

New Nova Scotia COVID-19 Health Research Coalition COVID-19 Funding Recipients

Project Description	Principal Investigator	Total Grant
This study will use a barrier-based risk management approach called Bowtie Analysis to develop a series of graphics to accurately and rapidly convey essential information on threats, consequences, prevention barriers, and mitigation barriers for the COVID-19 pandemic response.	Dr. Paul Amoyette	\$ 9,990.00
This study will contribute to, clarify, and enhance the best evidence-in-the-moment about programs and supports for vulnerable older adults living with dementia and their caregivers in the context of the COVID-19 pandemic.	Dr. Katie Aubrecht	\$ 54,908.00
This study will analyze the relationships between COVID-19 transmission rates, meteorological and air quality, and the fluctuations in social mobility in Nova Scotia to allow for better calibration of spatial spread in simulation models that are used to inform policy making.	Dr. Yigit Aydede	\$ 36,900.00
This study aims to better understand COVID-19 immune disruption and reversibility by examining global and SARS-CoV-2 specific immune dysregulation before, during and after therapy.	Dr. Lisa Barrett	\$ 75,000.00
This study will rapidly assess the potential of active derivatives of known antiviral drug compounds to inhibit the production of one of the building blocks the COVID-19 virus requires to replicate itself.	Dr. Stephen Bearne	\$ 25,000.00
This study will develop and test a device to aid the safe repositioning of critically ill, heavily sedated, intubated, and/or pharmacologically paralyzed COVID-19 patients.	Dr. Stephen Beed	\$ 10,700.00
This study will use the new 0.5T Magnetic Resonance Imaging scanner at the QEII Health Sciences Centre to determine whether evidence of brain abnormalities among COVID-19 inpatients is associated with the need for ventilation, and whether there are consistent features in the brains of COVID-19 patients that could inform treatment.	Dr. Steven Beyea	\$ 74,647.69
This study will compare Nova Scotians' well-being and coping during the COVID-19 pandemic with other jurisdictions, assess LGBTQ+ Nova Scotians' well-being and coping during the pandemic relative to LGBTQ+ individuals in other jurisdictions, and examine Nova Scotians' experiences with intimate partner violence during the pandemic in comparison to other jurisdictions.	Dr. Karen Blair	\$ 32,559.99
This study aims to provide better understanding of the Willingness among healthcare providers and the intrapersonal traits most commonly associated with a person's Willingness, namely resilience and empathy.	Ms. Megan Brydon	\$ 3,000.00

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This study will use novel data mining approaches to analyze primary care electronic medical record data in order to better meet the needs of patients during and after the pandemic.	Dr. Fred Burge	\$ 35,000.00
This study will assess the needs of neonatal intensive care unit (NICU) families at the IWK Health Centre during the COVID-19 pandemic, identify barriers and facilitators to implementing virtual care options for these families during the pandemic, and evaluate one potential virtual care platform for NICU families.	Dr. Marsha Campbell Yeo	\$ 50,000.00
This study will use a Learning Health System framework to examine the IWK Health Centre COVID-19 pandemic planning work and identify strategies that we can use to be prepared for future pandemics.	Dr. Janet Curran	\$ 50,000.00
Don't Count Us Out! – to identify the determinants of trust that African Nova Scotians have with the COVID-19 pandemic strategy and response, and demonstrate how race-based data collection during the COVID-19 pandemic can establish foundational capacity to extend race-based analysis to other health and health care issues.	Dr. OmiSoore Dryden	\$ 40,000.00
This study will provide the necessary pre-clinical assessment and validation of second-generation SARS-CoV-2 vaccine candidates required to meet Public Health Agency of Canada and World Health Organization guidelines for ethical first-in-human clinical assessment on an expedited timescale.	Dr. Roy Duncan	\$ 25,000.00
This study will develop a prototype textile that can be used to locally manufacture personal protective equipment such as surgical masks and respirators to deal with shortfalls in global supply chains.	Dr. John Frampton & Professor Gary Markle	\$ 50,000.00
This study will rapidly develop tailored screening and intervention tools to support mental health and prevent elevated job burnout or safety risks in COVID-19-responding health care staff in Nova Scotia.	Dr. Debra Gilin	\$ 47,640.00
This study will develop a new, digital droplet polymerase chain reaction (ddPCR) COVID-19 test and determine whether it is more sensitive than the existing real-time PCR test.	Dr. Todd Hatchette	\$ 44,000.00
This study will employ a type of artificial intelligence called a hyperheuristic to provide direction on how to deploy COVID-19 tests, vaccines, or other interventions.	Dr. James Hughes	\$ 42,000.00
This study will examine the consequences and outcomes of cultural stigma from COVID-19 ordinances in three jurisdictions of Nova Scotia, New Zealand, and Australia.	Dr. Robert Huish	\$ 28,600.00
As part of the existing Canadian Longitudinal Study on Aging (CLSA), this study will determine individual factors that increase risk of COVID-19 symptoms and severity, understand the impact of pre-COVID factors such as socioeconomic status on health outcomes, and assess the long-term health and social consequences of COVID-19 and associated mitigation strategies on older adults.	Dr. Susan Kirkland	\$ 35,000.00

