

COVGEN NEWSLETTER

WHAT'S NEW IN COVGEN?

Welcome to our first issue of the COVGEN newsletter! This issue will cover the period between November 2021 and August 2022. This issue will include a brief overview of recent projects within COVGEN hubs, introductions for two new hubs that have joined, and provide a brief spotlight on a few influential researchers whose work directly aligns with COVGEN missions. We will also provide a brief recap of our first ever COVGEN summit. This event, which took place on November 10th, 2021, brought together members from all COVGEN hubs around the globe (100+ virtually and in-person) and gave hubs the opportunity to share their research on young families and children conceived, carried, and born during the COVID-19 pandemic – the COVID generation (COVGEN)!

HUB INTRODUCTION

SOUTH KOREA

COVGEN is thrilled to welcome our South Korea hub.

This hub is led by Drs. Hyorim Lee, Chunghee Chung,

Minsol Kim, and Byunghee An. This hub is comprised
of Kyungpook National University Family and Child

Study (KNUFCS) research group and is now working on
collecting a longitudinal dataset on the effects of
pregnancy, childbirth, and parenting experiences
during the COVID-19 period on maternal mental
health, subsequent childbirth intention, and the
development of children in infancy.

SPAIN

We also extend our welcome to our Spain hub. Led by Drs. Miguel Ruiz Veguilla, Nathalia Garrido Torres, and Benedicto Crespo-Facorro, this hub is comprised of a multidisciplinary team (psychiatry, psychology, biotechnology, molecular biology) that correlates biological findings with clinical findings through animal models, neuroimaging techniques, genetics and immunology.

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SUMMIT RECAP

Our 2021 COVGEN Alliance Summit began with two keynote presentations from Dr. Catherine Lebel (University of Calgary, Canada) and Dr. Livio Provenzi (University of Pavia, Italy). Dr. Lebel discussed pregnancy during COVID-19 pandemic and infant outcomes while Dr. Provenzi walked us through psychobiological footprints of prenatal COVID-19 related stress.

We then heard from Dr. Moriah Thomason (New York University, USA), the founding member of COVGEN, as she delivered her opening remarks and updated us on her research team's efforts to explore the effects of the COVID-19 pandemic on families and their children.

Next, we welcomed Drs. Presley Nichols, Elizabeth K. Wood, Michele Stites, Rachel Pride and Karen G. Martinez-Gonzalez in our first round of flash talks. Their presentations covered topics including the impact of COVID-19 on breastfeeding practices, weight-gain during pregnancy, parents' opinion of disruptions to special learning, as well as the effects of prenatal COVID-19 exposure and pandemic-related stress on infant outcomes.

After, we gathered for our panel discussion and heard from Drs. Stacy Drury, Dani Dumitriu, Mia Mclean, and William Fifer as they discussed how international collaboration can advance science practice and policy about children and families especially in the wake of global events such as the COVID-19 pandemic. Our panel was expertly moderated by Dr. Amy Elliott.

Our second round of flash talks included presentations from Drs. Elysia Larson, Renee Trsitano, Gerry Giesbrecht, Morgan Firestein, Tzipi Horowitz-Kraus where we heard about doulas and their important role in prevention of perinatal mood disorders in a pandemic, differences between reading on screen and paper, as well as the effects of COVID-19 on low birth-weight infants in NICUs of southeast Louisiana, susceptibility and resilience of infant, and infant neurodevelopmental outcomes.

We received 47 infographics from our hubs and Drs. Morgan Firestein and Leticia Regia Lima Cavalcante received the COVGEN Content and COVGEN Creativity awards, respectively. If you would like to watch a recording of the summit or view abstracts/infographics presented, please visit our website.



