signaling in behavior João Oliveira (Portugal) S20-04 Norepinephrine links astrocytic activity to regulation of cortical state Kira Poskanzer (USA)	S21-T#6 Brain metabolism by MRS: State-of-the-art and recent advances Chairs: Joao Duarte (Sweden) / Yuhei Takado (Japan) Speakers: S21-01 Brain metabolism probed by hyperpolarized 13C magnetic resonance Arnaud Comment (UK) S21-02 Functional metabolism investigated by fMRS: an overview on methods and outcome Nathalie Just (France) S21-04 Advanced 'H MRS in Clinical Applications Gulin Oz (USA) S21-05 Combining MRS and PET to elucidate the pathophysiology of Aging brain Yuhei Takado (Japan)	S22-T#10 mRNA translation in neuronal development, synaptic plasticity and diseases Chair: Carlo Sala (Italy) Speakers: Kobi Rosenblum (Israel) Susan L Ackerman (USA) Carlo Sala (Italy)
12:30 - 13:00 13:00 - 14:00		LUNCH BREAK - B	allroom C & Foyer	
13:00 - 14:00 14:00 - 15:00		Young APSN-JSN Meeting	g B/ Exhibition - Ballroom AB	
15:00 - 17:00	 S23-T#9 Glial Ca2+ dysfunction in CNS diseases Chairs: Schuichi Koizumi (Japan) Speakers: S23-01 Glial Ca2+ signaling and neuron- microglia interaction Yuki Fujita (Japan) S23-02 Striatal astrocyte-neuron interactions in health and disease Baljit S Khakh (USA) S23-03 Neuronal hyper-excitability driven by astrocytic P2Y1 receptor signaling. Eiji Shigetomi (Japan) Annamaria Lia (Italy) 	S24-T#4 The interplay between α- synuclein and LRRK2 kinase in Parkinson's disease: dysfunction of crucial cellular functions and signaling pathways Chairs:Tiago Outeiro (Germany) / Simone Engelender (Israel) S24-01 LRRK2 is important to maintain nuclear envelop integrity: Implications to Parkinson's disease Simone Engelender (Israel) Tiago Outeiro (Germany) Sabine Hilfiker (USA) Takeshi Iwatsubo (Japan)		
19:00 - 22:00		Farewell Reception at	Royal Hawaiian Hotel	

Legend:	Plenary Lecture	Workshop	Symposium
	Young ISN/APSN Member Symposium	Young Scientist Lectureship	ISN / APSN / JSN Business Meeting







BUSINESS MEETINGS

ISN BUSINESS MEETING

TUESDAY, AUGUST 30, 13:00 – 14:00 | Plenary Hall / Room 310 Theater

Please join us for the official ISN Annual Business Meeting in the Plenary Hall / Room 310 Theater. Please note, this is for ISN Members only.

APSN BUSINESS MEETING

MONDAY, AUGUST 29, 13:00 - 14:00 | Plenary Hall / Room 310 Theater

Please join us for the official APSN Annual Business Meeting in the Plenary Hall / Room 310 Theater. Please note, this is for APSN Members only

JSN BUSINESS MEETING

WEDNESDAY, AUGUST 31, 13:00 - 14:00 | Plenary Hall / Room 310 Theater

Please join us for the official JSN Annual Business Meeting in the Plenary Hall / Room 310 Theater. Please note, this is for JSN Members only





Poster presentation by authors between 10:00 – 10:30 & 14:00 – 15:00 on Monday and 10:30 – 11:00 & 14:00 – 15:00 Tuesday Poster presentation by authors with odd numbers between 17:00 – 18:00 on Monday Poster presentation by authors with even numbers between 18:00 – 19:00 on Monday

MTU01 - Gene Regulation & Genetics (Session A)

- MTU01-01 Transcriptional and Epigenetic Influences in Neurodegenerative Disease Dharmendra Kumar Khatri
- MTU01-02 Histone acetyltransferase KAT2A is a critical epigenetic regulator of cocaine responses in the nucleus accumbens Erin Calipari, Vanderbilt University, Pharmacology, Nashville, United States

MTU02 - Signal transduction & synaptic transmission (Session A)

- MTU02-01 Targeting neuro-inflammatory signaling cascade: A Possible Therapeutic Strategy in Halting Epilepsy. Warda Ainuddin
- MTU02-02 Alterations of extracellular ATP-dependent signal transduction in rodent model of environmentally triggered autism Lidia Babiec
- MTU02-03 Counteracting organophosphate-induced toxicity by improved bioscavenging capacity of BChE and damage prevention at cell level Tena Čadež
- MTU02-04 EGF-dependent H-Ras activation and lipid raft mobility is controlled by the RasGAP neurofibromin in cortical neurons Charikleia Peta
- MTU02-05 Signaling pathway in neovascularization of glioblastoma: Role of metabotropic glutamate receptors Nandakumar Dalavaikodihalli Nanjaiah
- MTU 02-06 Measuring amyloid-β dynamics in response to selective excitation and inhibition of glutamatergic and GABAergic signaling Rachel Hendrix

MTU03 – Neuroinflammation & neuroimmunology (Session A)

- MTU03-01 MICE LACKING 5-LIPOXYGENASE DISPLAY MOTOR DEFICITS ASSOCIATED WITH CORTICAL AND HIPPOCAMPAL SYNAPSE ABNORMALITIES Maria Carolina Barbosa-Silva
- MTU03-02 NEUROPROTECTIVE EFFECT OF THYMOQUINONE ON LIPOPOLYSACCHARIDES (LPS) INDUCED NEURODEGENERATION AND COGNITIVE IMPAIRMENT IN MICE Olusegun Adeoluwa
- MTU03-04 Analysis of cytokines in patients with major depressive disorder Eva Babusikova





MTU03-05 IL-6: A Putative Link between Neuroinflammation and Disturbed Magnesium Homeostasis? Mária Brodňanová

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- MTU03-06 A role for inflammation on lesion-induced neuroplasticity during critical periods of brain development Luana Chagas
- MTU03-07 Mechanistic considerations of nickel in neurodegenerative diseases: an updated systematic review. Chidinma Anyachor
- MTU03-08 The role of methylglyoxal accumulation in the induction of diabetic neuropathic pain Klaudia Dócs
- MTU03-09 Tramadol Modulates Cognition and Lipid-Immune Signalling in the Gut-Liver-Brain Axis of Sleep-Deprived Periadolescent Rats Edem Edem
- MTU03-10 Minocycline Attenuates Impaired Hypothalamic-Ovarian Antioxidant Capacity by Modulating NLRP3 in a Rat Model of Cerebral Ischemia Adedamola Fafure
- MTU03-11 Chronic glial activation causes cholinergic cell loss in the basal forebrain during pathological aging Rashmi Gamage
- MTU03-12 SLN targeting for treatment of Neurocysticercosis Priyanka Gosain
- MTU03-13 Neuroprotective and anti-inflammatory effects of Evodiamine in Parkinson's Disease allied Depressive-like behavior Mohit Kwatra
- MTU03-14 Highly active antiretroviral therapy-AgNPs conjugate interacts with neuronal & glial cells and alleviates anxiety in diabetic rats Sodig kolawole Lawal
- MTU03-15 Astrocytic calcium signaling as a neuroprotective mechanism against α-synuclein-induced inflammation Emmanouela Leandrou
- MTU03-16 Neurodevelopmental toxicity of embryonic exposure of Acetamiprid in the animal model Christine Lee Li Mei

