

JUNE 27th – JULY 2nd



Welcome to Cortical Connections 2021

Cortical Connections 2021 is an internationally recognized scientific event created to discuss developmental malformations of the corpus callosum with both scientific community and the lay public, including non-governmental organizations and Family Groups connected to the cause. The event will be held online over six days, June 27 – July 2, 2021, bringing together doctors, researchers of scientific relevance from a wide range of areas of knowledge, other clinicians, and individuals with callosal malformations and their families. The conference is organized by the International Research Consortium for the Corpus Callosum and Cerebral Connectivity (IRC5).

Event Structure

Series on Scientific Studies of Corpus Callosum Dysgenesis - 27th June to 1st July (8pm – 9:15pm GMT*)

Two scientific experts present current research on callosal dysgenesis (DCC) related the topic of the day, followed by an interactive discussion of these presentations and related research. Presentations and discussion in English.

Series on Living with Corpus Callosum Dysgenesis - 27th June to 1st July (9:30pm – 10:45pm GMT*)

Expert clinician-scientists answer questions commonly asked by people living with callosal dysgenesis, followed by an interactive discussion of questions raised by attendees. Pre-recorded presentations by experts in English with translations available. Live discussion in English.

Awareness Day Celebration – 2nd July The last day will be dedicated to celebrate the DCC Awareness Day, co-hosted by IRC5 and The Bridge. There will be simultaneous virtual rooms addressing specific topics related to the DCC and facilitating interaction among the international DCC community.

Virtual Poster Session - 27th June to 2nd July Throughout the six days of event, there will be a gallery of

scientific posters covering the following topics about corpus callosum dysgenesis and related developmental brain malformations. Attendees will be able to contact and interact with the authors at any time. See detailed information [here](#).

* Session times were scheduled to favor the simultaneous participation of people from different countries.

About IRC5

The consortium is composed of scientists and clinicians from around the world striving to make major discoveries that will make a significant difference to the lives of individuals with brain malformations. All of these activities occur in a highly collaborative manner to accelerate research and promote data sharing and to also preserve the progress made by individual investigators and prior collaborative arrangements. More information at [here](#).

Our Aims for Cortical Connections 2021

- Create a virtual environment to foster the scientific debate and awareness about developmental Brain Malformations and Corpus Callosum Disorders.
- Provide scientific information related to the topic for both scientific researchers and families.
- Facilitate interaction among researchers and families of patients in the international community.
- Generate informational tools (e.g. videos) to address questions from the community (compiled by The Bridge).

Cortical Connections 2021 - Program

June 27

8pm-9:10pm SCIENTIFIC PANEL: CORTICAL DEVELOPMENT

Chair: Roberto Lent (Brazil)

8:00 - 8:10 - **Opening**

Presenters: Fernanda Tovar Moll (Brazil) & Lynn K. Paul (United States)

8:10 - 8:30 - **200 million years of interhemispheric communication: 20 years later**

Speaker: Francisco Aboitiz (Chile)

8:30 - 8:50 - **Corpus Callosum Development Impacted by Zika Virus**

Speaker: Patricia Garcez (Brazil)

8:50 - 9:00 - **Discussion**

9:00 - 9:10 - **Quick talks: posters flash session**

CENPJ REGULATES AXONAL GROWTH IN CORTICAL NEURONS THROUGH MICROTUBULE DESTABILIZATION

Presenter: Pamela de Meneses lack Ximenes

9:30pm-10:45pm LIVING WITH DCC: CALLOSAL MALFORMATIONS: CLASSIFICATION, CAUSES, PREVALENCE
Speakers: Linda Richards (Australia), Elliott Sherr (United States) & Tally Lerman-Sagie (Israel)

(Israel)

Live discussion

June 28

8pm-9:15pm SCIENTIFIC PANEL: GENETICS

Chairs: Binnaz Yalcin (France) & Paul Lockhart (Australia)

8:00 - 8:20 - **Quick talks: posters flash session**

CHARACTERISATION OF A RECURRENT MISSENSE MUTATION IN THE DNA-BINDING DOMAIN OF THE NFI TRANSCRIPTION FACTORS

Presenter: Jonathan W.C. Lim (Australia)

COMPREHENSIVE GENETIC ANALYSIS CONFERS HIGH DIAGNOSTIC YIELD IN 16 JAPANESE PATIENTS WITH CORPUS CALLOSUM ANOMALIES.

