UNDERGRADUATE RESEARCH IN NATURAL AND CLINICAL SCIENCE AND TECHNOLOGY (URNCST) JOURNAL
Read more URNCST Journal articles and submit your own today at: https://www.urncst.com

CONFERENCE ABSTRACT BOOK **OPEN ACCESS**

The 2025 ASPIRE Research Program Symposium Abstract Booklet

Shania Sheth, BHSc [1]*, Siddharth Seth, BHSc [1]

[1] Faculty of Medicine, University of Toronto, Toronto, Ontario, Canada M5S 1A1

*Corresponding Author Details: shania.sheth@mail.utoronto.ca

Abstract
The ASPIRE (Advocacy, Support, Perseverance, Innovation, Research, Experience) Research Program, founded by Shania Sheth and Siddharth Seth, provides students with early research experience and the opportunity to conduct their own research project. The ASPIRE 2025 cohort of 65 undergraduate students worked together in teams of 2-6 over a span of 4 months to create and execute a novel research project on a topic of their choice. The teams received guidance by experienced student research mentors, allowing students to learn, develop, and refine essential research skills. The program focused on teaching students how to develop effective search strategies, perform data extraction, and analyze research papers thematically to construct a well-structured narrative review. Students concluded the program by presenting their work in the form of a research poster at the ASPIRE Research Symposium, a full-day event filled with guest speakers and networking opportunities. Presented in this abstract booklet is the culmination of months of hard work, dedication, and achievement. We hope you enjoy reading through the 2025 ASPIRE Research Program abstracts. We are very excited to see what our aspiring researchers achieve next! For future opportunities, feel free to follow aspire.research on Instagram and reach out to aspire.research.program@gmail.com.

Keywords: The ASPIRE Research Program; undergraduate research; narrative literature review; poster presentations; research competition

Table of Contents

Conference Abstracts

Note: These abstracts have been reproduced directly from the material supplied by the authors, without editorial alteration by the staff of the URNCST Journal. Insufficiencies of preparation, grammar, spelling, style, syntax, and usage are the authors.

Exploring the Role of Creative Art Forms in the Rehabilitation of Individuals with Cerebral Palsy: A Narrative Literature Review

Anne Liu, BHSc Student [1], Corey Li, BHSc Student [1], Jenny Han, BHSc Student [1], Cynthia Wang, BHSc Student [1], Yifan Eva Xie, BHSc Student [1], Iris Ma, BHSc Student [1]
[1] Faculty of Health Sciences, Queen's University, Kingston, Ontario, Canada K7L 3N6

Introduction: Cerebral palsy (CP) is a group of neurological disorders characterized by motor impairments and associated functional limitations. Creative arts, including music, dance, visual arts, and drama, have increasingly been integrated into rehabilitation programs to support development. This review aims to explore the role and potential benefits of creative arts in the rehabilitation of individuals with CP.

Methods: A literature search was conducted on both PubMed and Web of Science. Keywords included "cerebral palsy" and "creative arts" or "dance" or "music" or "visual arts" or "drama." Articles in English written after 2009 were included.

Results: The literature search resulted in 46 relevant articles. The articles were analyzed narratively and categorized into three subcategories, namely physical, neurological, and social rehabilitation. Dance-based interventions were found to improve balance, gait, range of motion, and brain activity associated with positive emotions. Music-based interventions improved coordination, strength, and movement efficiency. Neurologic music therapy was found to improve neuroplasticity, white matter integrity, and connectivity between motor areas of the brain. Dance and music interventions enhanced emotional stability, motivation, sense of belonging, collaboration, and self-esteem.

Conclusion: Dance and music interventions offer unique and substantial benefits toward the physical, social, and neurological rehabilitation of CP patients. By highlighting the significance of holistic rehabilitation, these approaches create new pathways for improving motor function, emotional well-being, and social inclusion in rehabilitation. Future studies should investigate the effects of music and dance-based therapies on adults through longitudinal randomized controlled trials and evaluate the effectiveness of other creative art interventions.