MTU04 – Molecular basis of disease (Session A)

- MTU04-01 Aqueous lyophilisate of Malvaviscus arboreus Dill. Ex Cav. leaves exerts antiepileptogenic properties Maxwell Blesdel ADASSI
- MTU04-03 Modulation of Multidrug Resistance Protein 1-mediated export processes by the antiviral drug ritonavir Christian Arend
- MTU04-04 Neuronal loss, Oxidative Stress, inflammatory and Junctional Perturbations in Hippocampus of Diabetic Rats Treated With Alcohol Jaclyn Asouzu Johnson





- MTU04-05 Aberrant expression and activity of neuronal nitric oxide synthase alters calcium signaling in Alzheimer's disease neurons Rachelle Balez
- MTU04-06 Mitochondrial respiration and vulnerability to oxidative stress in the hippocampus of insulin-resistant Goto-Kakizaki rats Judit Soriano
- MTU04-09 Elucidating the role of Tau isoform expression in human iPSC-derived Tauopathy models Angelika Dannert

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MEETING

- MTU04-10 New interaction between Gβγ protein and human Monoamine Transporters (hMATs), insights from in silico studies. Luis Dinamarca
- MTU04-11 Glycine receptor autoantibodies bind to the glycine receptor bsubunit representing a novel target of stiff person syndrome Anna-Lena Eckes
- MTU04-12 GSK-3 in Huntington's disease Hagit Eldar-Finkelman
- MTU04-13 Systematic study of extracellular vesicles and their integrative analysis with Parkinson's organoids MAP Ewa Grassin
- MTU04-14 Identifying prenatal molecular origins of neurodevelopmental disturbances Rachel Hill
- MTU04-16 Ribosomal S6 Kinase confers hippocampal cell layer-specific resistance to excitotoxic cell death Kari Hoyt
- MTU04-18 Molecular mechanisms of intermittent fasting-induced ischemic tolerance Soomin Jeong
- MTU04-19 The modulatory role of curcumin and quercetin on Drosophila GSK-3: a potential therapeutic intervention in Parkinson's disease John OLANREWAJU
- MTU04-20 Non-canonical role of PINK1 in modulating PKA function and dendrite outgrowth Smijin K. Soman
- MTU04-21 Human stem-cell-derived cortical tissue models to investigate Alzheimer's disease Julien Klimmt
- MTU04-22 CDKL5 deficiency slows synaptic vesicle endocytosis at central nerve terminals Christiana Kontaxi
- MTU04-23 LRRK2 and a-synuclein fibrils reciprocally regulate to enhance insoluble a-synuclein release under lysosomal overload stress Tomoki Kuwahara
- MTU04-24 The role of ubiquitin-proteasome system in psychiatric disorders using chronic restraint stress model of depression in mice. Jung Hoon Lee





MTU05 – Brain Development & Cell differentiation (Session A)

MTU05-01 Relationship between reelin and morphological features in the human infant hippocampal dentate gyrus (DG) Vanessa Despotovski MTU05-02 KCC2 Manipulation alters features of migrating interneurons in ferret neocortex Francis Djankpa MTU05-03 Vanadium improves memory and spatial learning and protects the pyramidal cells of the hippocampus in juvenile hydrocephalic mice Omowumi Femi-Akinlosotu MTU05-04 Two phosphorylated sites of GAP-43 are the markers of the growing axons in both rodents and primates Michihiro Igarashi MTU05-05 Glial fibrillary acidic protein (GFAP) distribution in brains of juvenile, subadult and adult Japanese quail (Curtonix Japonica) Amadi Ogonda Ihunwo MTU05-06 Self-patterning of brain organoids by adhesion-based cell assembly Kent Imaizumi MTU05-07 Regulation of inhibitory interneuron wiring by the Cadherin superfamily. Julie Lefebvre MTU05-08 nsSNPs within the extracellular loops of M6a impair its neuroplastic function Antonella León MTU05-08 nsSNPs within the extracellular loops of M6a impair its neuroplastic function Antonella León MTU05-09 Ameliorative properties of kolaviron on aluminium chloride-induced degeneration in the hippocampus of fetal Wistar rats in-utero. Susan Lewu

MTU06 – Bioenergetics & Metabolism (Session A)

- MTU06-01 N-Acetyl Cysteine ameliorates mitochondrial dysfunction in ischemic injury via attenuating Drp-1 mediated mitochondrial autophagy. Mubashshir Ali
- MTU06-02 ASTROCYTIC INSULIN SIGNALING AND INFLAMMATION IN EXPERIMENTAL ALZHEIMER'S DISEASE Melisa Bentivegna
- MTU06-03 Metabolic impact of regulatory volume change Abhijit Das
- MTU06-04 Pyruvate release and consumption in cultured primary rat astrocytes Nadine Denker
- MTU06-05 Aging promotes an increase in mitochondrial fragmentation of astrocytes Luan Diniz





MTU06-06 Aminolevulinic acid and iron rescued mitochondrial activity and antioxidant defenses in DARS2 deficient fibroblasts Tuany Eichwald

MTU07 – Neuronal plasticity & behavior (Session A)

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MEETING

- MTU07-01 Behavioral effect of selective deletion of beta2* nicotinic acetylcholine receptors in cortical GABAergic neurons Alice Abbondanza
- MTU07-02 Optogenetics-mediated local cerebral blood flow affects mouse behavior and neural activity Yoshifumi Abe
- MTU07-03 MOTIVATION BEHAVIOR IN MICE UNDER RESTRICTED FEEDING CONDITIONS: INVOLVEMENT OF CLOCK PROTEINS AND DOPAMINERGIC PROTEINS Julieta Acosta
- MTU07-04 Alterations of behavior, faecal bacteria and fatty acids, brain and intestinal morphology in rats exposed to Cobalt chloride Akinleye Akinrinde
- MTU07-05 Sex-dependent behavioural and brain effects of young rats after alcohol binge drinking and methamphetamine self-administration Priscila Costa
- MTU07-07 The underlying mechanisms related to frustration early adversities and programming of emotional behavior Joelma Alves
- MTU07-08 NEURO PLASTICITY IN GERIATRIC BRAIN AFTER HEARING USE: AN ELECTROPHYSIOLOGIC MEASURE Mohammad Shamim Ansari
- MTU07-09 Changes in biochemical and memory profile of hippocampus of Sprague Dawley rat pups exposed intrauterine to kolanut extracts Foluso Atiba
- MTU07-11 Adenosine A2A receptors control the extinction of fear memories Rodrigo Cunha
- MTU07-12 Extracellular vesicles from palmitate-exposed microglia trigger brain dysfunction in mice Gabriela Cristina De Paula
- MTU07-13 Cannabis extract alone and in combination with cannabidiol reduces relapse to methamphetamine and locomotor sensitization. Laisa Umpierrez
- MTU07-14 ALTERATION ON EFFORT DECISION MAKING IN A MODEL OF PRENATAL STRESS: NAC AND ACC FUNCTIONAL CHANGES Ana Verónica Domigues
- MTU07-15 Physical Exercise Restores the Neuroepigenetic Aberrations in the Hippocampus of Diabetic Brain Valencia Fernandes