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This study will identify microbes associated with COVID-19 disease severity and create and assess the accuracy of a microbiome-based COVID-19 risk assessment tool.	Dr. Morgan Langille	\$ 30,000.00
This study, co-led by Mi'kmaq community health leaders, will use a Mi'kmaq-developed health data linking registry to determine the prevalence and health experience of Mi'kmaq community members in Nova Scotia diagnosed with COVID-19.	Dr. Margot Latimer	\$ 36,710.00
This study will test whether a new type of personal protective equipment (PPE) made in the Maritimes of reusable material can be put on faster and more safely than standard PPE.	Dr. Peter MacDougall	\$ 15,000.00
This study will identify solutions that can be implemented to address health law- and policy-related deficiencies and gaps that have been caused or revealed by COVID-19.	Dr. Constance MacIntosh & Dr. Matthew Herder	\$ 50,000.00
This study will determine how temperature affects both coronavirus propagation and cellular response to infection, allowing for better interpretation of ongoing vaccine research.	Dr. Craig McCormick	\$ 30,360.00
This study will determine what changes in practice will be required to ensure a safe return of the routine delivery of oral healthcare services to the Dalhousie University Faculty of Dentistry teaching clinic and to dental practices throughout Nova Scotia.	Dr. Mary McNally	\$ 25,000.00
This study will link mobile sensing and clinical data to assess the impact of social distancing and counterbalancing behaviours on mental health during the COVID-19 crisis and 3 months later.	Dr. Sandra Meier	\$ 50,000.00
This study will evaluate, refine, and implement a virtual patient-centered platform to guide COVID-19 patient care in the community, and examine clinical predictors of COVID disease progression.	Dr. Ashley Miller	\$ 73,000.00
This study will investigate the degree to which Nova Scotia's COVID-19 pandemic response has affected morbidity and mortality in patients with known or new onset cardiovascular or neurovascular disease.	Dr. Ratika Parkash	\$ 73,750.00
This study will determine the optimal upper respiratory tract specimen for detecting virus in COVID-19 patients, the point at which the virus is no longer detected in infected individuals' upper respiratory tracts, the point at which recovered patients are no longer infectious, and how antibody titres correlate with viral shedding and disease severity.	Dr. Glenn Patriquin	\$ 25,000.00
This study will generate large quantities of coronavirus spike proteins that can be used to produce immune diagnostic kits and in subunit vaccines directed at COVID-19.	Dr. Chris Richardson	\$ 25,000.00

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This study will investigate how differences in frailty and fitness among people being assessed for COVID-19 are related to the development, progression, and outcomes of the disease.	Dr. Kenneth Rockwood	\$ 73,000.00
This study will determine how lessons from the impact of COVID-19 can inform social policy and healthcare measures to better respond to gender-based violence (GBV) within the African Nova Scotian communities and how health care systems can incorporate culturally appropriate programming, resources, and services to support better responses to GBV and other adverse childhood experiences in African Nova Scotian communities.	Sen Dr. Wanda Thomas Bernard & Dr. Nancy Ross	\$ 45,000.00
This study will develop and implement a "one stop shop" for medical specialist consultation by primary care providers working with long-term care residents to manage COVID-19 outbreaks with real-time evaluation of feasibility and effectiveness using an implementation science methodology.	Dr. Nhaba Shetty & Dr. Paige Moorhouse	\$ 47,531.25
This study aims to protect health care workers from contracting COVID-19 by developing a device that could be placed over potentially infectious patients like a 'bubble' to hold infected air during intubation.	Dr. Ana Sjaus	\$ 30,000.00
This study will develop an approach to disinfect N95 masks with ultraviolet light so that they can be reused in the event of supply issues.	Dr. Amina Stoddart	\$ 31,673.00
This study will describe and compare clinical characteristics of hemodialysis patients with known or suspected exposure to COVID-19 with those of hemodialysis patients with no known or suspected exposure to COVID-19, and describe the clinical outcomes of hemodialysis patients who develop COVID-19 with those who do not.	Dr. Karthik Tennankore	\$ 43,103.36
This study will provide solution-oriented recommendations for how clinical services, health promotion, and the collection of disaggregated race-based health data can improve access to COVID-19 testing and health services, and reduce infections by identifying the social determinants that create exposure to and risk for COVID-19 infections and its exacerbation of current illnesses experienced by African Nova Scotians in the Preston communities	Dr. Ingrid Waldron	\$ 75,000.00
This study will determine whether a pentavalent COVID-19 vaccine can be quickly developed by formulating SARS-CoV-2 antigen with a commercial quadrivalent influenza virus vaccine.	Dr. Jun Wang	\$ 35,000.00
This study will assess the self-perceived stress of primary caregivers of infants under 6 months old, and how the COVID-19 State of Emergency has impacted infant feeding in Nova Scotia.	Dr. Kyly Whitfield	\$ 9,918.00

For more information, contact

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