



Réalisations de recherche 2024 de l'USIN de l'Hôpital de Montréal pour enfants



Pour connaître
toutes les
réalisations



67

Publications and présentations

En 2024, nos chercheurs ont publié **67** articles and **67** résumés

Subventions et bourses

Notre équipe talentueuse a reçu de nombreux prix et subventions pour ses efforts visant à améliorer les résultats et le bien-être de nos patients et de leurs familles.

\$9,260,022
Subventions



78



Conférences et publications

Cette année, nos chercheurs ont été invités à participer à différentes conférences et publications.

Vous souhaitez en savoir
plus sur la recherche en
néonatalogie ?
Scannez le code QR !



La recherche et l'innovation au sein du
service de pédiatrie et de néonatalogie
sont rendues possibles grâce au soutien
de la Fondation de l'Hôpital de Montréal
pour enfants.

la fondation
de l'hôpital
de montréal
pour enfants
the montreal
children's
hospital
foundation



Nous tenons à remercier tout particulièrement les membres de l'équipe de l'unité néonatale de soins intensifs, nos patients et leurs familles qui nous ont aidés à améliorer la qualité des soins en participant à nos recherches.

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2025

CHER.E.S COLLEGUES,

C'est avec grand plaisir que nous vous présentons les réalisations de recherche 2024 de l'unité de soins intensifs néonataux de l'Hôpital de Montréal pour enfants. Nous sommes impressionnés par la productivité et le travail acharné de toute notre équipe. La recherche sert de catalyseur à l'innovation clinique et à l'amélioration de la qualité des soins, et nous pouvons affirmer sans crainte que nous faisons avancer les choses !



Dans ce rapport, vous trouverez la liste des publications, des présentations, des subventions et des prix auxquels nous avons contribué au cours de la dernière année. Les sujets abordés vont de la réparation des lésions cérébrales à la santé cardiovasculaire des prématurés, en passant par l'amélioration du soutien aux familles.



La création d'un environnement de recherche fructueux nécessite la participation et la confiance de toutes les parties prenantes, qu'il s'agisse des scientifiques, des équipes de recherche, des équipes cliniques ou des familles. Merci à vous tous d'avoir rendu cela possible.

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L'ÉQUIPE 2024



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1. Abdelmageed WA*, Lapointe A, Brown R, Gorgos A, Luu TM, **Beltempo, M., Altit G#**, Dayan N#. (2024, April) Association Between Maternal Hypertension and Infant Neurodevelopment in Extremely Preterm Infants. *J Perinatol*; 44(4):539-547. #Share co-senior authorship.
2. Abboud, F. *, Easson, K. *, Ehrler, M., Ziolkowski, J., Rohlicek, C. V., Latal, B., Saint-Martin C., Gilbert, G., Greutmann, M., Devenyi, G. A., O’Gorman Tuura, R., Chakravarty, M. M, **Brossard-Racine, M.** (2024). Cortical alterations associated with executive function deficits in youth with a congenital heart defect. *Imaging Neuroscience*, 2, 1–17. https://doi.org/10.1162/imag_a_00371
3. Abou Mehrem A, Toye J, **Beltempo M**, Aziz K, Bizgu V, Wong J, Singhal N, Shah P. Resource Utilization and Outcomes of Moderate and Late Preterm Infants in Canada. *J Pediatr*. 2024 Feb 22:113976. doi: 10.1016/j.jpeds.2024.113976. Epub ahead of print. PMID: 38401787.
4. Al-Saoud, S., Nichols, E. S., **Brossard-Racine, M.**, Wild, C. J., Norton, L., & Duerden, E. G. (2024). A transdiagnostic examination of cognitive heterogeneity in children and adolescents with neurodevelopmental disorders. *Child Neuropsychology*, 1–19. <https://doi.org/10.1080/09297049.2024.2364957>
5. **Altit G**, Hamilton D, O'Brien K. (2024, July). Skin-to-skin care (SSC) for term and preterm infants. *Paediatr Child Health*. 2024 Jul 22;29(4):238-254. doi: 10.1093/pch/pxae015. PMID: 39045471; PMCID: PMC11261823.
6. **Altit G**, Hamilton D, O'Brien K. (2024, July). Les soins peau-à-peau chez les nourrissons à terme et prématurés. *Paediatr Child Health*. 2024 Jul 22;29(4):238-254. doi: 10.1093/pch/pxae014. PMID: 39045481; PMCID: PMC11261829.
7. **Altit G**, Lapointe A, Kipfmüller F, Patel N. (2024, July). Cardiac function in congenital diaphragmatic hernia. *Seminars in Pediatric Surgery*. <https://doi.org/10.1016/j.sempedsurg.2024.151438>.
8. Amar S*, Moore SS*, Wutthigat P*, Ohayon A*, Villegas Martinez D, Simoneau J, Renaud C, **Altit G.** (2024, March) Gestational age-specific markers associated with postnatal intervention in fetal suspicion of coarctation of the aorta. *American Journal of Perinatology*. doi: 10.1055/a-2298-4670.
9. Bearer C, Abman SH, Agostoni C, Ballard P, Bliss J, de Boode WP, Canpolat FE, Chalak L, Cilio MR, Dammann O, Davis J, El-Metwally D, Ferriero D, Ford S, Fuentes-Afflick E, Gano D, Giussani D, Gonzalez F, Gunn A, Hogeveen M, Huang AY, Kaplan J, Klebanoff M, Lachman P, Mak R, Malhotra A, Miller S, Mitchell WB, Molloy E, Mulkey SB, Roland D, Sampath V, **Sant'Anna G**, Schaff P, Singer LT, Stroustrup A, Tingay D, Tiribelli C, Toldi G, Tryggestad J, Valente EM, Wilson-Costello D, Zupancic J. Asperger's syndrome - about time to rename it? *Pediatr Res*. 2024 Feb;95(3):582-584
10. Bensouda B, Mandel R, **Altit G**, Ali N. (2024, April) Umbilical cord blood culture for early onset sepsis in preterm infants: A retrospective study. *Pediatric Research*. doi: 10.1038/s41390-024-03183-7
11. Biran V, Saba E*, Lapointe A, Macias CM*, Mawad W, Martinez DV, Cavallé-Garrido T, **Wintermark P, Altit G.** Cardiac function at follow-up in infants treated with therapeutic hypothermia for neonatal hypoxic-ischemic encephalopathy. *Pediatr Res*. 2024 Oct 31. doi: 10.1038/s41390-024-03694-Epub ahead of print. PMID: 39482497.
12. Bolduc, M. E. *, Rennick, J. E., Gagnon, I., Sokol, E., Majnemer, A., & **Brossard-Racine, M.** (2024). Navigating the healthcare system with my child with CHD: parental perspectives on developmental follow-up practices. *Cardiology in the Young*, 34(1), 37-43. <https://doi.org/10.1017/S1047951123001051>

13. Cervera SB*, Saeed S, Luu TM, Gorgos A, **Beltempo M**, Claveau M, Basso O, Lapointe A, Tremblay S, **Altit G**. (2024, March). Evaluation of the association between patent ductus arteriosus approach and neurodevelopment in extremely preterm infants. *J Perinatol.* 44(3):388-395.
14. Cervera BS, Saeed S, Luu TM, Gorgos A, **Beltempo M**, Claveau M, Basso O, Lapointe A, Tremblay S, **Altit G**. Impact of patent ductus arteriosus approach on neurodevelopmental outcomes in extremely preterm infants. *J Perinatol.* 2024 Jan 26. doi: 10.1038/s41372-024-01877-8. Epub ahead of print. PMID: 38278962.
15. De Carvalho Nunes G*, Barbosa de Oliveira C, Zeid M, Leone M, Mardakis S, Remmer E, Boyer J, Hailu E, **Altit G**, **Beltempo M**, **Shalish W**, **Sant'Anna G**. (2024, July) Early Bubble CPAP Protocol Implementation and Rates of Death or Severe BPD. *Pediatrics*; 154(1):e2023065373.
16. Dimmer A*, **Altit G**, Beauseigle S, Guadagno E, Koclas L, **Paquette K**, Sant'Anna A, Shapiro A, Poenaru D, Puligandla P. Clinical Care Trajectory Assessment of Children With Congenital Diaphragmatic Hernia and Neurodevelopmental Impairment (2024, Sep). *J Pediatr Surg.* 2024 Sep 12:161906. doi: 10.1016/j.jpedsurg.2024.161906. Epub ahead of print. PMID: 39368855.
17. Dimmer A*, Meehan M*, Beauseigle S, Koclas L, **Paquette K**, Michel Macias C*, Moore SS*, Sant'Anna A, Shapiro A, Simoneau J, Villegas Martinez D, **Altit G**#, Puligandla P#. (2024, April) Disease severity impacts perceived quality of life in congenital diaphragmatic hernia. *Archives of Disease in Childhood.* doi: 10.1136/archdischild-2024-326906. #Share co-senior authorship.
18. Dionne, E.*, Majnemer, A., Beauchamp, M. H., & **Brossard-Racine, M.** (2024). Factors associated with mathematical capacity in children with Developmental Coordination Disorder. *Research in Developmental Disabilities*, 147, 104710. <https://doi.org/10.1016/j.ridd.2024.104710>
19. Easson, K.*, **Khairy, M.**, Rohlicek, C.V., Gilbert, G., Majnemer, A., Nguyen, K.A., Luu, T.M., Couture, É., Nuyt, A.M., Deoni, S.C. and Descoteaux, M., & **Brossard-Racine, M** (2023). White matter microstructure is differently associated with executive functioning in youth born with congenital heart disease and youth born preterm. *Brain and Behavior*, 13(12), e3308. <https://doi.org/10.1002/brb3.3308>
20. Eberhard R, **Paquette K**, **Garfinkle J**, Myers KA. *Response to Hydrocortisone in an Extremely Preterm Neonate with Late-Onset Sepsis, Meningoencephalitis, and Drug-Resistant Seizures.* *Clin EEG Neurosci.* 2024 Mar;55(2):252-256
21. Faingold R*, Prempunpong C*, **Garfinkle J*** ... Association between Early Basal Ganglia and Thalami Perfusion Assessed by Color Doppler Ultrasonography and Brain Injury in Infants with Hypoxic-Ischemic Encephalopathy: A Prospective Cohort Study. *J Pediatr* 2024;271: 114086.
22. Feeley N, Kabajaasi O, Kenya-Mugisha N, Tagoola A, O'Brien K, **Duby J**. Benefits and Challenges of Implementing an Adaptation of Family Integrated Care in a Ugandan Setting. *Adv Neonatal Care.* 2024;24(2):172-180.
23. **Garfinkle J**, Khairy M,... Beltempo M. Corrected Age at Bayley Assessment and Developmental Delay in Extreme Preterms. *Pediatrics* 2024;153: e2023063654
24. **Garfinkle J**. Automation to approximate the Gestalt: applying machine learning to the general movement assessment. *Ped Res* 2024 online
25. Hébert A, McNamara PJ, de Carvalho Nunes G*, Maltais-Bilodeau C, Leclerc ME, Wutthigat P*, Simoneau J, Drolet C, **Altit G**. (2023, April). Patent ductus arteriosus management and pulmonary vascular disease at 36 weeks of extreme preterm infants. *Pediatr Res.* 2024 Jun 19. doi: 10.1038/s41390-024-03321-1. Epub ahead of print. PMID: 38898108.
26. Hennessy, A., Nichols, E. S., Al-Saoud, S., **Brossard-Racine, M.**, & Duerden, E. G. (2024). Identifying cognitive profiles in children with neurodevelopmental disorders using online cognitive testing. *Clinical Child Psychology and Psychiatry*, 29(2), 591–607. <https://doi.org/10.1177/1359104524122889>
27. Husain A, Knake L, Sullivan B, Barry J, Beam K, Holmes E, Hooven T, McAdams R, Moreira A, **Shalish W**, Vesoulis Z. AI models in clinical neonatology: a review of modeling approaches and a