- MTU07-16 Reactivation of leptin receptor alleviate the deleterious consequences of absence of leptin signaling in obese mice brain Caroline Fernandes
- MTU07-17 Integration of behavior and neuronal physiology in a mouse model of Rett Syndrome: a focus on serotonergic system modulation Daniela Monteiro-Fernandes
- MTU07-18 A potential therapeutic approach for Alzheimer's disease Tayná Rody

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MEETING

MTU08 – Clinical studies, biomarkers & imaging (Session A)

- MTU08-02 Immunomodulatory sphingosine-1-phosphates as plasma biomarkers of Alzheimer's disease and vascular cognitive impairment Xin Ying Chua
- MTU08-03 Predictive markers of multiple sclerosis progression measurable in vivo using the MRSI in the basal ganglia Petra Hnilicova

MTU09 - Glia and neuron-glia interactions (Session A)

- MTU09-01 Transient synaptic density unbalancing in the motor cortex after peripheral nerve injury: involvement of microglial Raguel Maria Campos
- MTU09-02 Microglia depletion and repopulation alleviates vascular damage and neuronal loss in the diabetic retina Kaira Church
- MTU09-03 The role of astrocyte Gq signalling in neuroinflammation and cognition Alycia M Crooks
- MTU09-05 Responses of oligodendrocytes to different FGF-family members: Uncoupling structure-function relationship within FGF subfamilies Hebe Guardiola-Diaz
- MTU09-06 Astrocyte senescence is associated with Lamin-B1 loss, nuclear deformations, and synaptogenic capacity impairments Isadora Matias
- MTU09-07 GINGER-GARLIC SUPPLEMENTATION ATTENUATES HIPPOCAMPAL ASTROCYTIC RESPONSE FOLLOWING LEAD (Pb) EXPOSURE IN ADULT FEMALE WISTAR RATS KENNETH C. OPARAJI
- MTU09-08 Sphingolipid-dependent membrane organization and signaling orchestrating myelin repair Sara Grassi





MTU10 – Neurodegeneration and neuropsychiatric disorders (Session A)

- MTU10-01 The antidepressant-like action of ethanolic extract of garlic is mediated by its antioxidant function Khushboo.
- MTU10-02 Amelioration of cognitive deficit by Propranolol in a scopolamine- Induced Alzheimer's Disease- Like condition in a Rat Model. Pinky
- MTU10-03 Methyl Jasmonate Inhibits MPP+-Induced Neuroinflammation and Oxidation in BV2 Microglia Cells Via NF-kB(p65)/Nrf2 Pathway John Adewale Adediji
- MTU10-04 In silico study of Date Palm phytochemicals against Cdk5/p25 Activation in the treatment of Alzheimer's disease Michael Ajenikoko
- MTU10-05 MTBR-243 in the early diagnoses of AD and the role of Microglia/Carbenoxolone as localized therapeutic interventions in AD rats Mai M. Anwar
- MTU10-06 Neuroprotective consequence of embelin in experimental model of multiple sclerosis: behavioral and biochemical aspects Rimpi arora
- MTU10-07 Attenuation of amyloid β-induced cognitive decline by averting mitochondrial injury in Alzheimer's diseaseNeha
- MTU10-08 Sustained release triple drug loaded Colloidosomes for management of Parkinson's Disease Saurabh Bhargava
- MTU10-09 Carrier mediated delivery system bearing dopamine for effective management of parkinsonism Varun Bhargava
- MTU10-10 Intranasal delivery of insulin for the restoration of memory signaling in Alzheimer disease Mani Bhargava
- MTU10-11 The molecular tweezer CLR01 reduces motor impairments and neuropathology in spinocerebellar ataxia type 3 in vivo models Daniela Vilasboas-Campos
- MTU10-12 Levels of activating transcription factor 6 alpha (ATF6α) in Alzheimer's disease Mariana Chauvet
- MTU10-13 Brain Cell type-specific insulin resistance exacerbates Alzheimer's disease-like phenotypes in 5xFAD mice Wengiang Chen
- MTU10-14 The study of depression and cognitive comorbidities in a mouse model of Spinocerebellar ataxia type 3 Joana Sofia Correia
- MTU10-15 Unveiling the astrocytic contribution for synaptic dysfunction in ALS Sara Costa-Pinto





- MTU10-16 Geldanamycin and Spironolactone enhance the degradation of C9orf72 ALS/FTD dipeptide repeat proteins. Riccardo Cristofani
- MTU10-17 Intranasal administration of nootropics reverses motor symptoms and loss of midbrain dopamine neurons in PINK1 knockout rats Ruben Dagda
- MTU10-18 DIAGNOSING LEARNING AND MEMORY DYSFUNCTION IN A NEURODEGENERATIVE DISEASE: THE CASE OF ALZHEIMER'S DISEASE Ernest Dalle
- MTU10-19 Hippocampal histone trimethylation and neurogenesis are associated with resilience in a rat model with depressive-like behavior Alana C. Panzenhagen
- MTU10-20 ATF4 promotes PUMA/Bax-dependent neuronal apoptosis via the mTOR pathway in Parkinson's disease models. Matthew Demmings
- MTU10-21 STUDYING THE ROLE OF AUTOPHAGY IN KRABBE DISEASE Narayan Dhimal

ISN-APSN

MEETING

- MTU10-22 iPSC-derived in vitro striatal circuits to understand GBA-associated Parkinson's Disease. Quyen Do
- MTU10-23 ALS astrocytes impair neuronal firing in ALS and healthy iPSC-derived motor neurons Dzung Do-Ha
- MTU10-24 A fantastic beast or a fantastic drug? Doxy (doxycycline) attenuates L-DOPA-induced dyskinesia in hemiparkinsonian mice. Mauricio dos Santos Pereira
- MTU10-25 On cholinergic regulation in Alzheimer's disease: transcriptomic analysis at the single-cell level Serafima Dubnov
- MTU10-26 Studies on the role of B to Z DNA conformational transition in neuronal cell death: relevance to neurodegenerative disorders Lakshmi Sowmya Emani
- MTU10-27 Structure-Function studies of Alzheimer's disease Kaneez Fatima-Shad
- MTU10-28 Strain-typing of scrapie and bovine spongiform encephalopathy using ovine PrP (ARQ/ARQ) overexpressing transgenic mice Olanrewaiu Fatola
- MTU10-29 Nigella sativa Oil Modulated Hippocampal Endophenotypes in Dizocilpine-Induced Schizophrenia In BALB/c Mice Royhaan Folarin
- MTU10-30 Microglial large extracellular vesicles propagate early synaptic dysfunction in Alzheimer's disease by moving at the axon surface Martina Gabrielli