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PROJECT HIGHLIGHTS

1. LOS ANGELES

THE RELATIONSHIP BETWEEN MATERNAL PERCEIVED STRESS AND INFANT BEHAVIOR AT 6 MONTHS OLD DURING THE COVID-19 PANDEMIC

The authors investigated whether new mothers who reported higher levels of perceived stress during the COVID-19 pandemic would be more likely to report disruptive infant behavioural habits, such as excessive crying and interrupted sleep patterns at 6-months-old infants by completing online surveys. It was found that mothers who reported higher levels of perceived stress during the pandemic reported higher amounts of excessive fussiness and crying but longer amounts of uninterrupted sleep and shorter amounts of time taken to put the infant to sleep. How varying levels of maternal stress and infant behaviors relate to overall developmental status in our ongoing study is currently unknown. The authors are currently expanding this work to include data from 6 other sites.



2. LOS ANGELES

THE CORONAVIRUS, HEALTH, ISOLATION, AND RESILIENCY IN PREGNANCY STUDY (USC CHIRP)

This study started in April 2020 with a sample of expectant parents and we recently launched our two-year follow-up wave in spring 2022. Thus far, we have published results from the first wave of the study (see papers referenced in the footnote) and are currently submitting several papers looking at gestational outcomes and infant temperament in our sample. Of the papers that we have already published, we found heightened psychological distress (depression, anxiety, and perceived stress) among pregnant women sampled in spring 2020 compared to a pre-pandemic sample of pregnant women, and we also found that if pregnant women expected changes to their delivery plans such that they anticipated delivering without their partner or support person, they reported more psychological distress.



3. BOSTON-SEATTLE

PROMOTING YOUTH MENTAL HEALTH DURING THE COVID-19 PANDEMIC : A LONGITUDINAL STUDY

The researchers examined mental health changes in youth aged 7-15 from prior to the pandemic. They also looked at a number of potentially protective factors at the family level. They found that mental health problems increased dramatically among children and adolescents during the COVID-19 pandemic, particularly among those who experienced high levels of pandemic-related stressors including serious illness or death of a family member, significant financial loss, and social isolation. A number of simple strategies families engaged in appeared to promote better mental health during the pandemic including having a structured daily routine, limiting passive screen time use, limiting exposure to news media about the pandemic, and to a lesser extent spending more time in nature, and getting the recommended amount of sleep.



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- 1) Bradley, H., Fine, D., Smith, A.B., (2022, July). The relationship between maternal perceived stress and infant behavior at 6 months old during the COVID-19 pandemic [Poster presentation conference]. International Congress on Infant Studies. Ottowa CA. United States.
- 2) Morris, A. R., Herzig, S. E., Orozco, M., Truong, V., Campuzano, V., Sridhara, S., Sellery, P., & Saxbe, D. E. (2022). Delivering alone in a pandemic: Anticipated changes to partner presence at birth are associated with prenatal distress. Families, Systems, & Health, 40(1), 126-131. https://doi.org/10.1037/fsh0000679
- 2) Morris, A. R., & Saxbe, D. E. (2021). Mental Health and Prenatal Bonding in Pregnant Women During the COVID-19 Pandemic: Evidence for Heightened Risk Compared With a Prepandemic Sample. Clinical Psychological Science. https://doi.org/10.1177/21677026211049430
- 3) Rosen ML, Rodman AM, Kasparek SW, Mayes M, Freeman MM, et al. (2021) Promoting youth mental health during the COVID-19 pandemic: A longitudinal study. PLOS ONE 16(8): e0255294. https://doi.org/10.1371/journal.pone.0255294



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4. CALGARY

PREGNANCY DURING THE COVID-19 PANDEMIC (PDP) STUDY

The PdP study is an ongoing longitudinal cohort study that launched in April 2020. The goal is to understand how the COVID-19 pandemic affected the mental and physical wellbeing of pregnant individuals and their babies. Through this project, we are learning more about how to support families and their developing babies during times of uncertainty, stress, or anxiety. More than 11,000 pregnant individuals have enrolled in the study and have been asked to complete questionnaires about their experience of pregnancy during COVID-19, mental health, coping and resiliency, delivery, and their child's health and development. In optional follow-up studies, we are also collecting biological samples, such as hair, saliva, stool, and blood, to learn more about the ways that stress affects biological indicators of stress in pregnant people and their babies. The 2 year-postpartum survey launched in May 2022. The findings of the PdP study thus far can be found on our website (linked below).