- consensus proposal for standardized reporting of model performance. *Pediatr Res*. 2024 Dec 17. Published online ahead of print.
28. Jeanne E, Alvaro R, Shalish W. Reimagining apnea monitoring in the neonatal ICU. *Curr Opin Pediatr*. December 12, 2024. Online ahead of print
 29. Kabajassi O, Reiter A, Tagoola A, Kenya-Mugisha N, O'Brien K, Wiens MO, Feeley N, **Duby J**. Facilitators and constraints to family integrated care in low-resource settings informed the adaptation in Uganda. *Acta Paediatr*. 2024;113(8):1845-1851.
 30. Kadour Peero E, Banjar S, Khoudja, Ton-leclerc S, Beauchaud C, Benoit J, **Beltempo M**, Daham M, Gold P, Kadoch J, Jamal W, Laskin C, Mahutte N, Phillips S, Sylvestre C, Buckett W, Genest G. Reproductive outcomes of women with repeated implantation failures with IVIg treatment. *Sci Rep* **14**, 3876 (2024). <https://doi.org/10.1038/s41598-024-54423-z>
 31. Sant'Anna GM, Shalish W. Weaning from mechanical ventilation assessment of extubation readiness. *Semin Perinatol* 2024;48(2):151890.
 32. Kim SH, Jeanne E, **Shalish W**, Yoo JY, Rogers JA. Wireless wearable devices for continuous monitoring of body sounds and motions. *Clin Transl Med* 2024;14(2):e1593.
 33. Michel-Macías C*, Hébert A, **Altit G**. (2024, June). Optimizing Management of Chronic Pulmonary Hypertension in Preterm Infants: Strategies for a Complex Population. *Curr Opinion Ped*. PMID: 38957100. doi: 10.1097/MOP.0000000000001383.
 34. Michel-Macías C*, Moore SS*, De Carvalho Nunes G*, Villegas Martínez D, Dancea D, Wutthigat P*, Simoneau J, **Beltempo M**, **Sant'Anna G**, **Altit G**. (2024, May). Smaller left ventricle in extreme of prematurity and postnatal growth. *Journal of the American Society of Echocardiography*. <https://doi.org/10.1016/j.echo.2024.05.010>
 35. Moore SS*, Keller RL, **Altit G**. (2024, March) Congenital Diaphragmatic Hernia Pulmonary Hypertension and Pulmonary Vascular Disease. *Clin Perinatol*. 51(1):151-170. doi: 10.1016/j.clp.2023.10.001. PMID: 38325939
 36. Mukerji A, Read, B, Yang J, Baczynski N, Ng E, Dunn M, Ethier G, Abou Mehrem A, **Beltempo M**, Drolet C, da Silva O, Louis D, Lemyre B, Afifi J, Singh B, Sherlock R, Stavel M, Masse E, Kanungo J, Wong J, Bodani J, Khurshid F, Lee KS, Augustine S, Barbosa de Oliveira C, Makary H, Newman A, Ojah C, Shah P. CPAP Versus NIPPV Post-extubation in Preterm Neonates: A Comparative-Effectiveness Study. *Pediatrics*. 2024 Mar 21:e2023064045. doi: 10.1542/peds.2023-064045.
 37. Paolo Manzoni, Eugenio Baraldi, Fabio Midulla, Olivier Claris, Sandro Dessardo, Terho Heikkinen, Richard Thwaites, Bosco Paes, Xavier Carbonell-Estrany, Dmytro Dobryansky, Merih Cetinkaya, Adel S. Al Harbi, Ji-Man Kang, Anne Goh Eng Neo, Hsin Chi, **Guilherme Sant'Anna**, Mónica V Guillén, Gonzalo L Mariani²⁴, Marco Aurelio P Safadi, Soledad Urzua, Heather J Zar, Pierre Goussard, Barry Rodgers-Gray, Nicola Waghorne, Manuel Sanchez Luna. ARMADA (Advancing RSV Management And Disease Awareness) Taskforce: Systematic review and expert consensus on the use of long-acting monoclonal antibodies for prevention of respiratory syncytial virus disease, *Open Forum Infectious Diseases journal, in press*
 38. Paquet SP, Pronovost E, Simonyan D, Caouette G, Matte-Gagné C, **Olivier F**, Bartholomew J, Morin A, Mohamed I, Marc I, Guillot M. Maternal high-dose docosahexaenoic acid supplementation and neurodevelopment at 5 Years of preterm children. *Clin Nutr ESPEN*. 2024 Dec;64:253-262. doi: 10.1016/j.clnesp.2024.09.029. Epub 2024 Oct 11. PMID: 39396702.
 39. Puligandla P, Skarsgard E, Baird R, Guadagno E, Dimmer A*, Ganesco O, Abbasi N, **Altit G**, Brindle M, Fernandes S, Dakshinamurti S, Flageole H, Hebert A, Keijzer R., Offringa M, Patel D, Ryan G, Traynor M, Zani A, Chiu P. (2024, April) Canadian Congenital Diaphragmatic Hernia Collaborative. Diagnosis and management of congenital diaphragmatic hernia: a 2023 update from the Canadian Congenital Diaphragmatic Hernia Collaborative. *Arch Dis Child Fetal Neonatal Ed*. 18;109(3):239-252. doi: 10.1136/archdischild-2023-325865. PMID: 37879884
 40. Schmölzer G, Asztalos E, **Beltempo M**, Boix H, Dempsey E, El-Naggar W, Finer N, Mukerji A, Law B, Yaskina M, Shah P, Sheta A, Soraisham A, Tarnow-Mordi W, Vento M. Does the use of higher

versus lower oxygen concentration improve neurodevelopmental outcomes at 18-24 months in very low birthweight infants? Study protocol for a cluster randomized controlled trial. *Trials* **25**, 237 (2024). <https://doi.org/10.1186/s13063-024-08080-2>