Exploring the Effects of Glioblastoma on Psychosocial Well-Being: A Narrative Literature Review

Jake Heinbuch, BHSc Student [1], Luke Heinbuch, BHSc Student [1]
[1] Faculty of Health Sciences, Queen's University, Kingston, Ontario, Canada K7L 3N6

Introduction: Glioblastoma (GBM) is known to be one of the deadliest cancers, with the average life expectancy after diagnosis being between 12 and 14 months. This narrative literature review aims to explore the impacts of GBM on patients' psychosocial well-being, in order to inform psychosocial interventions and holistic, patient-centered care.

Methods: The literature search was completed using the PubMed and Web of Science databases. The keywords searched included "glioblastoma", "psychosocial", "mental health", "caregiver", "quality of life", and "emotional well-being". Articles written after 2015 and in English were included.

Results: The literature search resulted in 31 relevant articles, which were analyzed narratively to identify themes related to psychosocial well-being. The search found that GBM patients commonly experienced major psychological distress including anxiety, depression, suicidal thoughts, and existential grief. Furthermore, declines in memory, cognition, and social withdrawal often led to a decrease in quality of life (QoL). Changes in identity, social isolation, and strained communication contributed to damaged interpersonal relationships. Finally, evident gaps in support services for GBM patients caused many unmet psychosocial needs. However, when early psychosocial screenings and palliative care to support needs were available, patients saw an improvement in psychosocial well-being and QoL.

Conclusion: This narrative literature review highlights the detrimental psychosocial impacts GBM has on patients. The findings illustrate the need for early psychosocial assessments and services specifically targeted at managing psychological distress to improve the overall QoL of GBM patients. Future research should assess novel psychosocial interventions in diverse GBM populations to help improve patient-centered care.

Exploring Factors That Impact the Success and Effectiveness of Cognitive Behavioural Therapy for Paediatric Insomnia: A Narrative Literature Review

Sneha Baruah, BHSc Student [1], Akhila Challa, BHSc Student [1], Isabelle Chen, BHSc Student [1],
Ishita Chohan, BHSc Student [1], Amy Yeung, BHSc Student [1]
[1] Faculty of Health Sciences, Queen's University, Kingston, Ontario, Canada K7L 3N6

Introduction: Paediatric insomnia is a common sleep disorder among children. While cognitive behavioral therapy for insomnia (CBT-I) is a promising treatment, there are several confounding factors that influence the success of CBT-I treatment. This narrative literature review aims to analyze the impact of different factors on the success and effectiveness of CBT-I.
Methods: The literature search was completed using the PubMed and the Web of Science databases. The keywords searched included "cognitive behavioural therapy," "insomnia," "pediatric" or "paediatric." Articles written after 2015 and in English were included.
Results: The literature search resulted in 29 relevant articles which were analyzed narratively to categorize different success factors for CBT-I. The four areas of focus were digital delivery, parental engagement, comorbidities, and combination therapies. Digital delivery was found to be less effective than in-person delivery but often more cost-effective for families. Parental reinforcement was essential as parents' level of sleep education and understanding of the importance of bedtime routines improved CBT-I effectiveness. Comorbidities such as depression, anxiety, autism, and attention-deficit/hyperactivity disorder were found to decrease CBT effectiveness. Combination therapies that combined CBT-I with light therapy, melatonin, and mindfulness were found to increase effectiveness.
Conclusion: This narrative literature review highlights four key factors that influence the effectiveness of CBT-I for paediatric insomnia, shedding light on how healthcare providers can increase CBT-I accessibility, quality, and adherence. Future research should aim to delineate the exact impact of these factors and contribute to the further development of evidence-based CBT-I treatments for paediatric insomnia.