MTU10-31 Role of Metabolism in Pathological Aggregation of TDP-43 and its Down-Stream Toxicity Ismail Gbadamosi

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MEETING

- MTU10-32 Approaching promising markers for Parkinson's disease using serum cytokines and DAMPs along to clinical parameters Daniel Gelain1
- MTU10-33 Role of pharmacological antagonism of A2AR in the acquisition of morphine withdrawal-induced CPA Victoria Gomez-Murcia
- MTU10-34 Pre-clinical study of a 5HT1A specific agonist in the CMVMJD135 mouse model of Machado-Joseph disease Sara Guerreiro
- MTU10-38 Ouabain prevents NMDA elicited neuronal calcium overload in brain cortical slices: role of membrane cholesterol Margarita Ilyina
- MTU 10-39 A new insight on Al-maltolate-treated aged rabbit as Alzheimer's animal model: a new approach in drug discovery CHAND BASHA SK

MTU11 - Intercellular organelles and trafficking (Session A)

- MTU11-01 Agonist activation of Sigma-1R upregulates Kv1.2 trafficking at the plasma membrane through anterograde and recycling pathways Sara-Maude Bélanger
- MTU11-02 Novel uptake and degradation pathway of proteins by lysosomes required for neuromuscular homeostasis Yuuki Fujiwara
- MTU11-03 Sigma-1R is involved in Kv1.2 channel stability Veronik Lachance

MTU12 – Stem Cells and regeneration (Session A)

- MTU12-01 Jigsaw-shaped self-assembling peptide (JigSAP) hydrogels efficiently incorporate and release VEGF and promote brain regeneration Itsuki Ajioka
- MTU12-02 A new strategy to improve central neuronal regeneration after glial scar formation Gonçalo Costa
- MTU12-03 BDNF, adenosine A2AR and cannabinoid receptors: a triad of regulators of postnatal oligodendrogenesis Joana M Mateus





MTU13 – Lipids and glycobiology (Session A)

MTU13-03 A remyelination-promoting antibody modulates sphingolipid metabolism in microglial cells Chiara D'Aprile

MTU14 - Neurochemical technologies and resources (Session A)

MTU14-01 Caveats to Use of the NeuN Antibody in Formalin-Fixed Human Infant Brain Tissue Lauren Luijerink

MTU15 – Other Topics (Session A)

- MTU15-01 Modulation of BDNF By Gabapentin, Indomethacin and Their Low Dose Combination In Inflammatory Adjuvant Model of Rat Zaid Abdul Razzak
- MTU15-02 Behavioral, neurodevelopmental and gut microbiome changes following gestational exposure to high housing temperature in rats Olamide Adebiyi
- MTU15-03 Association between Cardiorespiratory Fitness and Metabolic Syndrome Ye Seul Bae
- MTU15-04 Characterization of nuclear lamina alterations in astrocyte senescence Isabella Damico
- MTU15-05 GPR27-MEDIATED INCREASE IN CYTOSOLIC L-LACTATE IN 3T3 EMBRYONIC CELLS AND ASTROCYTES Dorian Dolanc
- MTU15-06 Chronic Vanadium Neurotoxicity in Mice: Oxidative Stress and Neuro-inflammatory Consequences Oluwabusayo Folarin
- MTU15-07 Arsenic induces differential neurotoxicty via an interdependent ERα, Wnt and EGFR pathway in male and female rats Asmita Garg
- MTU15-08 A novel method for isolation of spontaneously-released small extracellular vesicles from mouse and human brain Patrícia Gomes
- MTU15-09 Workshop "Scientific Publishing: From study design to post-acceptance marketing" Laura Hausmann
- MTU15-10 Cellular, synaptic, and behavioral effects of the anti-epileptic drug cenobamate (YKP3089) Myoung-Hwan Kim



HONOLULU, USA

SEPTEMBER 1, 2022

AUGUST 28 -



POSTER SESSION B (WTH) / WEDNESDAY, AUGUST 31 AND THURSDAY, SEPTEMBER 1 2022

Poster presentation by authors between 10:30 – 11:00 & 14:00 – 16:00 on Wednesday and Thursday Poster presentation by authors with odd numbers between 17:00 – 18:00 on Wednesday Poster presentation by authors with even numbers between 18:00 – 19:00 on Wednesday

WTH01 - Gene Regulation & Genetics (Session B)

WTH01-01 A Possible Pathogenic PSEN2 Gly56Ser Mutation in a Korean Patient with Early-Onset Alzheimer's Disease Kyu Hwan Shim

WTH02 - Signal transduction & synaptic transmission

- WTH02-01 Respiratory Neuron Identification using Cell-type specific expression by channelrhodopsin-2 in vivo Behnam Vafadari
- WTH02-02 Glutamate-dependent increase in DNA Methylation in Cultured Bergmann Glia Cells Bolaji Oyenike Ayetayo
- WTH02-03 BDNF upregulates the synaptic expression of NMDA receptors in hippocampal neurons by a mechanism dependent on local translation Carlos Bandeira Duarte
- WTH02-04 Desensitization of Mu-opioid receptors in the spinal cord dorsal horn is reduced by endogenous TRPV1 agonist. Mario Heles
- WTH02-05 MIF inhibitor (ISO-1) reduces pain hypersensitivity in a model of peripheral neuropathy Monica Pontearso
- WTH02-06 Progesterone and allopregnanolone attenuates the effects of cocaine on dopamine release in the NAc and hypermobility in rats William Norbey Sanchez Luna

WTH03 – Neuroinflammation & neuroimmunology (Session B)

- WTH03-01 Hippocampal-dependent spatial memory impairment is associated with neuroinflammation after mild traumatic brain injury in mice Caroline Amaral Machado
- WTH03-02 Social isolation impact on the development of neuropsychiatric disorders and neuroinflammation an aging study in a mice model Daniela M Magalhães
- WTH03-03 ANTI-NEUROINFLAMMATION OF BLACK SEED OIL AGAINST D-GALACTOSE- AND LEAD-INDUCED ALZHEIMER-LIKE DISEASE MODEL IN RATS MUSA OMOYINE ILIYASU
- WTH03-03 ANTI-NEUROINFLAMMATION OF BLACK SEED OIL AGAINST D-GALACTOSE- AND LEAD-INDUCED ALZHEIMER-LIKE DISEASE MODEL IN RATS MUSA OMOYINE ILIYASU





WTH03-04 Extracellular DJ-1 plays a key role in the induction of sterile inflammation after ischemic stroke Koutarou NAKAMURA1