41. Segatto K, Weigert RM, da Silveira MF, Frâncio F, Salvagni K, Silva SC, Martins Marba ST, **Sant'Anna G**. Optimized control of gas temperature and relative humidity during non-invasive respiratory support in preterm infants: A simple and low-cost intervention. *J Neonatal Perinatal Med*. 2024 Nov 3:19345798241291348. doi: 10.1177/19345798241291348.
42. Senechal E, Radeschi D, Lv S, Ruiz A, Jeanne E, Kearney R, Shalish W, Sant Anna G. Wireless Skin Sensors for Electrocardiogram and Heart Rate Monitoring in the Neonatal Intensive Care Unit: a prospective feasibility, safety, and accuracy study. *Frontiers in Bioengineering and Biotechnology*, in press.
43. Senechal, E., Radeschi, D., Kearney, R., Shalish, W., & Sant Anna, G. "Parents' and Health Care Providers' Perspectives on Vital Signs Monitoring Technologies in the Neonatal Intensive Care Unit: An International Survey." *American Journal of Perinatology*, in press.
44. Sullivan BA, Moreira AG, McAdams RM, Knake LA, Husain A, Qiu J, Mudireddy A, Majeedi A, **Shalish W**, Lake DE, Vesoulis ZA. Comparing machine learning techniques for neonatal mortality prediction: insights from a modeling competition. *Pediatr Res*. 2024 Dec 16. Published online ahead of print.
45. Surak A., **Altit G.**, Singh Y. (2024, March) Targeted Neonatal Echocardiography: Basics of knobology 101. *American Journal of Perinatology*. doi: 10.1055/s-0044-1782652.
46. Tugba Alarcon-Martinez, Elissa Remmer, Stephanie Mardakis, Marisa Leone, Johanne Boyer, Shasha Lv, Marc Beltempo, **Guilherme Sant'Anna**, Wissam Shalish. Interprofessional Perspectives on Non-Invasive Respiratory Support Practices in Extremely Preterm Infants: A Canadian Survey. *J Perinatology*, in press
47. Varghese NP, **Altit G**, Gubichuk MM, Siddaiah R (2024, June). Navigating Diagnostic and Treatment Challenges of Pulmonary Hypertension in Infants with Bronchopulmonary Dysplasia. *Journal of Clinical Medicine*. 13, no. 12: 3417. doi:10.3390/jcm13123417
48. **Wintermark P**, Lapointe A, Steinhorn R, Rampakakis E, Burhenne J, Meid AD, Bajraktari-Sylejmani G, **Khairy M**, **Altit G**, Adamo MT, Poccia A, Gilbert G, Saint-Martin C, Toffoli D, Vachon J, Hailu E, Colin P, Haefeli WE. (2024, March) Feasibility and Safety of Sildenafil to Repair Brain Injury Secondary to Birth Asphyxia (SANE-01): A Randomized, Double-blind, Placebo-controlled Phase Ib Clinical Trial. *J Pediatr*. 22;266:113879. doi: 10.1016/j.jpeds.2023.113879. Epub ahead of print. PMID: 38142044.
49. **Jabbour E**, Patel S, Lacroix G, Pechlivanoglou P, Shah P, **Beltempo M**. Validation of a costing algorithm and cost drivers for neonates admitted to the neonatal intensive care unit. *Am J Perinatol*. 2024 Jan 23. doi: 10.1055/a-2251-6238. Epub ahead of print. PMID: 38262468.
50. Hadj-Youssef S, Rondeau F, Kossi TG, Ghali N, Laberge M, Li P, **Beltempo M**, Lacroix G, Wissanji H. Determinants of adherence to age-specific guidelines for umbilical hernia repair in Quebec children. *Journal of Pediatric Surgery*. Feb 03 2024. <https://doi.org/10.1016/j.jpedsurg.2024.01.035>
51. Hodgson E, Briatico D, Klapman S, Skarsgard E, **Beltempo M**, Shah P, Huisman E, Mark Walton M, Livingston M. Exclusive Breast Milk in Infants with Uncomplicated Gastroschisis: A National Cohort Study. *Journal of Pediatric Surgery*. Feb 03 2024. <https://doi.org/10.1016/j.jpedsurg.2024.01.045>.
52. Ahmed A, Pullenayegum E, McDonald S, **Beltempo M**, Premji S, Pole J, Bacchini F, Shah P, Pechlivanoglou P. Preterm birth, family income, and intergenerational income mobility. *JAMA Netw Open*. 2024;7(6):e2415921. doi:10.1001/jamanetworkopen.2024.15921
53. **Fazio M**, Jabbour E, Bertelle V, Lapointe A, Lacroix G, Gravel S, Cabot M, Piedboeuf B, **Beltempo M**. Organizational Risk Factors for Nosocomial Infection in the Neonatal Intensive Care Unit. *Journal*

of Pediatrics: Clinical Practice. 2024 Vol. 13 Pages 200112 DOI:
<https://doi.org/10.1016/j.jpdc.2024.200112>

54. Campbell-Yeo M, Bacchini F, Alcock L, Mitra S, MacNeil M, Mireault A, **Beltempo M**, Bishop T, Campbell D, Chilcott A, Comeau J, Dol J, Grant A, Gubbay J, Brianna Hughes, Hundert A, Inglis D, Lakoff A, Lalani Y, Luu TM, Morton J, Narvey M, O'Brien K, Robeson P, Science M, Shah P, Whitehead L. Practice recommendations regarding parental presence in NICUs during pandemics caused by respiratory pathogens like COVID-19. (2024) *Frontiers in Pediatrics Front. Pediatr.* 12:1390209. doi: 10.3389/fped.2024.1390209
55. **Klinger G, Shah P, Helenius K, Isayama T, Adams M, Vento M, Lastrucci F, Norman M, Hakansson S, Beltempo M, Kusuda S, Lui K, San Feliciano L, Lehtonen L, Battin M, Bassler D, Yang J, Reichman B. Late-onset sepsis among extremely preterm infants of 24-28 weeks gestation – An international comparison in 10 high-income countries. Neonatology 2024; <https://doi.org/10.1159/000539245>**
56. De Carvalho Nunes G, Barbosa de Oliveira C, Leone M, Boyer J, Markadis S, Remmer, Hailu E, **Beltempo M**, Shalish W, Sant Anna G. Implementation of a Bubble CPAP Protocol in Extremely Preterm Infants and Rates of Delivery Room Intubation, CPAP Failure and Death/Severe BPD – a 6-year Quality Improvement Study. *Pediatrics* 2024; e2023065373. 10.1542/peds.2023-065373
57. Soullane S, Shah P, Lodha A, Shivananda S, Redpath S, Seshia M, Simpson CD, Pechlivanoglou P, Piedboeuf B, Ye XY, **Beltempo M**. Association of human resources with outcomes of very preterm infants: a survey-linked retrospective cohort study. *J Perinatol* (2024). <https://doi.org/10.1038/s41372-024-02083-2>
58. Jabour E, Wintermark P, Basfar W, Patel S, Pechlivanoglou P, Shah P, **Beltempo M**. on behalf of the Canadian Neonatal Network Investigators Costs of care for neonates with hypoxic-ischemic encephalopathy treated with therapeutic hypothermia and validation of the Canadian Neonatal Network costing algorithm. *Journal of Pediatrics: Clinical Practice.* <https://doi.org/10.1016/j.jpdc.2024.200124>
59. Lipp R, **Beltempo M**, Lodha A, McKanna J, Weiz D, Ricci F, Hicks M, Benlamri A, Mukerji A, Alvaro R, Ng E, Luu TM, Shah P, Abou Mehrem A. Association Between Non-invasive Respiratory Support or Intubation during Stabilization after Birth and Neonatal and Neurodevelopmental outcomes in Preterm Infants 23-25 Weeks' Gestation. *J Pediatr.* 2024 Aug 30:114270. doi: 10.1016/j.jpeds.2024.114270. Epub ahead of print. PMID: 39218207.
60. Abda A, Yoon E, Kanungo J, Ojah C, Lapointe A, Shah P, **Beltempo M**, Barrington K on behalf of the Canadian Neonatal Network Investigators. Assessing the Association Between Necrotizing Enterocolitis and the Type of Initial Central Venous Access in Preterm Infants. *Acta Paediatrica.* 07 Oct 2024. <https://doi.org/10.1111/apa.17444>
61. Bouadi N, **Beltempo M**, Éthier G, Boucoiran I, McDonald S, Villeneuve A. Deferred Cord Clamping in Twin Pregnancies across Canada: A National Survey of practices. *JOGC.* Volume 46, Issue 11, 102659
62. Mehrem A, **Beltempo M**. Noninvasive Respiratory Support for Stabilization after Birth is A Safe Approach in Micropreterm Infants *The Journal of Pediatrics*, Volume 0, Issue 0, 114395
63. Ahmed, A., Pullenayegum, E., McDonald, S, **Beltempo, M.**, Premji S, Pole, J, Bacchini, F., Shah, P, Pechlivanoglou, P. Association between preterm birth and economic and educational outcomes in adulthood: A population-based matched cohort study. *PlosOne.* November 6, 2024 <https://doi.org/10.1371/journal.pone.0311895>
64. Ahmed A, Pullenayegum E, McDonald S, **Beltempo M**, Premji S, Shoukry R, Pole JD, Bacchini F, Shah P, Pechlivanoglou P. Preterm Birth, Family Income, and Intergenerational Income Mobility. *JAMA Netw Open.* 2024;7(6):e2415921. doi:10.1001/jamanetworkopen.2024.1592
65. Ting J, Gupta-Bhatnagar S, Choudhury J, Yoon E, Ethier G, Sherlock R, Toye J, **Beltempo M**, Shah P. Antimicrobial utilisation patterns between 2013 and 2022 in Canadian neonates born at less than 33 weeks gestation: a retrospective cohort study. *The Lancet Regional Health - Americas* 2024 Vol. 40 Pages 100942

66. Ahmed AM, Grandi SM, Pullenayegum E, McDonald S, **Beltempo M**, Premji S, Pole J, Bacchini F, Shah P, Pechlivanoglou P. Short-Term and Long-Term Mortality Risk After Preterm Birth. *JAMA Netw Open*. 2024;7(11):e2445871. doi:10.1001/jamanetworkopen.2024.45871
67. Fazio, M., Jabbour, E., Patel, S., Bertelle, V., Lapointe, A., Lacroix, G., Gravel, S., Cabot, M., Piedboeuf, B., **Beltempo, M**. Association of Shift-Level Organizational Factors with Nosocomial Infection in the Neonatal Intensive Care Unit. *The Journal of Pediatrics: Clinical Practice*. 2024 September. doi: <https://doi.org/10.1016/j.jpdc.2024.200112>