Exploring Factors That Influence Birth Control Preferences in Adolescent Women in North America: A Narrative Literature Review

Marina Huang, BHSc Student [1], Sohyeon Park, BHSc Student [1], Chloe Jones, BHSc Student [1],
Sofia de Andrade, BHSc Student [1]
[1] Faculty of Health Sciences, Queen's University, Kingston, Ontario, Canada K7L 3N6

Introduction: Birth control refers to methods and devices used to prevent pregnancy. Birth control usage often starts in adolescence, with many individuals choosing to use the same method for their entire life. This narrative literature review aims to examine the factors influencing birth control preferences in adolescent women to guide reproductive health initiatives in North America.
Methods: The literature search was completed using the PubMed and the Web of Science databases. The keywords searched included "birth control" or "contraception" or "contraceptive", "North America", "selection", "woman", and "adolescent". Articles written after 2015 and in English were included.
Results: The literature search resulted in 23 relevant articles, which were analyzed narratively to determine the most prevalent factors shaping contraceptive preferences for adolescent women in North America. The most common determinants were categorized into personal, systemic, social, and biological factors. Personal factors included individual goals and desires, lifestyle choices, placement, prior experience, and independence. Systemic factors highlighted barriers such as cost and insurance, inadequate provider education, geographic accessibility, and misinformation or lack of awareness. Societal factors included influence from peers, parents, and providers, familiarity with method, privacy concerns, and stigma from others. Biological factors were contraceptive effectiveness, concerns of adverse effects, and medical contradictions.
Conclusion: This narrative literature review highlights the social, personal, systemic, and biological factors influencing contraceptive preferences for adolescent women in North America. These findings emphasize the importance of widespread birth control education to help ensure adolescents make the right decision for their own reproductive health.

Exploring Quality of Life in Children with Epilepsy Across Different Socioeconomic Statuses: A Narrative Literature Review

Riya Chopra, BHSc Student [1], Anushka Kalia, BHSc Student [1], Simar Kaur, BHSc Student [1],
Julie Martinovic, BHSc Student [1], Parita Talati, BHSc Student [1]
[1] Faculty of Health Sciences, Queen's University, Kingston, Ontario, Canada K7L 3N6

Introduction: Epilepsy is a neurological disorder characterized by recurrent seizures that affects millions of children globally. Socioeconomic status (SES), which measures societal standing by examining income, education, and occupation, greatly impacts health outcomes. This narrative literature review aims to explore the impact of epilepsy on children with different SES by examining quality of life (QoL) in order to gain a deeper understanding of how children with epilepsy can be supported.
Methods: The literature search was completed using PubMed and Web of Science databases. Keywords used included "epilepsy," "pediatric" (or "paediatric" or "children"), "quality of life" (or "QoL"), and "socioeconomic status" (or "SES"). Articles written after 2015 and in English were included.
Results: The literature search resulted in 23 relevant articles which were analyzed narratively to determine the impact of SES on QoL for children with epilepsy. Socioeconomic status was linked to various social determinants of health such as environment, housing, income, education, employment, and healthcare. These factors were shown to be important predictors of QoL for children with epilepsy. The results highlight a strong link between SES and QoL in children with epilepsy that experience lower SES, where low SES is associated with poorer health outcomes.
Conclusion: These findings emphasize the need for a multidimensional approach to epilepsy management for children with low SES. Addressing SES disparities through expanded research, improved healthcare accessibility, and community support programs could help enhance long-term outcomes for children with epilepsy.

Exploring the Role of Organoids in Cancer Treatment: A Narrative Literature Review

Elina Yang, BHSc Student [1], Rosalyn Deng, BHSc Student [1], Helena Zhu, BHSc Student [1]
[1] Faculty of Health Sciences, Queen's University, Kingston, Ontario, Canada K7L 3N6