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- WTH03-05 Dietary Inclusion of Bryophyllum pinnatum Modulates Markers of Inflammation and Neurodegeneration in Ulcerative Colitis Rats Brain Olasunkanmi Omojokun
- WTH03-06 Therapeutic inhibition of HMGB1 suppress seizures and ameliorates memory impairment in adult zebrafish. Yam Nath Paudel
- WTH03-07 Receptor for Advanced Glycation End Products Mediates LPS-Induced Chronic Neuroinflammation in the Substantia Nigra Daniel Oppermann Peixoto
- WTH03-08 Effects on Parvalbumin Neurons and Perineuronal Nets in Alzheimer's Disease Mouse Models are not mediated by C5a-C5aR1 signaling Tiffany Petrisko
- WTH03-09 Analysis of motor and anxiety-like behavior and autoantibody binding after passive transfer of IgG from SPS patients into mice Inken Piro
- WTH03-10 An in-vitro oxygen-glucose-deprivation model to investigate the challenges of implant-based drug delivery for human glia cells. Luise Schlotterose
- WTH03-11 Hypothalamic inflammation induced by high-fat high sugar diet is a gender-specific, reversible process Rui F Simões
- WTH03-13 Restoring heart failure-induced long-term memory impairment by targeting the cystic fibrosis transmembrane regulator Lotte Vanherle
- WTH03-14 Embryonic LPS-administration induces developmental neurotoxicity via HDAC inhibitor-like neuronal alteration Sharumadhi Veloo
- WTH03-15 Illustrating synergistic mechanism of herbal compound-formula in targeting neuroinflammation Xian Zhou
- WTH 03-16 Social isolation-induced depression promotes ethanol intake through microglia-derived neuroinflammation Chang-Gue Son

WTH04 – Molecular basis of disease (Session B)

- WTH04-01 Reduced chronic restraint stress in mice overexpressing hyperactive proteasomes in the forebrain Min Jae Lee
- WTH04-02 SARS-CoV-2 affects the dopamine metabolism in human iPSCs-derived dopaminergic neurons Giulia Lunghi







- WTH04-03 Altered secretion of astrocyte-derived extracellular vesicles contribute to metabolic and redox imbalance in Huntington's disease Gonzalo Mayorga-Weber
- WTH04-04 TET3 Modulates Mitochondrial Genes and Mitochondrial Pathophysiology after Stroke Kahlilia Morris-Blanco

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- WTH04-05 Synergistic effect of fibrinogen and Aβ peptides on neuroinflammation and synaptotoxicity in Alzheimer's disease research models Elisa Nicoloso Simões-Pires
- WTH04-06 Early cellular and molecular alterations in a novel mouse model expressing human ApoE4 Onyedikachi Ojiakor
- WTH04-07 Mechanisms for brain region and sex-specific alterations in circHomer1expression in adult mouse brain following PAE Grigorios Papageorgiou,
- WTH04-08 Rapid MSO-sensitive extracellular accumulation of taurine in hippocampus of young rats during initial pilocarpine-induced seizures Marek Pawlik
- WTH04-09 The role of Third Intracellular Loop in the trace amine associated receptor 1 mechanism. Toward new opportunities for drug design Agustin Robles
- WTH04-10 New mechanism involved in rat kainate-induced status epilepticus Leonor Ribeiro-Rodrigues
- WTH04-11 Identification of a novel lysosomal release pathway regulated by Parkinson's disease kinase LRRK2 Maria Sakurai
- WTH04-12 Genome-wide CRISPR screens to identify modulators of TDP-43 aggregation in ALS Rebecca San Gil
- WTH04-13 Alterations in miRNA and proteome profile identify miR-29b: A potent regulator of arsenic-induced neurodegeneration Sana Sarkar
- WTH04-14 REFERENCE GENE STABILITY WITHIN THE RAT BRAIN IN THE LITHIUM PILOCARPINE EPILEPSY MODEL: TIMING AND REGION SPECIFICITY Alexander Schwarz
- WTH04-15 Towards understanding the role of CRMs as key regulators of autophagy in the brain: An in-silico molecular docking approach Apoory Sharma
- WTH04-16 Type 1 diabetes mediated increased capillary stalling and impaired behavioral performance in mice Sorabh Sharma
- WTH04-17 Rapid demise of cholinergic-targeted brain transfer RNA fragments in cognitively declined women with Alzheimer's disease Dana Shulman







- WTH04-18 The unique biology of RNA-granules in vulnerability and treatment of Stress and Alzheimer's Disease brain pathologies Joana Margarida Silva
- WTH04-19 Prenatal hypoxia affects nicotine consumption and withdrawal in adult rats via impairment of the glutamate system in the brain Viktor Stratilov
- WTH04-20 Dynamics of microtubules and MAPs under the physiological condition that cause high phosphorylation state of tau protein Ayaka Hagita-Tatsumoto
- WTH04-21 QUANTUM DOT CONJUGATES IN CELLULAR MODELS DERIVED FROM PATIENTS: TOWARDS MOLECULAR CHARACTERIZATION AND PERSONALIZED MEDICINE Carlota Tosat-Bitrián
- WTH04-22 UNDER SIMILAR SYNAPTIC PATTERNS, MICROGLIA UNVEILS SEX-DIFFERENCES IN THE VALPROIC ACID MODEL OF AUTISM SPECTRUM DISORDER Marianela Traetta
- WTH04-23 Role of miR-802 in brain insulin signaling and its impact on Down syndrome Antonella Tramutola

ISN-APSN

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- WTH04-24 HIF1 induces pentose phosphate pathway dysfunction and neuronal death in rat hippocampus after severe hypoxia Oleg Vetrovoy
- WTH04-25 MITRAGYNINE INDUCED COGNITIVE IMPAIRMENTS VIA HISTONES REGULATION AT THE EPIGENETIC LEVEL Suleiman Yunusa

WTH05 – Brain Development & Cell differentiation (Session B)

- WTH05-03 Biotinylation by Neurofascin Antibody Recognition Maps the Extracellular Axon Initial Segment Proteome Yuki Ogawa
- WTH05-05 The Unfolded Protein Response (UPR) in the piglet brainstem following exposure to intermittenthypercapnic-hypoxia (IHH). Shannon Thomson
- WTH05-06 Environmental Toxicant Bisphenol Alternatives (BPS & BPF) Mediated Effect(s) on Neurogenesis in the Rat Hippocampus SAURABH TIWARI
- WTH05-07 Visualization of newly formed oligodendrocytes in mice Kiichi Yokoyama
- WTH05-08 Neurodevelopment and pharmacological studies: in vitro and in vivo models for neuroactive drug testing Denis Zosen







POSTER SESSION B (WTH) / WEDNESDAY, AUGUST 31 AND THURSDAY, SEPTEMBER 1 2022

WTH06 – Bioenergetics & Metabolism (Session B)

- WTH06-01 The expression of pyruvate carboxylase in human astrocytes cell line Eduard Gondáš
- WTH06-02 ATP depletion in cultured primary astrocytes Antonia Harders
- WTH06-04 Brain metabolic network trajectories during aging Débora G. Souza
- WTH06-05 Protective effect of Rhus Verniciflua extract on mitochondrial fitness status during the progression of Parkinson's disease Zuzana Tatarkova
- WTH06-06 Intranasal insulin elicits different intracellular signalling responses in the hippocampus and frontal cortex of the mouse João P. P. Vieira
- WTH06-07 β-lapachone-mediated WST1 reduction as indicator for the cytosolic redox metabolism of cultured primary astrocytes Patrick Watermann

WTH07 – Neuronal plasticity & behavior (Session B)