RESUMES PUBLIES

1. Hazan Mea, J., Plessas-Azurduy, P., Sonea, T., Kanaprach, P., Michel Macias, C., Moore, S. S., Wutthigate, P., Simoneau, J., Villegas Martinez, D., Villeneuve, A., Lapointe, A., Sant'Anna, G., & **Altit, G.** (2024, December 3). Evaluating the Impact of Dexamethasone on Lung Ultrasound Scores in Extremely Preterm Infants with Evolving BPD [Poster presentation]. **Department of Medicine Research Symposium 2024**, 12:00–1:00 PM, Montreal, Canada.
2. Hazan Mea J*, Villegas Martinez D, Mardakis S, Remmer E, Cavallé-Garrido T, **Altit G.** (2024, November 14). Healthcare Professionals' Views on Music as a Comfort Measure during Targeted Neonatal Echocardiography [Poster presentation]. **Réseau Air, Intersectorialité, Recherche Respiratoire et Sonore (AIRS) Congrès 2024**, Poster 5, 5:00-6:00pm, Montreal, Canada.
3. Nogara S*, Michel-Macias C*, Moore SS*, Hebert A, Nouraeyan N, Drolet C, Lapointe A, Villeneuve A, Bensouda B, Villegas Martinez D, Simoneau J, Cavalle-Garido T, Dancea A, Sant'Anna G, **Altit G.** Left ventricular dimensions at 36 weeks corrected age in extremely preterm newborns: a prospective 4D-echocardiography study. **XXX Congresso Nazionale Società Italiana di Neonatologia**. October 31, 2024. Padova Congress, Padova, Italia. Poster presentation.
4. Hazan Mea J*, Villegas Martinez D, Mardakis S, Remmer E, Cavallé-Garrido T, Altit G. Music as a comfort measure during targeted neonatal echocardiography: perspectives from healthcare professionals. **Congrès provincial de la recherche mère-enfant 2024**. October 29, 2024. CHU de Québec, Quebec City, Quebec.
5. Magri A*, Roofigari N*, Kanaprach P *, Michel-Macias C*, Mazzarello M*, Mir M*, Wutthigate P*, Moore SS*, Simoneau J, Villegas Martinez D, Dancea A, Bertolizio G, Altit G. Correlation between renal and cerebral saturations and Doppler indices of systemic perfusion in congenital heart defects in newborns. **Congrès provincial de la recherche mère-enfant 2024**. October 29, 2024. CHU de Québec, Quebec City, Quebec. Poster presentation.
6. Hazan Mea J*, Martinez DV, Mardakis S, Remmer E, Cavalle-Garido T, **Altit G.** (2024, August) Impact of Music Therapy during Targeted Neonatal Echocardiography - A Survey of Neonatal Healthcare Professionals. 2024 RI-MUHC Summer Student Research Day. Montreal, Canada.
7. Kanaprach P*, Michel-Macias C*, Mazzarello M*, Rampakakis E, Mir M*, Wutthigate P*, Simoneau J, Villegas D, Shemie SD, Brossard-Racine M, Dancea A, Bertolizio G, Moore SS*, **Altit G.** (2024, August) Resistive index values of the anterior cerebral artery are associated with the instantaneous levels of cerebral saturation in newborns with congenital heart defects. 2024 RI-MUHC Summer Student Research Day. Montreal, Canada.

8. Sahussarungsi S*, Wuthigate P, Simoneau J, Ohayon A, Martinez DV, Henin C, Cavalle T, Dancea A, Mawad W, **Altit G.** (2024, August) Feasibility of 3D-Echocardiography for LV and LA performance and dimensions in the immediate postnatal neonatal period - a prospective study. 2024 RI-MUHC Summer Student Research Day. Montreal, Canada.
9. Aita M., Laporte G., Breton-Piette A., De CliBord-Faugère G., Lavallée A., Le May S., **Altit G.**, Larone Juneau A., Remmer E., Lippé S., Tremblay S., Héon M. (2024, June). Neonatal nurses' acceptability and feasibility of the NeuroN-QI intervention. 33rd Annual Meeting of the European Society of Paediatric and Neonatal Intensive Care (ESPNIC), Rome, Italy, June 11th-14th 2024.
10. Kanaprach P*, Michel-Macias C*, Mazzarello M*, Rampakakis E, Mir M*, Wuthigate P*, Simoneau J, Villegas D, Shemie SD, Brossard-Racine M, Dancea A, Bertolizio G, Moore SS*, **Altit G.** (2024, August) Resistive index values of the anterior cerebral artery are associated with the instantaneous levels of cerebral saturation in newborns with congenital heart defects. Presentation by the supervised student Pasinee Kanaprach. **NeoHeart 2024**, New York City, United States.
11. Daneshmand M, Dasari H, Alkatat A, **Altit G**, Grandi S, Nerenberg K, Daskalopoulou S, Malhamé I. (2024, May) Scoping review protocol: Assessment of Persistent Postpartum Hypertension. Maurice McGregor Cardiovascular Research Day, McGill University, Montreal, Quebec (Poster).
12. Michel Macias C*, Moore SS*, Nunes G*, Villegas Martinez D, Dancea A, Wuthigate P*, Simoneau J, Beltempo M, Sant'Anna G, **Altit G.** Small left ventricle in extreme of prematurity and postnatal growth. Presentation by supervised student Carolina Michel-Macias. **Pediatric Academic Societies' (PAS) Annual Meeting 2024**, May 2-6th, 2024, Toronto, Canada. (Poster).
13. Michel-Macias C*, Rampakakis E, Mazzarello M*, Mir M*, Moore SS*, Wuthigate P*, Simoneau J*, Villegas D, Shemie SD, Brossard-Racine M, Dancea A, Bertolizio G, **Altit G.** Cerebral and Renal Saturations Progressively Decrease In Neonates With Congenital Heart Defects And Diastolic Steal Prior To Intervention Period: A Prospective Study. Presentation by the supervised student Carolina Michel-Macias, **PAS Annual Meeting 2024**, May 2-6th, 2024, Toronto, Canada. (Poster).
14. Kanaprach P*, Michel-Macias C*, Mazzarello M*, Rampakakis E, Mir M*, Wuthigate P*, Simoneau J, Villegas D, Shemie SD, Brossard-Racine M, Dancea A, Bertolizio G, Moore SS*, **Altit G.** Resistive index values of the anterior cerebral artery are associated with the instantaneous levels of cerebral saturation in newborns with congenital heart defects. Presentation by the supervised student Pasinee Kanaprach. **PAS Annual Meeting 2024**, May 2-6th, 2024 Toronto, Canada.
15. Sahussarungsi S*, Wuthigate P*, Simoneau J*, Ohayon A*, Villegas Martinez D, Henin C, Cavalle T, Dancea A, Mawad W, **Altit G.** Feasibility of 3D-Echocardiography for LV performance and dimensions in the immediate postnatal neonatal period – a prospective study. Presentation by the supervised student Sariya Sahussarungsi. **PAS Annual Meeting 2024**, May 2-6th, 2024, Toronto, Canada. (Poster).
16. Jomleh H, Castro Gomez MJ, Rampakakis E, Lapointe A, **Altit G**, Gilbert G, Steinhorn R, Haefeli WE, Wintermark P*. Assessing myelination evolution to study neurorestoration in the neonatal hypoxic-ischemic brain. **PAS) Annual Meeting 2024**, May 2-6th, 2024, Presentation by doctorate student Hossein Jomleh (Supervised by Dr. Pia Wintermark), Toronto, Canada.
17. Cohen O, Poleg N, Herzlich J, Mendelsohn R, Marom R, Mangel L, Mandel D, **Altit G**, Moore SS. Heart Rate and Brain Injury in Infants with Hypoxic Ischemic Encephalopathy. **PAS Annual Meeting 2024**, Poster by the supervised student Shiran Moore. May 2-6, in Toronto, Canada.
18. Magri A*, Roofigari N*, Kanaprach P *, Michel-Macias C*, Mazzarello M*, Mir M*, Wuthigate P*, Moore SS*, Simoneau J, Villegas Martinez D, Dancea A, Bertolizio G, **Altit G.** Correlation between renal and cerebral saturations and Doppler indices of systemic perfusion in congenital heart

- defects in newborns. **Neonatal Cardiology Research Day**. November 7, 2024. Shriner's Hospital, Montreal, Quebec.
19. Sahussarungsi S*, Wutthigate P*, Simoneau J*, Ohayon A*, Villegas Martinez D, Henin C, Cavalle T, Dancea A, Mawad W, **Altit G**. Feasibility of 3D-Echocardiography for LV performance and dimensions in the immediate postnatal neonatal period – a prospective study. **Neonatal Cardiology Research Day**. November 7, 2024. Shriner's Hospital, Montreal, Quebec.
 20. Roofigari N*, Magri A*, Kanaprach P*, Michel-Macias C*, Mazzarello M*, Mir M*, Wutthigate P*, Moore SS*, Simoneau J, Villegas Martinez D, Dancea A, Bertolizio G, Cavalle-Garrido T, **Altit G**. Systemic Doppler velocities in newborns with congenital heart defects – a prospective study. **Neonatal Cardiology Research Day**. November 7, 2024. Shriner's Hospital, Montreal, Quebec.
 21. Hazan Mea J*, Plessas-Azurduy P*, Sonea T*, Kanaprach P*, Michel-Macias C*, Moore SS*, Wutthigate P*, Simoneau J, Villegas Martinez D, Villeneuve A, Lapointe A, Sant'Anna G, **Altit G**. Effect of Dexamethasone on Lung Ultrasound Scores in Extremely Preterm Infants with Evolving BPD. **Neonatal Cardiology Research Day**. November 7, 2024. Shriner's Hospital, Montreal, Quebec.
 22. Lopez C*, Brassard M, Mawad W, Villegas Martinez D, Gutierrez R, Raboisson MJ*, Altit G*. Échocardiographie de strain dans l'évaluation de la croissance des hypoplasies ventriculaires gauches chez le fœtus. **Neonatal Cardiology Research Day**. November 7, 2024. Shriner's Hospital, Montreal, Quebec.
 23. Roofigari N*, Magri A*, Kanaprach P*, Michel-Macias C*, Mazzarello M*, Mir M*, Wutthigate P*, Moore SS*, Simoneau J, Villegas Martinez D, Dancea A, Bertolizio G, Cavalle-Garrido T, **Altit G**. Systemic Doppler velocities in newborns with congenital heart defects – a prospective study. **Targeted Neonatal Echocardiography Quebec Collaborative 2024**. October 16, 2024. CHU Sainte-Justine, Montreal, Quebec.
 24. Kanaprach P*, Michel Macias C*, Moore SS*, Wutthigate P*, Hebert A, Nouraeyan N, Drolet C, Lapointe A, Villeneuve A, Bensouda B, Villegas Martinez D, Simoneau J, Cavalle-Garrido T, Dancea A, Sant'Anna G, **Altit G**. Micro-preemies and evaluation of right ventricular function and pulmonary pressure at 4 months corrected age. **Targeted Neonatal Echocardiography Quebec Collaborative 2024**. October 16, 2024. CHU Sainte-Justine, Montreal, Quebec. Won Best Oral Presentation.
 25. Hazan Mea J*, Villegas Martinez D, Mardakis S, Remmer E, Cavallé-Garrido T, **Altit G**. Music as a comfort measure during targeted neonatal echocardiography: perspectives from healthcare professionals. **Targeted Neonatal Echocardiography Quebec Collaborative 2024**. October 16, 2024. CHU Sainte-Justine, Montreal, Quebec.
 26. Magri A*, Roofigari N*, Kanaprach P *, Michel-Macias C*, Mazzarello M*, Mir M*, Wutthigate P*, Moore SS*, Simoneau J, Villegas Martinez D, Dancea A, Bertolizio G, **Altit G**. Correlation between renal and cerebral saturations and Doppler indices of systemic perfusion in congenital heart defects in newborns. **Targeted Neonatal Echocardiography Quebec Collaborative 2024**. October 16, 2024. CHU Sainte-Justine, Montreal, Quebec. Won Best Oral Presentation.
 27. Sahussarungsi S*, Wutthigate P*, Simoneau J*, Ohayon A*, Villegas Martinez D, Henin C, Cavalle T, Dancea A, Mawad W, **Altit G**. Feasibility of 3D-Echocardiography for LV performance and dimensions in the immediate postnatal neonatal period – a prospective study. **Targeted Neonatal Echocardiography Quebec Collaborative 2024**. October 16, 2024. CHU Sainte-Justine, Montreal, Quebec.
 28. Sahussarungsi S*, Wutthigate P*, Simoneau J*, Ohayon A*, Villegas Martinez D, Henin C, Cavalle T, Dancea A, Mawad W, **Altit G**. Feasibility of 3D-Echocardiography for LV performance and dimensions in the immediate postnatal neonatal period – a prospective study. **2024 RI-MUHC**