Introduction: Organoids are three-dimensional structures derived from stem cells that replicate the complexity of human tumors and offer a more accurate model than traditional cell cultures. By mimicking patient-specific cancer cells, organoids hold potential for advancing targeted treatments and optimizing drug efficacy. Considering organoids could significantly improve the development of more effective, personalized cancer therapies, this narrative literature review aims to explore how organoids are currently being used in cancer treatment research.
Methods: A literature search was conducted using the PubMed and Web of Science databases. The keywords searched included "organoid," "cancer," and "treatment." Articles written after 2015, in English, and relevant to the topic were included.
Results: The literature search resulted in 41 relevant articles which were analyzed narratively, revealing three key themes. These themes included use of organoids in cancer drug screening and precision medicine, organoids for tumor heterogeneity modeling, and personalized cancer therapies based on organoids. Organoids demonstrated potential as ethical alternatives to traditional animal models, enabling advancements in disease-specific organoid models used in the treatment of various cancers, including brain, lung, and prostate. Furthermore, organoids offered insights into drug resistance mechanisms, disease progression, and potential therapeutic targets, improving targeted cancer treatment strategies and clinical outcomes.
Conclusion: This narrative literature review highlights the various roles of organoid models in advancing cancer treatment through personalized medicine, drug screening, and understanding tumor biology. These findings advocate for the continued use and refinement of organoids to further advance cancer treatment for patients globally.

Exploring the Relationship Between Bilingualism and Alzheimer's Disease: A Narrative Literature Review

Kevin Nguyen, BHSc Student [1], Jordan Jia, BHSc Student [1], Rishi Dalta, BHSc Student [1],
Yaduparan Mukunthan, BHSc Student [1], Yadusharan Mukunthan, BHSc Student [1]
[1] Faculty of Health Sciences, Queen's University, Kingston, Ontario, Canada K7L 3N6

Introduction: As the aging population continues to increase globally, understanding factors that mitigate cognitive decline, such as Alzheimer's disease, is becoming increasingly crucial. This narrative literature review aims to analyze the potential impact of bilingualism as a protective factor against the onset and progression of Alzheimer's disease.
Methods: The literature search was completed using PubMed. The keywords searched included "bilingualism", "bilingual", and "Alzheimer's". Articles written after 2015 and in English were included.

Results: The literature search resulted in 153 relevant articles which were analyzed narratively to understand the relationship between bilingualism and Alzheimer's Disease. The primary themes identified were related to improved cognitive reserve, protective effects, cognitive profile, and delayed symptoms. These effects were primarily attributed to increased grey matter volume in the frontal, parietal, and basal ganglia.
Conclusion: This narrative literature review highlights that bilingualism has the potential to delay Alzheimer's symptoms as bilingualism supports cognitive reserve, has protective effects, improves cognitive profile, and helps delay symptoms. Future research should focus on the exact mechanism behind the protective effects of bilingualism and exploring how this can be leveraged to support the growing aging population around the world.

Exploring the Influence of Maternal Mental Health on the Development of Children's Food Allergies: A Narrative Literature Review

Noor Khan, BHSc Student [1], Emily Sharif, BHSc Student [1], Zara Zafar, BHSc Student [1]
[1] Faculty of Health Sciences, Queen's University, Kingston, Ontario, Canada K7L 3N6

Introduction: Food allergies occur when the body's immune system reacts abnormally to a specific food protein. The development of allergies in children has been attributed to numerous physiological mechanisms, but the relationship between allergies and maternal factors remains largely underexplored. This narrative literature review aims to analyze the impacts of prenatal and postnatal anxiety and depression on children's food allergy risk in order to identify strategies to reduce allergy incidence and severity.
Methods: A comprehensive literature search was completed using PubMed and Web of Science databases. Keywords included "maternal mental health," "maternal anxiety," "maternal depression," and "food allergy." Articles written after 2015 and in English were included.
Results: The literature search resulted in 13 relevant articles which were analyzed narratively, identifying interconnected biological, behavioral, and nutritional pathways by which prenatal and postpartum maternal mental health influences food allergy development. Biological mechanisms include impacts on fetal immune development, the gut microbiome, the HPA axis, and steroid imbalance. Affected behavioural patterns include parenting attitudes, mother-child relationships, and feeding difficulties. Nutritional factors consist of weaning diets, elimination diets, and breastfeeding. The results highlight that elevated maternal stress, anxiety, and depression increase the risk of food allergies in children through numerous pathways.
Conclusion: These findings advocate for increased attention to the mental health of expecting and new mothers in order to implement interventions that reduce the likelihood and severity of food allergies in children. Future research should create and explore the effectiveness of interventions to improve maternal mental health.