5. BALTIMORE

CHILDREN'S HOME LEARNING ENVIRONMENT: THE USE OF DIGITAL DEVICES

In this study, parents completed a survey at the onset of the pandemic and again in the spring of 2022 regarding the at-home learning environment for their children (ages 6 through 13) and their own digital literacy. The study found that nearly half the parents reported that their confidence to use digital devices to assist their children's learning increased between time points. The study also showed that the majority of parents (81%) reported that their view about how the use of digital devices can influence education changed since COVID-19. Ultimately, parents' experiences with at-home learning resulted in a realization of the importance of digital technology as a learning tool.



6. RICHMOND, VA

COVID-19 AND PERINATAL EXPERIENCES (VCU COPE) STUDY

In this study, the researchers qualitatively investigated the lived experiences of pregnant and postpartum women in the United States during the COVID-19 pandemic. The authors argue that two key themes became apparent in interviewing these soon-to-be and new moms: the pandemic shined a light on the many typical struggles of motherhood; and, there is a lack of consistent, community-based and healthcare system resources available to address the complex needs of pregnant and postpartum women, both generally and during the COVID-19 pandemic.



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6) Kinser, P., Jallo, N., Moyer, S., Weinstock, M., Barrett, D., Mughal, N., Stevens, L., & Rider, A. (2022). "It's always hard being a mom, but the pandemic has made everything harder": A qualitative exploration of the experiences of perinatal women during the COVID-19 pandemic. Midwifery, 109, 103313. https://doi.org/10.1016/j.midw.2022.103313

⁴⁾ www.pregnancyduringthepandemic.com/publications

⁵⁾ Sonnenschein, S., & Stites, M. (2022). Children's Home Learning Environment: The Use of Digital Devices, <u>Unpublished manuscript.</u>



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SPOTLIGHT

HYORIM LEE

KYUNGPOOK NATIONAL UNIVERSITY, SOUTH KOREA

Professor Hyorim Lee from Kyungpook National University launched a new research project aimed at building longitudinal data on the impact of pregnancy, childbirth, and parenting experiences during the COVID-19 period on maternal mental health, subsequent childbirth intention, and the development of children in infancy.

Her research group received funding from the Korean government valued at 2 billion won, equivalent to 1.5 million USD for 10 years.



SPOTLIGHT

SERENA GRUMI IRCCS MONDINO FOUNDATION, ITALY

Dr. Serena Grumi is a post-doc researcher who has provided an extraordinary contribution to the management of the MOM-COPE study (the Measuring the Outcomes of Maternal COVID-19-Related Prenatal Exposure study). This important project, supported by the Roche Foundation grant, allowed her research group to monitor the pandemic-related stress impact on the developmental outcomes in mother-child dyads who were not exposed to SARS-CoV-2 infection.

Dr. Grumi is also highly engaged in the field of research about the telemedicine approach in delivering supporting interventions to families of children with special needs. Her research work has a high translational nature and is strongly consistent with the COVGEN alliance aims.



SPOTLIGHT

STEFANIA VACARU RADBOUD UNIVERSITY MEDICAL CENTER, THE NETHERLANDS

Dr. Stefania Vacaru is a post-doc researcher who is interested in early caregiving environment, or the parent-child interactions from the first moments of a baby's life. In their research, they investigated the contribution of these early relationships to child development from clinical, experimental, and psychobiological perspectives. Dr. Vacaru's recent work has led to numerous publications regarding the effect of COVID-19 pandemic on child-parent relationships and its effects on mental health.



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