- WTH07-01 Brain volume and proteome profiles changes in the aging rat brain and impacts on cognitive and locomotor functions Hamizah Shahirah Hamezah
- WTH07-02 Influence of strength training on behavioral parameters in an animal model of alcoholism Lucas dos Reis Izolan
- WTH07-03 Safety profile of localized non-invasive brain stimulation using uHD-PES: histological analysis Vishal Jain
- WTH07-04 Memory Consolidation Related Computational Markers Utilizing In Vivo Electrophysiology Medha Kaushik
- WTH07-05 Astrocytic mGluR3 and related metabotropic receptors alter spatial memory in a sex-specific manner Samantha M. Meadows
- WTH07-06 Unravelling caffeine influence on adult neurogenesis and behavior João B. Moreira
- WTH07-07 Anxiolytic Effects of Aqueous Methanolic Extract of Allium sativum and Enriched Environment in an Open Field Test in Wistar Rats Philemon Paul Mshelia
- WTH07-08 Supplementation with medium-chain triglycerides (MCT) improves memory and alters glutamatergic gene expression in the rat brain Veronika Nikitina







- WTH07-09 Effect of taurine on GABA efflux during alcohol withdrawal and re-exposure in the nucleus accumbens of rats Rianne Pulcinelli
- WTH07-10 Cognitive abilities and hippocampal structure in aged brevican and neurocan double knock-out mice Jana Schulze
- WTH07-11 A cartographic and morphometric analysis of neuronal spines in m6A reader-deficient mice SHENGQUN HOU

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- WTH07-13 Role of hippocampal AMPA-R trafficking with STEP signaling in cadmium induced cognitive deficits in rats Amelioration by quercetin Anugya Srivastava
- WTH07-14 Brain mapping of c-Fos in binge-like drinking mice reveals that alcohol memories are stored in networks in remote brain regions Marzena Stefaniuk
- WTH07-15 Intermittent ketosis induced by MCT supplement: dose-dependent differential effects on cognitive and metabolic parameters in rats Alexander Trofimov
- WTH07-16 Length impairments of the axon initial segment in rodent models of attention-deficit hyperactivity disorder Takeshi Yoshimura

WTH08 – Clinical studies, biomarkers & imaging (Session B)

- WTH08-01 No association exists between non-alcoholic fatty liver disease and dementia risk: A meta-analysis of realworld evidence Mohammad Salman Hussain
- WTH08-02 Differential expression of brain endothelial cell markers in the human brain: implications in the pathogenesis of cerebral malaria Smart Mbagwu
- WTH08-03 A Systematic Review of the Psychological Stress on Cancer Recurrence Risk Hyeon-Muk Oh

WTH09 – Glia and neuron-glia interactions (Session B)

- WTH09-01 Ontogeny and early-life stress: microglial and behavioral sex-specific responses of young mice to infant maternal separation Bruna Resende
- WTH09-02 Adenosine -CB1 receptors crosstalk in astrocytes: implications in medial prefrontal cortex synaptic function Joana Gonçalves-Ribeiro
- WTH09-03 Fractalkine isoforms differentially regulate microglia activation and vascular damage in the diabetic retina Derek Rodriguez







WTH09-05 The role of L-MPZ in the aging of the peripheral nervous system Yuki Setoguchi

ISN-APSN

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- WTH09-06 The transcriptional regulator DREAM modulates glial cell proliferation dependent on the regional inflammatory microenvironment Patrick Süß
- WTH09-07 EXPOSURE TO INSECTICIDE MIXTURE OF CYPERMETHRIN AND DICHLORVOS INCREASED THE VOLUME OF ASTROCYTE AND GLUCOSE IN SUBSTANTIA NIGRA Princewill Udodi
- WTH09-08 Microglia derived from stem cells exhibit a more homeostatic and adult-like phenotype in brain organoids than in a monoculture Tyler J Wenzel

WTH10 – Neurodegeneration and neuropsychiatric disorders (Session B)

WTH	H10-01	Safety profile of localized non-invasive brain stimulation using uHD-PES: histological analysis Vishal Jain
WTH	H10-02	An Early Call to Prevent Valproic Acid Toxicity in Antiepileptic Therapy Muhammad Jamal
WTH	H10-03	Pioglitazone mediated transitory upregulation of neuronal uncoupling protein-4 and -5 in adult nonhuman primate's brain Sumit Jamwal
WTH	H10-04	Behavioural and molecular aspects of AlCl3 induced neurotoxicity in zebrafish Karamjeet Kaur
WTH	H10-05	Repurposing of Nrf2 activator attenuates mitochondrial-mediated apoptosis in experimental tMCAO model of ischemic stroke Pooja Kaushik
WTH	H10-06	Functional association and validation of genes of Parkinson's disease: A potential susceptibility Biomarker Vinay Yadav
WTH	H10-07	Neuroprotective action of Eugenol on Oxidative Stress-Dependent Apoptotic Death of DA Neurons in a Parkinson rat Model Abhishek Kumar
WTH	H10-08	Doing more with less: maximizing data yield of small-scale in vitro neurotoxicology investigations using morphological profiling Nils-Anders Labba
WTH	H10-09	A convincing pathophysiological mechanism of ME/CFS Jin-Seok Lee
WTH	H10-10	Brain FNDC5/Irisin in depressed patients and its modulation in mouse models of major depression Ricardo Lima-Filho
WTH	H10-11	Oxidative Stress in Q175 Mouse Model of Huntington's Disease Federico López Couselo







- WTH10-14 A novel tropomyosin-related kinase-B (TrkB) receptor activator: HIFN (2-fluoro-N-(2-(5-hydroxy-1H-indol-3-yl)ethyl)nicotinamide Shweta Modgil
- WTH10-15 ETHINYL ESRTADIOL AND LEVONORGESTREL IMPROVES SPATIAL MEMORY AND INDUCES NEURODEGENERATION IN THE LIMBIC SYSTEM OF WISTAR RATS. Agnes Nwakanma

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- WTH10-16 Anthracene and Benz[a]anthracene induced neurodegeneration, altered behaviour and increased SKN-1 expression in C. elegans Tosin Olasehinde
- WTH10-17 EFFECT OF CURCUMIN AND GALLIC ACID ON BEHAVIORAL AND NEUROCHEMICAL INDICES IN DIESEL EXHAUST PARTICLE-INDUCED NEURODEGENERATION Damilola Olatunde
- WTH10-18 Morin ameliorates rotenone-induced Parkinson's Disease in mice through anti-oxidation and antineuroinflammation. Taiwo Olubodun-obadun
- WTH10-19 Influence of Curcumin on choliensterase activity and gene expression in Brain of Scopolamine-induced Rats treated with donepezil Odunayo Oluokun
- WTH10-20 Hippocampal inflammation disrupts REM sleep in a neurodegeneration model induced by systemic LPS Pedro Ozorio Brum
- WTH10-21 Melatonin attenuates the bidirectional Gut-Brain axis mediated inflammation caused by PM2.5 and averts neurodegeneration Samir Ranjan Panda
- WTH10-22 Integrated microRNA and protein profiling reveals microRNAs-mediated regulation of apoptosis and autophagic flux in PD Anuj Pandey
- WTH10-23 Learning from the (ir)reproducibility of an amyloid-β-induced model of Alzheimer's disease Sara L. Paulo
- WTH10-24 Proteomic landscape of Alzheimer's disease Junmin Peng
- WTH10-25 Gene therapy approach for SPG4-based Hereditary Spastic Paraplegia. Emanuela Piermarini
- WTH10-26 Inhibiting SUMOylation promotes aggrephagy, mitophagy and ferritinophagy and SENP3 deSUMOylase is increased in Parkinson's disease Dean L. Pountney
- WTH10-27 6BIO is a potent dual inhibitor of Gsk3 beta and Cdk5 to protect by Alzheimer disease in experimental models Manisha Prajapat