Summer Student Research Day. Afternoon Oral Presentations. August 14th, 2024, Montreal, Canada.

29. Dimmer A*, **Altit G**, Beauseigle S, Koclas L, **Paquette K**, Sant'Ana A, Shapiro A, Poenaru D, Puligandla P. Clinical Care Trajectory Assessment of Children with Congenital Diaphragmatic Hernia and Neurodevelopmental Impairment. Pediatric Academic Societies' **American Pediatric Surgical Association (APSA) Annual Meeting 2024.** May 18th 2024, Phronix, Arizona, USA.
30. Castro Gomez MJ, Jomleh H, Rampakakis E, Lapointe A, **Altit G**, Gilbert G, Steinhorn R, Haefeli WE, Wintermark P*. Evolution of fractional anisotropy over the first month of life in the context of hypoxic-ischemic encephalopathy, hypothermia and sildenafil. **PAS Annual Meeting 2024**, May 2-6th, 2024 Toronto, Canada. Oral presentation by doctoral student Maria Jose C. Gomez (supervised by Dr. Pia Wintermark). Publication number: 2150.4.
31. Heguy, C.*, Palmis, S.*, Karat, B., Gilbert, G., Saint-Martin, C., **Shalish, W.**, Duerden, E. G., & **Brossard-Racine, M.** (2024). Association between hippocampal subfield development and socio emotional outcomes in preterm infants. [Abstract]. In: Organization for Human Brain Mapping, Abstract Book 5: OHBM 2024 Annual Meeting. Aperture Neuro, 4(Suppl 1). <https://doi.org/10.52294/001c.120595>
32. Palmis, S.*, Heguy, C.*, Rampakakis, E, **Wintermark, P.**, Rohlicek, C., Saint-Martin, C., Gilbert, G., **Brossard-Racine, M.** (2024). Early life adversity differently affects cerebellar growth in NICU survivors. [Abstract]. In: Organization for Human Brain Mapping, Abstract Book 3: OHBM 2024 Annual Meeting. Aperture Neuro, 4(Suppl 1). <https://doi.org/10.52294/001c.120593>
33. Heguy, C.*, Palmis, S.*, Karat, B., Gilbert, G., Saint-Martin, C., Duerden, E. G., **Shalish, W.**, & **Brossard-Racine, M.** (2024). Are severe cardiorespiratory events associated with hippocampal subfield development in very preterm-born infants? [Abstract]. In: Healthy Brains Healthy Lives (HBHL). Healthy Brains Healthy Lives 2024 Symposium, McGill Journal of Medicine, 21(1). <https://doi.org/10.26443/mjm.v21i1.1140>
34. Heguy, C.*, Palmis, S.*, Karat, B., Gilbert, G., Saint-Martin, C., **Shalish, W.**, Duerden, E. G., & **Brossard-Racine, M.** (2024, June 23-27). Association between hippocampal subfield development and socio-emotional outcomes in preterm infants. 2024 Organization for Human Brain Mapping (OHBM) Annual Meeting. Seoul, South Korea.
35. Palmis, S.*, Hégu, C.*, Rampakakis, E., **Wintermark, P.**, Rohlicek, C., Saint-Martin, C., Gilbert, G., & **Brossard-Racine, M.** (2024, June 23-27). Early life adversity differently affects cerebellar growth in NICU survivors. 2024 Organization for Human Brain Mapping (OHBM) Annual Meeting. Seoul, South Korea.
36. Dionne, E. *, Majnemer, A., Beauchamp, M., & **Brossard-Racine, M.** (2024, May 13 – 17). Habiletés visuoperceptuelles des enfants ayant un Trouble Développementale de la Coordination. 91^e congrès de l'Acfas. Ottawa, ON, Canada.
37. Heguy, C.*, Palmis, S.*, Karat, B., Gilbert, G., Saint-Martin, C., Duerden, E. G., **Shalish, W.**, & **Brossard-Racine, M.** (2024, May 8-9). Are severe cardiorespiratory events associated with hippocampal subfield development in very preterm-born infants? 2024 Healthy Brains, Healthy Lives Symposium. Montreal, QC, Canada.
38. Palmis, S.*, Hill, L.D.*, Vahidi, H., Gallagher, A., Duerden, E.G. & **Brossard-Racine, M.** (2024, May 8-9). Social determinants of children's neurodevelopment – A scoping review. Pediatric Academic Societies 2024 Annual Meeting. Toronto, ON, Canada.
39. Heguy, C.*, Palmis, S.*, Karat, B., Gilbert, G., Saint-Martin, C., Duerden, E. G., **Shalish, W.**, & **Brossard-Racine, M.** (2024, May 4). Do neonatal respiratory morbidities influence hippocampal development in preterm-born infants? Pediatric Academic Societies Meeting. Toronto, On, Canada.

40. Jeanne E*, Yoo JY, Lv S, Sant'Anna GM, Weese-Mayer DE, Rogers J, Shalish W. *A novel wireless, wearable acoustic sensor for the monitoring of respiratory airflow in preterm infants*. Oral Presentation at the Perinatal & Child Health Research Annual Meetings. June 2024.
41. Jeanne E*, Yoo JY, Lv S, Sant'Anna GM, Weese-Mayer DE, Rogers J, Shalish W. *A novel wireless, wearable acoustic sensor for the monitoring of respiratory airflow and respiratory efforts in preterm infants: Phase 2 of an observational international collaborative pilot study*. Work in Progress Poster Presentation at Pediatric Academic Societies, Toronto, Canada. May 2024.
42. Senechal E, Radeschi D, Kearney RE, Shalish W, Sant'Anna GM. Advanced wireless wearable skin sensors in the NICU: Parents perspectives. Poster Presentation at Pediatric Academic Societies, Toronto, Canada. May 2024.
43. Senechal E, Radeschi D, Shalish W, Kearney RE, Sant'Anna GM. Advanced wireless wearable skin sensors in the NICU: Health care professionals perspectives. Poster Presentation at Pediatric Academic Societies, Toronto, Canada. May 2024.
44. Tremblay J*, Azevedo V, Pinto S, Radeschi D, Senechal E, Ikhlef L, Jeanne E, Cambell E, Diamond M, Lv S, Kearney RE, Shalish W, Sant'Anna G. Advanced wireless sensors for neonatal care in the delivery room: the AWARD simulation study. Work in Progress Poster Presentation at Pediatric Academic Societies, Toronto, Canada. May 2024.
45. Radeschi D, Senechal E, Shalish W, Sant'Anna G, Kearney RE. Accuracy of bradycardia and tachycardia detection using wireless heart rate monitoring in the Neonatal Intensive Care Unit. Work in Progress Poster Presentation at Pediatric Academic Societies, Toronto, Canada. May 2024.
46. Knake LA, Mudireddy A, Shalish W, Rios DR, Blum J, Abramoff M, Sonka M. A pilot study evaluating the sole use of continuous ventilator and vital sign data to predict extubation success in neonates. Poster Presentation at Pediatric Academic Societies, Toronto, Canada. May 2024.
47. Launay A, Remner E, Labelle C, Camacho A, **Duby J**. Family Driven Feeding: A Quality Improvement Initiative. 38th International Gravens Conference – Oral presentation
48. Kabajaasi O, Khan F, Kenya-Mugisha N, Wiens MO, Nambuya H, **Duby J**. Video-Assisted Education to Encourage Maternal Engagement in a Ugandan NICU - 38th International Gravens Conference – oral presentation
49. Khan F, Kenya-Mugisha, N, Nambuya H, Kabajaasi O, **Duby J**. “Family Integrated Care in Uganda: Perspectives of Healthcare Workers.” Annual Conference Association of Perinatal Women’s Health Nurses/Canadian Association of Neonatal Nurses (Montreal, QC), November 202 – Oral presentation
50. Ying Pang X, Mardakis S, Proulx M-C, **Duby J**. Family forward: Evaluating the presence and participation of families in interdisciplinary rounds in the NICU. Annual Conference Association of Perinatal Women’s Health Nurses/Canadian Association of Neonatal Nurses (Montreal, QC), November 2024 – Poster
51. Launay A, Camacho A, Mardakis S, Remner E, Garfinkle J, **Duby J**. Hold me close: There is always an opportunity for some form skin-to-skin care in the NICU. Annual Conference Association of Perinatal Women’s Health Nurses/Canadian Association of Neonatal Nurses (Montreal, QC), November 2024 – Poster
52. *Eva B. Senechal, Daniel J. Radeschi, Robert Edward Kearney, Wissam Shalish, MD **Guilherme Sant'Anna**. Advanced Wireless Wearable Skin Sensors in the NICU: Parents Perspective. Pediatric Academic Societies Conference 2024 [Poster Presentation].
53. *Eva B. Senechal, Daniel J. Radeschi, Wissam Shalish, Robert Edward Kearney, **Guilherme Sant'Anna**. Advanced Wireless Skin Sensors in the NICU: Healthcare Professionals Perspective. Pediatric Academic Societies Conference 2024 [Poster Presentation].
54. Justine Tremblay, Vivian Mara G. de Oliveira Azevedo, Sasha Pinto, Robert Edward Kearney, **Guilherme Sant'Anna**, Daniel J. Radeschi, Melissa Diamond, Wissam Shalish. Advanced Wireless