Exploring Factors That Impact Muscle Hypertrophy: A Narrative Literature Review

Holly Yeadon, BSc Student [1], Jessica Dolinki, BHSc Student [2], Natasha Yeadon, BSc Student [1],
Rowan Hernandez, BSc [1]
[1] Faculty of Arts and Sciences, Queen's University, Kingston, Ontario, Canada K7L 3N6
[2] Faculty of Health Sciences, Queen's University, Kingston, Ontario, Canada K7L 3N6

Introduction: Muscle hypertrophy, or increasing the size of skeletal muscle, is a complex process influenced by various distinct factors. This narrative literature review aims to explore how each of these factors contribute to muscle growth, providing insight into the most effective strategies to optimize hypertrophy in both clinical and athletic populations.
Methods: The literature search was completed using the PubMed and Web of Science databases. The keywords searched included: "muscle hypertrophy" or "skeletal muscle growth" and, "factors" or "determinants" or "influences". Articles written after 2015 and in English were included.
Results: The literature search resulted in 35 relevant articles, which were analyzed narratively to identify key themes. Findings revealed that high protein intake is essential for maximizing muscle protein synthesis, with both post-workout protein timing and the quality of protein being crucial for muscle growth. With regards to resistance training, volume load/set was identified as the primary factor driving muscle hypertrophy, with genetic factors influencing individual responses to training. Furthermore, biochemical processes like mTORC1 activation and insulin signaling were found to be critical for muscle growth, with androgens also modifying gene expression to enhance hypertrophy.
Conclusion: These findings highlight the multifaceted nature of muscle hypertrophy, emphasizing the importance of diet, training volume, and biochemical processes. This underscores the need for personalized physical therapy and training approaches, as well as nutrition strategies to optimize muscle growth for both clinical and athletic populations. Future studies should focus on exploring the optimal guidelines that maximize these factors to promote muscle hypertrophy.

Exploring the Intersection of Polycystic Ovary Syndrome and Adolescent Mental Health: A Narrative Literature Review

Samaaya Gupta, BHSc Student [1], Aarya Gupta, BHSc Student [1], Kylie Yang, BHSc Student [1],
Edidiong Essiention, BHSc Student [1]
[1] Faculty of Health Sciences, Queen's University, Kingston, Ontario, Canada K7L 3N6

Introduction: Polycystic ovarian syndrome (PCOS) is a hormonal disorder affecting women of reproductive age, often leading to metabolic and psychological complications. Despite its prevalence, the impact of PCOS on mental health has been underexplored. This narrative review examines how physiological symptoms of PCOS in adolescent females contribute to the development and severity of depression and anxiety.

Methods: The literature search was completed using the PubMed databases. The keywords searched included "PCOS," "polycystic ovary syndrome," "mental health," "adolescent," "youth," "teens," and "teenagers." Articles written after 2015 and in English were included.

Results: The literary search resulted in 22 relevant articles, which were analyzed narratively to identify key themes. Adolescents with PCOS exhibited significantly higher levels of stress, depression, anxiety, body image distress, and eating disorders, attributed to diagnosis with PCOS, and hormonal fluctuations associated with the condition. Findings emphasized the need for early intervention, timely treatment, and regular screening to address mental health needs for adolescents with PCOS. These findings highlight the necessity for further research to better understand the mental health implications of PCOS in adolescent females.