Presenter: Sachiko Miyamoto (Japan)

8:20 - 8:40 - **Epidemiology of congenital defects of the central nervous system in South America**

Speaker: Jose Ignacio Zarante (Colombia)

8:40 - 9:00 - **Deciphering the genetic basis of corpus callosum disorders in mice**

Speaker: Binnaz Yalcin (France)

9:00 - **Discussion**

9:30pm-10:45pm LIVING WITH DCC: GENETICS & FETAL DEVELOPMENT

Speakers: Paul Lockhart (Australia), Tania Attié-bitach (France), Elliott Sherr (United States) & Christel Depienne (Germany)

Live discussion

June 29

8pm-9:15pm SCIENTIFIC PANEL: DIAGNOSTICS

Chair: Gregor Kasprian (Austria)

8:00 - 8:20 - **Callosal Dysgenesis: What Can Fetal MRI Tell Us?**

Speaker: Orit Glenn (United States)

8:20 - 8:40 - **The 50 shapes of the Corpus callosum**

Speaker: Gustavo Malinger (Israel)

8:40 - 9:00 - **Fetal Callosal Malformation Showcase: Pitfalls and Peculiarities**

Speaker: Matthew Whitehead (United States)

9:00 - **Discussion**

9:30pm- LIVING WITH DCC: DIAGNOSTICS & MEDICAL ISSUES

10:45pm Chair: Gregor Kasprian (Austria)

Speakers: Gregor Kasprian (Austria), Paulo Mattos (Brazil), Ricardo de Oliveira-souza (Brazil), Emily Castro Fonseca (Brazil), Romina Romaniello (Italy) & Fernando Vargas (Brazil)

Live discussion

June 30

8pm-9:25pm SCIENTIFIC PANEL: BRAIN IMAGING AND CONNECTIVITY

Chair: Filippo Arrigoni (Italy)

Quick talks: posters flash session

ROLE OF NRP1 IN CONTROLLING CORTICAL INTER-HEMISPHERIC CIRCUITS

Presenter: Fernando Martín Fernández

DIRECT INTERHEMISPHERIC CORTICAL COMMUNICATION VIA THALAMIC COMMISSURES: A NEW WHITE-MATTER PATHWAY IN THE RODENT BRAIN.

Presenter: Diego Szczupak (United States)

8:20 - 8:30 - **INCREASED GABA LEVELS IN POSTNATAL DEVELOPMENT ALTER CORTICAL INTER-HEMISPHERIC CIRCUITS**

Presenter: Lorena Bragg Gonzalo

8:30 - 8:50 - **Axonal guidance anomalies - where the corpus callosum meets the infratentorium**

Speaker: Karina Krajden Haratz (Israel)

8:50 - 9:10 - **Callosal-Specific Recruitment after Unilateral Injury**

Speaker: Emily Petrus (United States)

9:10 - **Discussion**

9:30pm- LIVING WITH DCC: BRAIN WIRING AND COMPENSATION

10:45pm Chair: Fernanda Tovar Moll (Brazil)

Speakers: Fernanda Tovar Moll (Brazil), Roberto Lent (Brazil), Diego Szczupak (United States), Filippo Arrigoni (Italy), Patricia Soares de Oliveira Szejnfeld (Brazil) & Karina Krajden Haratz (Israel)

Live discussion

July 1

8pm-9:15pm SCIENTIFIC PANEL: NEUROCOGNITIVE IMPACTS & INTERVENTIONS

Chairs: Lynn K. Paul (United States) & Rhonda Booth (United Kingdom)