- Sensors for Neonatal Care in the Delivery Room: the AWARD Simulation Study. Pediatric Academic Societies Conference 2024 Works in Progress [[Poster Presentation](#)].
55. Carolina Michel-Macías, Shiran S. Moore, Gabriela De Carvalho Nunes, Daniela Villegas Martinez, Adrian Dancea, Punnanee Wutthigate, Jessica Simoneau, Marc Beltempo, **Guilherme Sant'Anna**, Gabriel Altit. Small left ventricle in extreme of prematurity and postnatal growth. Pediatric Academic Societies Conference 2024 [[Poster Presentation](#)].
 56. Daniel J. Radeschi, Eva B. Senechal, Wissam Shalish, **Guilherme Sant'Anna**, Robert Kearney. Accuracy of Bradycardia and Tachycardia Detection Using Wireless Heart Rate Monitoring in the Neonatal Intensive Care Unit. Pediatric Academic Societies Conference 2024 Works in Progress Poster [[Poster Presentation](#)].
 57. Daniel Radeschi, *Eva Senechal, Wissam Shalish, **Guilherme Sant'Anna**, Robert Edward Kearney. Signal Quality Estimation of Impedance Pneumography Signals in the NICU Using a Frequency-based Approach. IEEE. Engineering in Medicine and Biology Society, 2025
 58. Afifi J, **Beltempo M**, Hicks M, Richter L, Colby L, Bourque CJ, Butt A, Salami B, Olukotun M, Shah P, Luu TM. Sociodemographic and Family Characteristics of Children With and Without Neurodevelopmental Impairment in a Canadian Cohort of Extreme Preterm Children. Pediatric Academic Societies 2024 Meeting. Toronto, ON, Canada, May 2024 (poster)
 59. Kashkari H, Shah P, Yoon E, Afifi J, **Beltempo M**, Crane J, McDonald S, El-Naggar W. Umbilical Cord Management in Preterm Infants Born by Cesarean Delivery. Pediatric Academic Societies 2024 Meeting. Toronto, ON, Canada, May 2024 (poster)
 60. Piedboeuf S, Piedboeuf B, Guillot M. Simoyan D, Marc I, Audrey Hébert A, **Beltempo M**. Bronchopulmonary dysplasia in extreme preterms: does the definition matter? Pediatric Academic Societies 2024 Meeting. Toronto, ON, Canada, May 2024 (poster)
 61. Ahmed A, Grandi SM, Pullenayegum E, McDonald, SD, Pole J, Premji S, **Beltempo M**, Bacchini F, Shah PS, Pechlivanoglou P. Short and long-term mortality after preterm birth: Evidence from a national population-based cohort. Society for pediatric and perinatal research (SPER) annual meeting, Austin, Texas, June 17-18 and Society for epidemiologic research (SER) annual meeting, Austin, Texas, June 18-21
 62. Abda A, Yoon E, Kanungo J, Ojah C, Lapointe A, Shah P, Beltempo M, Barrington K. The Link Between Initial Intravascular Access in Preterm Infants and Necrotising Enterocolitis. Canadian National Perinatal Research Meeting 2024. Vancouver. BC. June 2024 (poster)
 63. Marc I, Lavoie P, McPhee A, Collins C, Simonyan D, Pronovost E, Guillot M, Mohamed I, **Beltempo M**, Boutin A, Fortier I, Sullivan T, Moore L, Makrides M. High-dose docosahexaenoic acid for bronchopulmonary dysplasia severity in very preterm infants: A collaborative individual participant data meta-analysis. Canadian National Perinatal Research Meeting 2024. Vancouver. BC. June 2024 (poster)
 64. Barbera R, **Beltempo M**, D'Souza R, McDonald S, Ronzoni S, Ting J, Boucoiran I. Canadian survey on the diagnosis and clinical management of preterm premature rupture of membranes in tertiary centers. Canadian National Perinatal Research Meeting 2024. Vancouver. BC. June 2024 (oral)
 65. Fazio, M., Jabbour, E., Soullane, S., Burstein, B., **Beltempo, M**. The relationship between unit occupancy and outcomes in the neonatal intensive care unit: a systematic review and meta-analysis. (2024). Canadian National Perinatal Research Meeting. Montreal, Canada. (Poster)
 66. Fazio, M., Patel, S., Piedboeuf, B., Drolet, C., Lapointe, A., Bizgu, V., Massé, E., Lacroix, G., **Beltempo, M**; on behalf of the Quebec investigators of the Canadian Neonatal Network (CNN). Association of maternal factors and unit occupancy with the probability of outborn birth in the neonatal intensive care unit. (2024). Canadian National Perinatal Research Meeting. Montreal, Canada. (Poster)
 67. Quintero Salazar, J., Ting, J., Abou Mehrem, A., Khurshid, F., Boucoiran, I., Shah, PS., Beltempo, M ; on behalf of the Canadian Neonatal Network Investigators. Predictors of neonatal early-onset

sepsis and risk stratification decision-making for preterm infants between 30 0/7 and 34 6/7 weeks.
(2024) Congrès provincial de la recherche mère-enfant. Quebec, QC, Canada (Poster)

SUBVENTIONS ET BOURSES

Field, T., (NPA) PAs: Miller, S. **Brossard-Racine, M.**, Brouillette, J., Camirand Lemyre, F., Dehaes, M., Gallagher, A., Grewal, J., Honfo, S., Khairy, P., Ogourtsova, T., Seed, M., Selvanathan, T., Simard, M.-N., Wald, R., Zhou, L., Zwicker, J. wards & Grants Received - Lifespan Brain Health Trajectories in Congenital Heart Disease: the role of sex & gender - Heart & Stroke, Brain Canada: Congenital Heart Disease Team Grant – 2024-2029 – **\$1,750,000**

Research Tools and Instruments (RTI) Grants, Natural Sciences and Engineering Research Council of Canada (NSERC)

Title: In-vitro neonatal respiratory system to understand the relationship between respiratory sounds, airway pressure, and lung mechanics

Principal investigator : **Shalish, W.** Co-investigator: **Sant’Anna, G.**

Amount: \$147,238

Young Researcher’s Scholarship, Fondation de la Recherche Pédiatrique

Title: Intermittent hypoxias and associated modifiable risk factors during neonatal hospitalization in very preterm infants

Role: Principal applicant

Amount: \$30,000 over 2 years

CIHR Project Grant (\$1,690,651) “Smart Discharges for newborns with sepsis: a personalized public health approach for improving discharge and post-discharge care in low-resource settings” Principal Investigators: Matthew Wiens, **Jessica Duby**, Nathan Kenya-Mugisha

Beltempo, M. 2024 Travel Award grant for Early Career Investigators, Pediatrics Academic Societies, **\$2500 USD**

Beltempo, M. Principal applicant: FRQ-S Chercheur-boursier clinicien Junior 2: Transformation des services de soins intensifs néonataux pour améliorer les issues de santé (**145,938\$ for 4 years**)

Beltempo M (NPA), Shah P, Lee KS, Shivanda S, Soraisham A, Ting J. Improving health care systems for neonatal intensive care in the Canadian Neonatal Network. **Montreal Children’s Hospital Foundation and Canadian Neonatal Foundation \$500,000 CAD**

Kharrat A (NPA), Shah P, **Beltempo (Co-App)**, Luu TM, Russel K, Ting J. Incidence and outcomes of neonatal septic shock in Canada: a nationwide population-based observational study. CIHR Operating Grant: Data Analysis Using Existing Databases and Cohorts. **\$75,000 CAD**

Mukerji A(NPA), Jain A (PA), Shah P (PA), Sidhu A (PA), Abou Mehrem A, I; Augustine S, Bacchini F; Barbosa de Oliveira C, **Beltempo M (Co-App)**, Coughlin K; Drolet C; Dunn M, Harabor A, Kalish B, Kanungo J, Khurshid F, Law, Brenda H; Lemyre B, Louis D, Narvey M, Read B, Schmoelzer G, Shahroor M, Sherlock R, Shivananda S, Singh B; Stavel M, Stevenson M; Wong J; Yi M; Yoon E; Yuen

JR, Zhu F. Post-extubation pressures on non-invasive respiratory support in preterm neonates: A prospective comparative effectiveness research study. **CIHR Project Grant \$367,199 CAD**

Abenhaim H, Klam S, **Beltempo (co-app)**, Balayla J. Maternal and Neonatal Outcomes of Cesarean Deliveries in Women with Muscular Dystrophy. Muscular Dystrophy Canada. **\$92,944 CAD.**

Thebaud B (NPI), Fergusson D, Shah P, Asztalos E, Nuyt AM, Guillot M, **Beltempo M (CO-I)**, Lacaze-Masmonteil, Bacchini F, Dunn M, Robeson P, Renesme L, Schmoeler G, Courtman D, Shahroor M, Mukerji A, Ramasay T, Presseau J. Helping Underdeveloped Lungs with Cells (HULC-2) - A Randomized Controlled Trial to test the efficacy of umbilical cord-derived mesenchymal stromal cells (UC-MSC) in reducing respiratory morbidity in preterm infants at risk of bronchopulmonary dysplasia (BPD). **CIHR Project Grant \$2,300,649**