- WTH10-28 Curcumin modulates Nrf2-Keap1-p62 mediated autophagy in rotenone intoxicated Parkinsonian mouse model. Aaina Rathore
- WTH10-29 Neuroprotective and computational investigations of metal-hydroxyquinoline complexes against neurodegenerative diseases Waralee Ruankham
- WTH10-30 Delineating the effect of deferoxamine on iron homeostasis in cypermethrin-induced Parkinsonism Nidhi Sachan
- WTH10-31 Activation of DJ-1/Nrf2 signaling pathway ameliorates cypermethrin-induced oxidative damage in SH-SY5Y cells Alika Sarkar
- WTH10-32 Neuroprotective role of chlorogenic acid in arsenite-induced oxidative damage via modulation of redox homeostasis and inflammation Amit Kumar Singh
- WTH10-33 Impact of small molecules on Tau-Microtubules interaction and tau aggregation in primary peripheral neurons and neuronal models Ahmed Soliman
- WTH10-34 Title: Molecular mechanisms of BDNF-mediated mitochondrial remodeling and function in dendrites. Maryann SWAIN
- WTH10-35 Rod bipolar cell degeneration in chronically hypoglycemic mouse retina Fuminobu Tamalu

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MEETING

- WTH10-36 Cellular analysis of Autism Spectrum Disorder using co-culture system of hiPSC-derived neurons and macrophages from patients. Ryohei Takada
- WTH10-37 The role of the GluN2D subunit in mediating cognition in schizophrenia Chitra Vinnakota
- WTH10-38 Disease- and sex-specific RNA surveillance in cholinergic and dopaminergic circuits of schizophrenia and bipolar disorder brains Tamara Zorbaz
- WTH10-39 Behavioral and molecular changes resulted from different environmental lead exposures: a comparative study Liana Shvachiy

WTH11 – Intercellular organelles and trafficking (Session B)

WTH11-01 The Sigma-1 receptor dynamics, monitored with super-resolution imaging microscopy Ago Rinken





WTH12 – Stem Cells and regeneration (Session B)

- WTH12-01 Modeling Prader-Willi syndrome using hypothalamic organoids from patient-derived induced pluripotent stem cells Akisa Nemoto
- WTH12-03 Human Choroid Plexus-Ventricle-Cortical organoids model SARS-CoV-2 neuropathology in Down Syndrome and enable Drug Screening Mohammed R. Shaker
- WTH12-04 Acentrosomal Microtubule Assembly and Reactivation of Quiescent Neural Stem Cells Hongyan Wang

WTH13 – Lipids and glycobiology (Session B)

- WTH13-01 Dementia risk modifier TMEM106B increases with physiological ageing and affects myelin lipid homeostasis in the hippocampus Jun Yup Lee
- WTH13-02 Lipids as a novel biomarker for amyotrophic lateral sclerosis Sophia Luikinga
- WTH13-03 Biophysical studies to understand GM1- α -synuclein interaction Laura Mauri

WTH15 – Other Topics (Session B)

- WTH15-01 CNS-active reactivator of inhibited acetylcholinesterase provides neuroprotection in mice exposed to nerve agent Zrinka Kovarik
- WTH15-02 Novel NMDA-Receptor Antagonist reverses Vanadium Neurotoxicity in mice and mitochondrial damage in C.elegans AMANY LADAGU
- WTH15-03 Pro-maturating effect on OPCs driven by transferrin-loaded extracellular vesicles Vanesa Soledad Mattera
- WTH15-04 Inhibition of bromodomain and extraterminal proteins attenuates microglial phagocytosis Marta Matuszewska,
- WTH15-05 INVESTIGATING OREXIN INVOLVEMENT IN STRESS-INDUCED BINGE EATING IN FEMALE MICE Muthmainah Muthmainah
- WTH15-06 Probing Caffeine administration as a medical management for hydrocephalus; an experimental study Funmilayo Olopade
- WTH15-07 Loss of PKCδ in sensory neurons promotes hyperalgesia through VEGF/VEGFR1 and NGF/TrkA in osteoarthritis induced rodent model GURJIT SINGH







POSTER SESSION B (WTH) / WEDNESDAY, AUGUST 31 AND THURSDAY, SEPTEMBER 1 2022

- WTH15-08 Berberine Loaded MCM-41 Mesoporous Silica Nanoparticles Affected Cell Viability and Apoptosis, and Improved Mitochondrial Health Anurag Singh
- WTH15-09 Quantification of striatal neuropeptide Y-expressing interneurons and their modulation by nicotinic acetylcholine receptors. Matyáš Smolík
- WTH15-10 The impact of physical exercise on brain microcirculation, astrocytes, and microglia in a model of cerebral hypoperfusion Marina Leardini-Tristao





OPTIONAL NETWORKING EVENTS PROGRAM

WELCOME RECEPTION

SUNDAY, AUGUST 28, 18:30 – 20:30 HAWAII CONVENTION CENTER / ROOFTOP

Please join us for the official ISN-APSN 2022 Welcome Reception at HCC. All participants and social guests are welcome to join this networking event.

RECEPTION AT POSTER AREA

MONDAY, AUGUST 29, 17:00 – 19:00 |Poster Area WEDNESDAY, AUGUST 31, 17:00 – 19:00 | Poster Area

Don't miss these great opportunities to view the Poster Presentations, chat with the exhibitors and mix and connect with your colleagues from all around the World. All participants are welcome to join these special events.

FAREWELL CELEBRATION

THURSDAY, SEPTEMBER 1, 19:00 – 22:00 | THE ROYAL HAWAIIAN RESORT OCEAN LAWN

Meet colleagues and international experts outside the session halls, at The Royal Hawaiian Resort Ocean Lawn.

Don't miss this great opportunity to mix, mingle and build connections that will last you a lifetime!

All participants and social guests are welcome to join this networking event.