8:00 - 8:20 - **Quick talks: posters flash session**

NEUROPSYCHOLOGICAL PROFILES IN CHILDREN WITH AGCC: A SYSTEMATIC REVIEW

Presenter: Alice Wright

IMAGINATIVE ELABORATION IN AGENESIS OF THE CORPUS CALLOSUM: TOPIC

MODELING AND PERPLEXITY

Presenter: Matthew Hoard

8:20 - 8:40 - **Using non invasive brain stimulation to boost neuroplasticity in children and adolescents with neurodevelopmental and neurological disorders**

Speaker: Alessandra Finisguerra (Italy)

8:40 - 9:00 - **Music as a therapeutic tool in Neurodevelopmental Conditions**

Speaker: Pamela Heaton (United Kingdom)

9:00 - **Discussion**

9:30pm- LIVING WITH DCC: BEHAVIORAL ISSUES, PARENTING AND INTERVENTIONS

10:45pm Chair: Rhonda Booth (United Kingdom)

Speakers: Lynn K. Paul (United States) & Warren S. Brown (United States)

Live discussion

DCC AWARENESS DAY CELEBRATION. July 2

• AusDoCC, Australia

09am- ADULTS WITH DCC AROUND THE WORLD
Hosts: Michael Shanahan & Jade Wright (Australia)



10am- CHAT ROOM: AUSTRALIA INTERNATIONAL
Hosts: Kristina Coburn, Maree Maxfield & Edna The Fat Tailed Dunnart (Australia)



• Corpal, United Kingdom

2pm- CHAT ROOM: UNITED KINGDOM INTERNATIONAL
Chairs: Rachel Watson & Rhonda Booth (United Kingdom)
Speaker: Aspa Psaradellis (United Kingdom)



3pm-4pm CHAT ROOM: EDUCATORS/TEACHERS
Chairs: Leanne Hussey & Yogesh Nakarja (United Kingdom)
Speakers: Karima Esmail, Karim Esmail, Aspa Psaradellis & Rachel Staplehurst (United Kingdom)



• Hungary National

4pm-5pm CHAT ROOM: **IN HUNGARIAN*
Host: Eszter Szabo (Hungary)



• Hungary International

5pm-6pm CHAT ROOM: **IN ENGLISH*
* Host: Eszter Szabo (Hungary)



• France National

6pm-6:30pm CHAT ROOM: **IN FRENCH*
Host: Kirsi Pirttimaki (France)



• France International

6:30pm-7pm CHAT ROOM: **IN ENGLISH*
Host: Kirsi Pirttimaki (France)



• Corpal, United Kingdom

7pm-8pm **SESSION: BRAIN DEVELOPMENT AND NEURO-RADIOLOGY IN DISORDERS OF THE CORPUS CALLOSUM: A UK PERSPECTIVE**



Chairs: Aspa Psaradellis & Raj Nagra (United Kingdom)
Speakers: Mary Rutherford & Tomoki Arichi (United Kingdom)

- **NODCC, United States**

9pm-9:30pm **GLOBAL DCC AWARENESS DAY CELEBRATION**



- **ABrDCC, Brazil**

10pm- CHAT ROOM: BRAZIL NATIONAL **IN PORTUGUESE*

Host: Marco Girão (Brazil)

10 pm - **Os direitos da pessoa com deficiência**

Speaker: Nuno Henrique Sobral (Brazil)

11 pm - **Aspectos neuropsicológicos das desordens do corpo caloso**

Speakers: Myriam de Carvalho Monteiro (Brazil),
Fernanda Tovar Moll & Patricia Soares de Oliveira
Szejnfeld (Brazil)

11:59 pm - **O papel da família nos processos formativos da pessoa com ACC**

Speakers: Martha Benevides da Costa & Rubia Girão
(Brazil)