Conclusion: This narrative review highlights the strong association between the diagnosis and pathophysiological aspects of PCOS to mental health conditions. Mental health challenges have been shown to significantly reduce the quality of life in adolescents with PCOS. Future research should explore pathophysiological associations between PCOS and mental health in order to improve early intervention strategies as well as optimize mental health outcomes for adolescents with PCOS.

Exploring the Intersection of Artificial Intelligence and Attention Deficit Hyperactivity Disorder in Paediatric Populations: A Narrative Literature Review

Mathura Manoranjan, BHSc Student [1], Huang Zhao Wen, BHSc Student [1]
[1] Faculty of Health Sciences, Queen's University, Kingston, Ontario, Canada K7L 3N6

Introduction: Attention-Deficit/Hyperactivity Disorder (ADHD) is a prevalent neurodevelopmental condition in children, affecting cognition, behavior, and daily functioning. In recent years, Artificial Intelligence (AI) has emerged as a promising tool to enhance the understanding, diagnosis, and treatment of paediatric ADHD. This narrative literature review explores how AI is reshaping clinical and therapeutic approaches to ADHD in children.

Methods: A literature search was conducted using PubMed and Web of Science databases. Keywords included "ADHD" or "attention deficit hyperactivity disorder", "AI" or "artificial intelligence", and "pediatric*" or "paediatric*". Articles written after 2015 and in English were included.

Results: The literature search resulted in 44 relevant articles, which were analyzed narratively to identify key themes. Results highlight that AI technologies, particularly machine learning and deep learning, are improving diagnostic precision through neuroimaging, such as EEG and fMRI, eye-tracking, and electronic health records. AI-driven interventions, including robotic agents and personalized, play-based therapies, show promise in ADHD symptom management and engagement. Furthermore, AI is advancing the discovery of neurobiological markers, offering deeper insight into ADHD's underlying mechanisms.

Conclusion: AI holds significant potential to transform paediatric ADHD care by enabling earlier, more objective diagnosis and delivering personalized, dynamic interventions. However, to ensure ethical adoption, future research must prioritize validation of AI models across diverse populations, mitigate algorithmic bias, and safeguard data privacy. Integration of multimodal data streams into clinical workflows will be essential for AI's full utilization in real-world ADHD care.

Exploring Sex Differences in Individuals with Attention-Deficit Hyperactivity Disorder in North America: A Narrative Literature Review

Angel Ngo, BHSc Student [1], Ishaann Bakirathan, BHSc Student [1], Andrew Ogbuehi, BHSc Student [1],
Molly Xiong, BHSc Student [1], Byran Ruban, BHSc Student [1], Arani Hiritharan, BHSc Student [1]
[1] Faculty of Health Sciences, Queen's University, Kingston, Ontario, Canada K7L 3N6

Introduction: Attention-Deficit Hyperactivity Disorder (ADHD), a neurodivergent condition characterized by persistent patterns of inattention and/or hyperactivity-impulsivity which disrupts daily functioning and development. This narrative

literature review explores sex differences in ADHD within North America, highlighting factors that contribute to female underrepresentation. By examining these disparities and their consequences, this review advocates for greater equity in ADHD clinical research, diagnosis, and treatment.

Methods: The literature search was completed using the PubMed, PsycInfo, and Web of Science databases. The keywords searched included "ADHD" or "attention deficit hyperactivity disorder", "sex differences", and "North America". Relevant articles published in English after 2015 were included.

Results: The literature search yielded 45 relevant articles, which were analyzed narratively to investigate the sex differences in ADHD. The analysis identified key themes surrounding the medical profile of ADHD, ADHD related outcomes, risk factors, and treatment. Males with ADHD were found to be diagnosed more frequently, exhibit hyperactive symptoms and externalize issues like conduct disorders, obesity, and substance use. Females were found to be underdiagnosed, often displaying inattentive symptoms, anxiety, depression, and higher risks of sexual violence.