TRAVEL AWARDEES

Congratulations to the following young investigators for the ISN-APSN 2022 Meeting travel awards:

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2020: Silvia Oldani

for the paper "SynaptoPAC, an optogenetic tool for induction of presynaptic plasticity"

2021: Md. Omar Faruk

for the paper "Muscarinic signaling regulates voltage-gated potassium channel KCNQ2 phosphorylation in the nucleus accumbens via protein kinase C for aversive learning"

YOUNG SCIENTIST LECTURESHIP AWARDS

YSLA01

Aberrant upregulation of glycolysis mediates CLN7 neuronal ceroid lipofuscinosis <u>Marina Garcia-Macia</u> Universidad de Salamanca, Institute of Functional Biology and Genomics (IBFG), Salamanca, Spain

YSLA02

Defining mechanisms of blood-brain barrier dysfunction in dementia using advanced organ-on-a-chip models

<u>Mootaz Salman</u>

University of Oxford, Department of Physiology, Anatomy and Genetics, Oxford, United Kingdom

YOUNG MEMBERS' SYMPOSIA AWARDS

YMS01-01	Involvement of nucleus accumbens neurons in cue-reward associative learning Carina Soares-Cunha Life and Health Sciences Research Institute (ICVS), School of Medicine, University of Minho, Braga, Portugal
YMS01-02	Medial Prefrontal Serotonergic Input Regulates Cognitive Flexibility Behavior in Mice Nuno Alves Columbia University, Psychiatry, New York, United States
YMS01-03	Laterodorsal tegmentum-Nucleus accumbens projections underlie cocaine-induced preference Bárbara Coimbra, University of Minho, ICVS/3B's - Associate Laboratory, BRAGA, Portugal
YMS02-01	TIMP-1 released early in Alzheimer's disease from reactive astrocytes enhances memory and synaptic plasticity in 5xFAD mice Sukanya Sarkar, Csir-Indian Institute Of Chemical Biology, Cell Biology And Physiology, Kolkata, India
YMS02-02	Pathogenesis of white matter microglial dystrophy in human microvascular brain injury and Alzheimer's disease Philip Adeniyi Oregon Health and Science University, Pediatrics, Portland, United States







YOUNG MEMBERS' SYMPOSIA AWARDS

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- YMS02-03 Correction of mTORC1-mediated protein synthesis rescues memory in mouse models of Alzheimer's disease Danielle Cozachenco Federal University of Rio de Janeiro, Institute of Medical Biochemistry Leopoldo de Meis, Rio de Janeiro, Brazi
- YMS03-01 Protein kinase signalling cascades associated with neuronal death in excitotoxicity Ashfaqul Hoque St Vincent's Institute of Medical Research, Metabolic Signalling, Fitzroy, Victoria, Australia
- YMS03-02 The role of activity-dependent phosphorylation in the presynaptic function of α-synuclein Elysa Carr The Florey Institute of Neuroscience and Mental Health, Presynaptic Physiology, Melbourne, Australia
- YMS03-03 Repression of Eif2-Mediated Brain Protein Synthesis in the Pathophysiology of Major Depressive Disorder Alinny Isaac Federal University of Rio de Janeiro, Institute of Medical Biochemistry Leopoldo de Meis, Rio de Janeiro, Brazil
- YMS04-01 Chemogenetic regulation of microglial activity in an Alzheimer's disease model Aja Hogan-Cann University of Western Ontario, Program in Neuroscience, London, Canada
- YMS04-02 Schizophrenic patients hiPSC-derived astrocytes impair synaptic engulfment by induced microglial-like cells (iMGs) in vitro
 Pablo L. Cardozo
 Federal University of Minas Gerais, Department of Biochemistry and Immunology, Institute of Biological Sciences, Belo Horizonte, Brazil
- YMS04-03 Ketogenic diet promotes resilience to social stress and modifies microglial morphology and ultrastructure in male mice Fernando González Ibáñez CRCHU de Québec-Université Laval, Axe Neurosciences, Quebec, Canada
- YMS05-01 Frontotemporal Dementia caused by Progranulin mutations is characterised by disrupted myelin lipid metabolism.
 Oana C Marian
 The University of Sydney, School of Medical Sciences, Sydney, Australia
- YMS05-02 Lipid-mediated impairment of axonal lysosome transport contributing to autophagic stress in Niemann-Pick disease type C
 Joseph Roney
 The Porter Neuroscience Research Center, National Institute of Neurological Disorders and Stroke, National Institutes of Health, Synaptic Function Section, Bethesda, United States
- YMS05-03 Impacted brain perfusion upon genetic deletion of hormone-sensitive lipase in mice Cecilia Skoug Lund university, Faculty of medicine, Department of Experimental Medical Science, Lund, Sweden
- YMS05-04 Differential brain lipid composition in the Octodon degus, a matter of age and sex. Lorena Cuenca-Bermejo Clinical & Experimental Neuroscience, Human Anatomy (University of Murcia), Murcia, Spain
- YMS06-01 Therapeutic effects with lesion-specific delivery of the NgR-Fc peptide in an experimental model of multiple sclerosis Paschalis Theotokis AHEPA University Hospital, 2nd Department of Neurology, Thessaloniki, Greece







YOUNG MEMBERS' SYMPOSIA AWARDS

YMS06-02	Cannabidivarin and Neural Stem cells, a new hope for Rett Syndrome? Diogo Miguel Lourenço Instituto de Medicina Molecular João Lobo Antunes, Faculdade de Medicina da Universidade de Lisboa, Lisboa, Portugal
YMS06-03	CoREST3 is involved in neuronal differentiation and HDAC2 expression in cortical neurons derived from human pluripotent stem cells Simon Maksour
	Illawarra Health and Medical Research Institute, University of Wollongong, Wollongong, Australia
YMS06-04	Characterizing the role of Mitochondrial Dynamics in postnatal Neural Stem Cell fate Rita Soares
	Instituto de Medicina Molecular João Lobo Antunes, Faculdade de Medicina, Universidade de Lisboa, Lisboa, Portugal, Instituto de Medicina Molecular João Lobo Antunes, Lisbon, Portugal
YMS07-01	Trafficking of the glutamate transporter is impaired in LRRK2-related Parkinson's disease Ludovica lovino
	University of Padova, Department of Biology, Padova, Italy
YMS07-02	It takes two kinases to tango: regulation of LRRK2 by PAK6 in health and disease Lucia lannotta
	University of Padova, Department of Biology, Padua, Italy
YMS07-03	Metabolic and plasma membrane alterations in β -glucocerebrosidase- related pathologies: steps to understand neurodegeneration Emma Veronica Carsana
	Università degli Studi di Milano, Dipartimento di Biotecnologie Mediche e Medicina Traslazionale, Milan, Italy
YMS08-01	Sensory processing dysregulations as reliable translational biomarkers in SYNGAP1 haploinsufficiency Maria Isabel Carreño Muñoz Universite de Montreal, Neurosciences, Montreal, Canada
YMS08-02	Withania somnifera (L.) Dunal helps regain earlier muscle function restoration after a compression injury to Sciatic nerve in mice Faiqa Sajid
	Government College University Faisalabad, Physiology, Faisalabad, Pakistan
YMS08-03	Furan neurotoxicity in Wistar rats involves behavioural defects, microgliosis, astrogliosis and oxidative damage Ifeoluwa O. Awogbindin
	University of Ibadan, Department of Biochemistry, Ibadan, Nigeria
YMS08-04	Reboxetine treatment reduces neuroinflammation and glial activation in the P301S mouse model Irene L Gutierrez

University Complutense of Madrid, Pharmacology and Toxicology, MADRID, SPAIN



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PORTO, PORTUGAL AUGUST 06-10, 2023

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