Papenburg J, Bowen AC, Pellan Cheng M, Campbell T, Autmizquine J, Bullard J, Davis J, Gill P, Lopez A, Nashid N, Schwartz K, Barton M, Cambell A, Fanella S, Kellner J, Morris S, Pernicia J, Tong S, **Beltempo M (Co-I)**, Cooke S, Fontela P, Li P, Murthy S, Robinson J. Staphylococcus aureus Network Adaptive Platform trial in Pediatrics and Youth (SNAP-PY). **CIHR Project Grant \$1,067,176**

Stevenson M, Jain A, Mukerji A, Shah P, Yoon E, Bergman K, Katherina A, Schmoelzer G, Weisz D, Asztalos E, **Beltempo M (Co-I)**, Coughlin K, Ramanathan R, Shahroor M, Soraisham A, Wong J. A Cluster Crossover Randomized Controlled Trial of Manual T-piece versus Ventilator Positive Pressure Ventilation during Resuscitation of Extremely Premature Neonates: the MVP trial. **CIHR Project Grant \$711,451**

Pasquier JC, **Beltempo M(PI)**, Boucoiran I, Laforest-Lapointe I, Abenhaim H, Agrawal S, Arrieta Mendez M, Audibert F, Beaulieu JF, Bouron-Dal Soglio D, Bujold E, Chaillet N, Demers S, Gagnon R; Mâsse B, McDonald S, Ouellet A, Piedboeu B, Ronzoni S, Roy-Lacroix ME, Shah P, Tordjman LH. Étude préliminaire d'un ÉCR de phase 3 multicentrique testant l'association des antibiotiques et des probiotiques vaginaux pour des patientes ayant une rupture prématurée et préterme des membranes entre 24 et 32 semaines d'aménorrhée (Étude PROB-PROM) **CIHR Project Grant \$409,276**

Subventions et bourses : \$9,260,022

CONFERENCES ET PUBLICATIONS

1. **Altit G.** (2024, November 27-29). Point of Care Ultrasound Workshop. **I Congresso Internacional de Neonatologia do DF**, Brazilia, Brazil.

2. Altit G. (2024, November 27-29). Complex Cardiovascular Neonatal Conditions. **I Congresso Internacional de Neonatologia do DF**, Brazilia, Brazil.
3. Altit G. (2024, November 27-29). The Patent Ductus Arteriosus. **I Congresso Internacional de Neonatologia do DF**, Brazilia, Brazil.
4. Altit G. (2024, November 27-29). Neonatal Shock. **I Congresso Internacional de Neonatologia do DF**, Brazilia, Brazil.
5. Altit G (2024, November 14). Cardiopulmonary assessment and diagnostic approach of HIE. **Dr. Regan Giesinger Clinical Cardiopulmonary Physiology for the Care of the Sick Newborn Course**. Invited. Neonatal Hemodynamics Research Centre (NHRC) (Virtual; Toronto / Iowa).
6. Altit G (2024, September 26). Chronic pulmonary hypertension in BPD – a lifelong condition. **University of Miami – Neonatal Grand Rounds**. Miami, United States.
7. Altit G. (2024, September 23-25). Member of the organizing committee and Workshop on Point of Care Ultrasound. **Delphi Neonatal Innovation conference**, Fort Lauderdale, United States.
8. Altit G. (2024, September). Congenital Diaphragmatic Hernia – A 2024 Cardio-Respiratory Update. Sydney neonatal lectures. Sydney, United States.
9. Altit G. (2024, August 21). Precision in PDA Cath closure – Periprocedural Care. Panelist. **Neonatal Hemodynamics Research Center-PanAmerican Hemodynamics Collaborative webinar**. Virtual.
10. Altit G. (2024 August). The Complex Neonate with Pulmonary Hypertension. **Neoheart 2024**. Columbia University, Irving Medical Center, New York City, United States.
11. Altit G. (2024 August). Neonatal Point of Care Ultrasound Workshop. **Neoheart 2024**. Facilitator. Columbia University, Irving Medical Center, New York City, United States.
12. Altit G. (2024 August). Targeted Neonatal Echocardiography Workshop – Pulmonary Hypertension. **Neoheart 2024**. Facilitator. Columbia University, Irving Medical Center, New York City, United States.
13. Altit G. (2024 June). Enhancing Global Neonatal Cardiovascular Care through the NeoCardioLab Digital Platform. **The 29th International Perinatal Collegium**. Quebec City, Canada.
14. Altit G. (2024 May). Harmonizing Research, Education, and Transparency: NeoCardioLab's Journey At the heart of NeoCardioLab: Unconventional Career Pathway. **California Association of Neonatologists (CAN) and AAP District IX Section on Neonatal-Perinatal Medicine. 30th Annual Conference**. Coronado, California, United States of America.
15. Altit G (2024 May). Target shock – targeted agents reducing global hypoperfusion in extreme preTerms. **Pediatric academic societies 2024**. Oral (Hot) Symposium Invitation. Toronto, Canada.
16. Altit G (2024 May). Chronic pulmonary hypertension in BPD – a lifelong condition. **Bronchopulmonary Dysplasia Collaborative – Subgroup in Pulmonary Hypertension** (Virtual).
17. Altit G. (2024 April). Near-Infrared Spectroscopy and congenital heart diseases. 8th POCUSNEO Advanced Neonatal Care Symposium. (Virtual).
18. Altit G. (2024 April). Harmonizing research, Education and transparency: NeocardiLab's journey. **Boston Children Hospital Harvard**, Boston, United States (Virtual).
19. Altit G. (2024 March). At the heart of NeoCardioLab: Ultrasound Integration in Hemodynamic Research and Education. **Neonatal Clinical Forum presentations**. Massachusetts General Hospital – Harvard Affiliated Hospital, Boston, United States. (Virtual).

20. Altit G. (2024, February). Case – the “Bleu” Baby. **Bangkok International Neonatal Symposium 2024 – Meet the expert**; Neonatal Fellow sessions. Hua Hin, Thailand.
21. Altit G. (2024, February). **Bangkok International Neonatology Symposium 2024**. Lectures (80 participants): PAC system and echocardiography measurements; Acute pulmonary hypertension in HIE; Assessment and management of pulmonary hemodynamics and RV in the setting of Acute PH; Hemodynamic evaluation and management of TNE in chronic pulmonary hypertension. Facilitator of the Targeted Neonatal Echocardiography Workshop (40 participants). Bangkok, Thailand.
22. Altit G. (2024, Décembre). La Procédure de l’INESSS pour la gestion de l’ictère néonatale. **13^e Journées de néonatalogie du CHU Sainte-Justine**. Montreal, Canada.
23. Altit G. (2024, November 13). Bronchopulmonary-Dysplasia and Pulmonary Hypertension. Invited Keynote speaker. Joined **Canadian Association of Neonatal Nurses 2024 Conference and Canadian Association of Perinatal and Women’s Health Nurses 2024 Conference**. Montreal, Canada.
24. Altit G. (2024, October 3-4). Member of the organizing committee. Lectures : Cyanose réfractaire néonatale : c’est le cœur ou les poumons / Conclusion, échange et questions / Atelier de simulation : Pericardiocentèse et cardioversion. **Cardiologie Néonatale de la théorie à la pratique**. CHU Sainte-Justine, Montréal, Canada
25. Altit G. (2024, October). La Procédure de l’INESSS pour la gestion de l’ictère néonatale. **Conférencier formation continue de l’Association des biochimistes cliniques du Québec (ABCQ) 2024**. Auberge du Lac Taureau, Canada.
26. Altit G. (2024, September 17). Target Neonatal Echocardiogram. **13th McGill University Neonatal Conference Innovation and Technology in Neonatal Care**. Montreal, Canada.
27. Altit G. (2024, June 12). Congenital diaphragmatic hernia. Targeted Neonatal Echocardiography Foundation Curriculum. **Neonatal Hemodynamics Research Centre**. (Virtual)
28. Altit G, Launay A. (2024, May 22). Les soins peau à peau chez les nourrissons à terme et prématurés : recommandations et mise en pratique. **Communauté infirmière de pratique en néonatalogie du Québec**. (Virtual).
29. Altit G. (2024, April 12). Pulmonary Hypertension in Premature Infants. **Canadian Premature Babies Foundation – Scientific Preemie Chats** (Virtual). Ontario, Canada
30. Altit G. (2024 March). **Pan Canadian Fetal Cardiology Rounds**. Specialist invited for a panel discussion and audience interaction.
31. Altit G. (2024, November) Neonatal Cardiology Research Half-Day. Organizer. **Child Health and Human Development**. Shriner’s Hospital, Montreal, Canada.
32. Altit G. (2024, April). Harmonizing research, education and transparency: NeoCardioLab’s journey. Research Institute of the McGill University Health Centre. **Child Health and Human Development – Principal Investigator Presentations** (Monday noon seminars). Montreal.
33. Altit G, Zavalkoff S, Seguin J. (2024, April). Point of Care Ultrasound at the MCH: a story of innovation. Pediatric Medical Grand Round. **Montreal Children’s Hospital**, Montreal, Canada
34. Altit, G. **2024 April 17: Canadian Premature Babies Foundation**. *Moderating the Scientific Preemie Chats of the Canadian Premature Babies Foundation with Leah Whitehead (parent), Dr Adrienne Rahde Bischoff and Dr Audrey Hébert on Navigating the Controversies: Patent Ductus Arteriosus Management in Infants Born Less Than 28 Weeks.*
<https://www.youtube.com/watch?v=yorOU6nYxTo>