Conclusion: These findings highlight notable sex differences in ADHD, emphasizing the need for more equitable approaches to ADHD research, diagnosis, and treatment. Future recommendations include refining diagnostic frameworks and enhancing clinical education to promote a sex-informed, individualized approach to ADHD care to holistically improve quality of life for individuals with ADHD.

Exploring the Impact of Diet on the Gut-Brain Axis in Children with Autism: A Narrative Literature Review

Chaaya Nakra, BSc Student [1], Sandra Saki, BSc Student [1]
[1] Faculty of Arts and Science, Queen's University, Kingston, Ontario, Canada K7L 3N6

Introduction: The gut-brain axis (GBA) is a bidirectional communication system connecting the gastrointestinal (GI) tract and the central nervous system (CNS). Diet plays a critical role in modulating gut microbiota, which influences neurodevelopmental and behavioral symptoms in children with autism spectrum disorder (ASD). This narrative literature review aims to explore the relationship between diet, gut microbiota, and ASD symptoms to identify potential dietary interventions.

Methods: The literature search was completed using the PubMed and the Web of Science databases. The keywords searched included "children", "pediatric", "paediatric", "gut-brain axis", "diet", and "autism". Articles written after 2015 and in English were included.

Results: The literature search resulted in 20 relevant articles which were analyzed narratively to identify key dietary components that influence the GBA and contribute to ASD symptoms. Findings indicate that children with ASD exhibit altered gut dysbiosis, characterized by decreased beneficial microbes and increased pro-inflammatory species. Early nutrition and food selectivity significantly impact gut composition and behavioral outcomes. Diets high in processed foods and saturated fats exacerbate gut inflammation and cognitive impairments, while plant-based and fiber-rich diets enhance production of beneficial metabolites like short-chain fatty acids. Probiotic, prebiotic, and synbiotic interventions show promise in alleviating gastrointestinal and behavioral symptoms by modulating gut microbiota and neurotransmitter pathways.

Conclusion: This narrative literature review highlights the potential of dietary interventions as a non-invasive strategy to support neurodevelopmental and behavioral outcomes in children with ASD. Further research should explore personalized, evidence-based dietary interventions to improve gut health, as well as cognitive and social outcomes.

Conflicts of Interest

The authors declare that they have no conflicts of interest.

Authors' Contributions

SS: Founder and president of the ASPIRE Research Program, developed program curriculum, delivered all program workshops, mentored students throughout the research process, assisted authors with abstract development, reviewed abstract submissions, drafted the abstract booklet, and gave final approval for the abstract booklet to be published. Both authors contributed equally.

SS: Founder and president of the ASPIRE Research Program, developed program curriculum, delivered all program workshops, mentored students throughout the research process, assisted authors with abstract development, reviewed abstract submissions, drafted the abstract booklet, and gave final approval for the abstract booklet to be published. Both authors contributed equally.

Acknowledgements

We would like to send our heartfelt thanks to Kavi Gupta, Shenyi Lu, and Emiliano Zhang for their support during the ASPIRE 2025 Research Symposium! We would also like to send a special thank you to our cohort of 65 students for their active participation and engagement in the 2025 ASPIRE Research Program!

Funding

We would like to thank the Dunin-Deshpande Queen's Innovation Centre for providing in-kind support, including the venue for the ASPIRE 2025 Research Symposium. We would also like to thank the following local businesses in Kingston for their in-kind support for competition prizes: Score Pizza (91 Princess Street), Smoke's Poutinerie (183 Division Street), Novel Idea (207 Stuart Street), Oil Thigh Designs (156 Princess Street), and Trek Bicycle Kingston (710 Front Road).

Article Information

Managing Editor: Jeremy Y. Ng
Article Dates: Received Jul 04 25; Published Jul 18 25

Citation

Please cite this article as follows:
Sheth S, Seth S. The 2025 ASPIRE Research Program Symposium Abstract Booklet. URNCST Journal. 2025 Jul 18: 9(6). https://urncst.com/index.php/urncst/article/view/926
DOI Link: https://doi.org/10.26685/urncst.926