35. Palmis, S., Héguy, C., Rampakakis, E., **Wintermark, P.**, Rohlicek, C., Saint-Martin, C., Gilbert, G., & **Brossard-Racine, M.** (2024, November 27). Critical early life events differently affect cerebellar growth in infants born preterm or with congenital heart disease. 49th Preston Robb Neuroscience Day. Montreal, QC, Canada. [Accepted, but unable to attend due to parental leave]
36. Chen, N.H.*, Tardif, C. L., Saint-Martin, C., Pinchevsky, E., **Wintermark, P.**, **Brossard-Racine, M.** (2024, November 27). White matter microstructural alterations in school-aged survivors with neonatal encephalopathy treated with therapeutic hypothermia. 49th Preston Robb Neuroscience Day. Montreal, QC, Canada.
37. Héguy, C., Palmis, S., Karat, B., Gilbert, G., Saint-Martin, C., **Shalish, W.**, Duerden, E. G., & **Brossard-Racine, M.** (2024, September 27). Postnatal respiratory morbidities differently affect hippocampal subfield development in very preterm neonates. The 16th Annual IPN Retreat. Montreal, QC, Canada.
38. Dionne, E., Majnemer, A., Beauchamp, M., & **Brossard-Racine, M.** (2024, June 5-8). Factors associated with mathematical performance in children with Developmental Coordination Disorder. Joint Developmental Coordination Disorder 15th and International Motor Development Research Consortium 6th Conference. Ghent, Belgium. Oral Presentation. [Accepted, but unable to present due to parental leave].
39. **Brossard-Racine, M.** (2024, November 7). Neurodevelopmental and neurocognitive consequences of congenital heart disease. 2024 Neonatal Cardiology Scientific day, Montreal, Canada.
40. **Brossard-Racine, M.** Keynote speaker (2024, May 23). Neuroimaging in survivors of early life adversities. Quebec Bio-Imaging Network 2024 Annual Scientific Day, Montreal, Canada.
41. **Shalish W.** AI for neonatologists: a comprehensive overview of how AI will change clinical practice and academic life in the 21st century. Pre-conference session at the Pediatric Academic Societies Annual Meeting, Toronto, Canada, May 3rd 2024. Role: Speaker and moderator.
42. **Shalish W.** Can AI solve some of Neonatology's greatest challenges? Panel Discussion at the Pediatric Academic Societies Annual Meeting, Toronto, Canada, May 2024. Role: Speaker and moderator
43. **Shalish W.** Invited speaker, Annual Neonatology Conference, McGill University. Presentation entitled: 'A new vision on neonatal respiratory monitoring'.
44. **Shalish W.** Invited Speaker (virtual), Research Seminars for the Division of Neonatology at Columbia University/New York Presbyterian Hospital, New York, USA. Presentation entitled 'Reimagining apnea monitoring in the Neonatal Intensive Care Unit'
45. **Shalish W.** Invited Speaker, Neonatal Rounds for the Division of Neonatology at London Health Sciences Center, London, Ontario, Canada. Presentation entitled 'Reimagining apnea monitoring in the Neonatal Intensive Care Unit'.
46. Canadian Premature Babies Foundation Preemie Chat September 20, 2024 Labelle C & **Duby J** "Learning to Feed your Baby in the NICU"
47. McGill Annual Neonatal Conference (September 2024) **Duby J** "Innovations in Promoting Family Engagement in the NICU"
48. **SANT'ANNA, G.** Ontario, Canada. EPIQ Lung Health Grand Rounds. "*The Challenge of Premature Infants Extubation - Art, Science and Gamble*", April 2024 (Virtual)
49. **SANT'ANNA, G.** Ontario, Toronto. POCUSNEO & NEOPEDS Conference, Toronto. "*Strategies to minimize extubation failure in micro preemies*". May 2024
50. **SANT'ANNA, G.** British Columbia, Vancouver. Canadian Perinatal Research Meeting (CNPRM). Theme title: "*Health technology innovation and integration in clinical care*". Keynote Speaker. "Wireless Sensor Technology Innovation, Application and Vision for Future in Neonatal Care. June 4th, 2024.
51. **SANT'ANNA, G.** Montreal, Québec, Canada - "*Smart NICU Project at the Montreal Children's Hospital - MUHC*", XIII McGill Neonatal Conference Day, September 2024.

52. Montreal, Québec, Canada - “Smart NICU Project at the Montreal Children’s Hospital - MUHC”, Italian Delegation Visit, October 2024.
53. SANT’ANNA, G. SP, Brazil – II NeoBrain Brazil Conference. “The Brain-Lung Axis” and “Innovations and Technology in Neonatal Care and the Smart Hospital Project” - March 8 & 9, 2024
54. SANT’ANNA, G. Londrina, Brasil. 30 Years of HU Londrina, Neonatology. November 21-22, 2024. “Neonatology: 64 years of a successful history”; “Cuidados Gerais com RN PT extremos” and “Bubble CPAP”.
55. SANT’ANNA, G. Curitiba, Brasil. Sociedade Paranaense de Pediatria. Bubble CPAP workshop, “Cuidados Gerais com as via Aéreas”, “Pneumotórax” and “Inovação no Cuidado do Prematuro Extremo”. November 25 and 26, 2024.
56. SANT’ANNA, G. Brasília, DF, Brazil – II CINEO – November 28 and 29, 2024.
57. SANT’ANNA, G. Fort Lauderdale, FL – DELPHI Neonatal Innovation Conference: “The SMART NICU: a not-too-distant future?” - September 23-25, 2024
58. SANT’ANNA, G. Washington, DC –The 2024 Bubble CPAP & Non-Invasive Respiratory Management of the Neonate Conference. ““Extubating the Preterm Infant to non-invasive respiratory support: art, gamble or science?” and “Reproducibility of bCPAP in different clinical settings (A Bubble CPAP experience from Canada – The McGill Montreal Children’s Hospital). December 7-8, 2024.
59. SANT’ANNA, G. New York City - “Non-invasive ventilation in preterm infants: do we really need to intubate?” and “The Smart NICU Project” – 33rd Jen-Tien Wung Respiratory Care of the Newborn: A Practical Approach. Columbia University Conference on Neonatal Respiratory Care, October 19-20, 2024.
60. SANT’ANNA, G. New York City – Montefiore, “Optimal Timing of Extubation of Preterm Infants” at the 15th Annual: Current Topics in Neonatal Nutrition and Advances in Neonatal Care. Einstein College of Medicine and Montefiore Medical Center – Department of Pediatrics and the Division of Neonatology and Suny Stonybrook - October 22-23, 2024.
61. SANT’ANNA, G. Porto, Portugal. Hospital da Senhora da Oliveira - Guimarães. Weaning from Mechanical Ventilation: Evidence and Protocols”. October 2, 2024
62. SANT’ANNA, G. Porto, Portugal. IPoKRATES. Clinical Seminar. Nutrition for Preterm Infants: Where are we now and what is the future? “The association between fluids & nutrition during NICU stay and BPD”, “Feeding practices and lung aspiration: What do we know?” and “Continuous GI function monitoring in neonates: Is it possible?”. October 3-5, 2024. * IPoKRATES stands for the International Postgraduate Organization for Knowledge Transfer, Research, and Teaching Excellent Students. It is a non-profit, non-governmental foundation that invites distinguished professors and lecturers to give seminars on neonatal topics across the globe.
63. SANT’ANNA, G. Taipei, Taiwan – Taiwanese Society of Neonatology Conference - 09/03 - Advancing Monitoring Using a Family-Centered Approach; 11/03 - Extubation in Extremely Preterm Infants: Art, Science or Gamble? and 13/03 (Taipei) - Weaning from Mechanical Ventilation: Evidence-Based Strategies.
64. SANT’ANNA, G. São Paulo SP, Brazil – Workshop on “Neonatal Respiratory Care”. March 7, 2024
65. SANT’ANNA, G. São Paulo SP, Brazil – Workshop on “Neonatal Bubble CPAP and Respiratory Care”. March 20, 2025
66. SANT’ANNA, G. Rio de Janeiro, RJ, Brazil – Workshop on “Neonatal Bubble CPAP and Respiratory Care”. Congresso Brasileiro de Perinatologia. November, 2025
67. SANT’ANNA, G. São Paulo, Brazil. “The Brain-Lung Axis in the Premature Infant”. NeoBrain Brazil Highlights, Feb 15th, 2024.
68. SANT’ANNA, G. Maceió, Brasil. Reunião Clínica Hospital das Clínicas. *Uso do CPAP na UTIN Neonatal*. July 23rd, 2024.
69. SANT’ANNA, G. CAISM – X Jornada de Neonatologia. “CPAP após a Extubação” – August 23rd, 2024. Cuidados com a Instalação e Manutenção do CPAP.

70. **SANT'ANNA, G.** Toronto, Canada. PREEMIE Chats – Canadian Premature Babies Foundation, December 13th, 2024 – *Very Preterm Infants: Do we Really Need to Intubate?*
71. **SANT'ANNA, G.** CAISM – Hospital da Mulher J.A. Pinotti – “CPAP após a Extubação” – December 13th, 2024.
72. Emily Campbell*, Amanda Gross, Guilherme Mendes Sant'Anna, Wissam Shalish, Robert Edward Kearney. Modelling the Relationship between Bubble CPAP Pressure, Flow, and Canister Bubbling Sounds. 47th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC).
73. **Beltempo M.** Retour vers le futur : les ressources humaines en néonatalogie. Présentation scientifique de néonatalogie du CHU Sainte-Justine. Montréal, QC, Canada; Janvier 2024.
74. **Beltempo M.** L'organisation des soins en néonatalogie – est-il temps pour la gestion basée sur les données probantes? Présentation scientifique de Pédiatrie du CHU Sainte-Justine. Montréal, QC, Canada; Janvier 2024.
75. **Beltempo M.** Présentation: RCIU, faible poids et petit pour l'âge gestationnel – quoi dire à la famille ? Congrès annuel de l'Association des obstétriciens et gynécologues du Québec. Montreal, QC, Canada. May 2024
76. **Beltempo M.** The science of quality and the evidence of community. Saint-John Regional Hospital Neonatal Quality Improvement Day. Saint-John, NB, Canada. May 2024
77. **Beltempo M.** Organization of care in neonatology : time for evidence-based management? BC Children's Hospital Pediatric Grand Rounds. Vancouver, BC, Canada. September 2024
78. **Beltempo M.** Is quality scientific ? Kingston Hospital Pediatric Research Day. Kingston, ON, Canada. November 2024